NANDHA ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

ERODE – 638 052 TAMILNADU

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Criterion 3 – Research, Innovations and Extension	
3.4	Research Publications and Awards

3.4.4 Details of books and chapters in edited volumes / books per teacher during the year

E-copies of Books, Chapters and Publications

List of other journals, books and chapters in edited volumes / books per teacher during AY(2022-23)

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
1	C Pratheeba	NA	NA	A Review of an Off Grid Solar DC System for Rural Houses
2	K.Sivasankari	NA	Study on Online Branding Effectiveness and Future Trends with Special Reference to Angel Starch & Food Pvt Limited , 1st Floor H19 Periyarnagar, Erode, Tamilnadu	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
3	K.Sivasankari	NA	A study on Impact of Employee's Working Condition on Employee's Performance and Organizational Productivity with Reference to Cycle World	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
4	K.Sivasankari	NA	An Emprical Study on Employee Welfare Scheme with Reference to S&T welcare Equipment Pvt Ltd , Peelamedu, Coimbatore	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
5	K.Sivasankari	NA	A Study on Impact of Working Environment on Employee's Performance with Reference to Manufacturing units in Erode, District	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
6	M Senthilkumar	NA	A Study on Impact of Gender Discrimination and Performance in Workplace Foods and Inns With Special Reference to Vellore	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
7	L Jothibasu	NA	A Study on Impacts of Flexible Works Schedule on Organization Performance and Employee Satisfaction with Reference to Manufacturing Sectors, Erode	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
8	K Arulini	NA	A study on perception and Challenges of Mobile Banking with Reference to Union Bank , M. Anumanpalli	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
9	K.Sivasankari	NA	A study on Employee Welfare Measures and Its Impact on Employee Performance at Stat Health and Allied Insurance Co Ltd	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
10	K Nandhini	NA	A study on Impact of Warehousing on Production with Difference to Angel Starch Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
11	L Jothibasu	NA	A Study on Evidance Based HRM in Sakthi Auti Component Limited	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
12	K Arulini	NA	A Study on Buyer Satisfaction and Behaviour of Bajaj Automobile Platina H Gear(110CC) with Special Reference Dharapuram	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
13	Dr V Manimegalai	NA	A Examine on Employee Retention Strategy on the Subject of SST Oil Corporation, Gobi, Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
14	Dr K Parthiban	NA	An Empirical study on work-life balance of employees of Angel Starch & Food(P) Ltd., in Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
15	K Arulini	NA	A Study on Recruitment & Selection Process of candidate with the Special Reference of Boom HR Solution in Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
16	J Tamilarasu	NA	A Study on Employee's Perception towards HR Practices and culture with special reference to Wonjin Auto Parts Pvt. Ltd	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
17	L Jothibasu	NA	A Study on Factors Infulencing employee's performance with reference to Eatman Foods India Pvt. Ltd	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
18	M Senthilkumar	NA	An Empirical study of Retailers Preference towards Ghee with Special Reference to Knagayam	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
19	Dr V Manimegalai	NA	An Investigation of Social Media Marketing at Angle Starch and Food Pvt Ltd	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
20	Dr K Parthiban	NA	An Empirical Study on 360 Degree Performance Appraisal Special Reference to Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
21	K Arulini	NA	A Study on Employee Absenteesim with Reference to Big Bulls- Bangalore	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
22	J Tamilarasu	NA	A Study on Employee Engagement Strategies with Special Reference to Wonjin Auto parts pvt ltd	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
23	L Jothibasu	NA	A Study on the Causes and Consequences of Cybercrimes with Reference to Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
24	M Senthilkumar	NA	An Empirical Study of Occupational Stress amongst Faculty in Self Financing Engineering College with Special Reference to Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
25	K Nandhini	NA	A Study on Job Satisfaction of Employees with special referenceto Seyyon Hitech poly fabs private limited, Gangapuram	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
26	Dr V Manimegalai	NA	Analysis of Online Promotional Activities in Indiamart	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
27	Dr.K.Parthiban	NA	A Study on Employee A traction and Retention Strategies with Special Reference to Big Bulls	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
28	Ms.K.Arulini	NA	A Study on Stress Management of Employees with Special Reference Toartika Cotton Mills, Erode	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
29	Mr.N.Senthilkumar	NA	A study on Factors Influencing Company's Profitability with Reference to Cycle World	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
30	Ms.K.Nandhini	NA	A Study on Finding the Interest of the People in Property Management with	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
31	Dr.K.Parthiban	NA	A study on Roles of Human Resource Management in Developing Employee Engagement with Reference to Anamallais Agencies(Stadium) Erode	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
32	Ms.K.Arulini	NA	A Study on Organizational Climate in Engineering College Reference to Erode	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
33	Mr.J.Thamilarasu	NA	A Study on Employees Welfare Measureswith Special Reference Sakthi Sugars, Ltd	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
34	Mr.L.Jothibasu	NA	A Study on Performance Appraisal among the Employees with Special Reference to Amirtha Dairy Pvt Ltd, Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
35	Mr.N.Senthilkumar	NA	A Study on Employees's Awarness and Utilization of ESI Benefits in Feather Touch Cura, Coimbatore	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
36	Ms.K.Nandhini	NA	A Study on Factors Affecting the Work Life Balance with Reference to Artika Cotton Mills Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
37	Dr.V.Manimegalai	NA	A Study on Carrer Planning and Develop[ment towards RAN India Steels Pvt Ltd, Special Reference to Tiruchengode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
38	Dr.K.Parthiban	NA	A Study on Urbanization and its Impact on Bicycle with Special Reference to Cycle World Banglore	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
39	Ms.K.Arulini	NA	A Study on Impact of Human Resource Management on Organizational Performance	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
40	Mr.L.Jothibasu	NA	Study on Organizational Culture and Impacts on Employees Behaviour with Special Reference for Paddico Co, Ltd	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
41	Mr.N.Senthilkumar	NA	The Impact of Hybrid Working Model on Work-Life Balance in Arihant Maxsell Technology	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
42	K Nandhini	NA	A Study on Employees Loyalty and Retention with Special Reference to Angel Starch and Foods Pvt Ltd, Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
43	Dr.V.Manimegalai	NA	A Study on Search Engine Optimization (SEO)	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
44	Dr.K.Parthiban	NA	Analysis of Labour Welfare Schemes and Its Impact on Job Satisfaction , An Empirical Study with Special Reference to Baer Shoes (India) Pvt. Ltd	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
45	Ms.K.Arulini	NA	An Empirical Study on Employees Job Satisfaction in Fitness Equipment's Manufacturing Company	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
46	J Tamilarasu	NA	A Study on Customer Satisfaction on Digital Marketing in Angle Starch and Food Pvt. Ltd	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
47	Mr.L.Jothibasu	NA	A Study on Employee Attraction and Retention Strategies with Special Reference to Velavan Agencies	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
48	Mr.N.Senthilkumar	NA	A Study on Effectiveness of Grievance Handling Procedure with Respect to Subasri Textile Tiruppur	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
49	K Nandhini	NA	A Study on the Impacts of Search Engine Marketing with Reference to Angel Starch, Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
50	Dr.V.Manimegalai	NA	A Study on Employee Relationship Towards Working Environment in Spinpack Industries.Co, Erode	International Journal of Multidisciplinary Research in Arts,Science, Engineering, Technology & Management
51	Dr.K.Parthiban	NA	Study on Impacts of Purchase and Material Management on Production Department with Reference to Seyyon Hi-Tech Poly Fabs Pvt Ltd , Erode	International Journal of Advanced Research in Arts, Science, Engineering & Management (IJARASEM)
52	B Ramraj, B Santhosh, M R Sathananth, S Vipin, S Vivek	NA	Electricity Generation using Dynamic Bifacial Solar Panel using IoT	International Journal for Science and Advance Research in Technology
53	V Ravichandran, V Manikandan, M Santhosh, S Sudarsan	NA	Uninterruptible Power Supply with Multiple Power Sources by using Fuzzy Controller	International Journal for Science and Advance Research in Technology
54	S Elango, K Balamurugan, S Gowthamaraja, S Haran, G Kesava Pandiyan	NA	Harmonics Analysis in Distribution System with Integration of PV System	International Journal for Science and Advance Research in Technology
55	V Ravichandran, B Boopathiraja, K Gowerishankar, V Kavin, R Kirubanithi	NA	Self Design and Self Adjustment of Stabilizers and UPS During Runtime	International Journal for Science and Advance Research in Technology
56	DrGRamani,S Gopal,ER Jeevanandham, P S Dhamotharan, N Arun	NA	IoT Based Smart Energy Monitoring System for Home Appliances using Machine Learning Algorithm	International Journal for Science and Advance Research in Technology

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
57	P Krishnagandhi, K Gowrisankar, Akshay Shaji, R Karthi, D Kavin	NA	Solar Based Wireless EV Charger	International Journal for Science and Advance Research in Technology
58	P Krishnagandhi, S Meganathan, S Sanjay, K Logeshwaran, R Naveen	NA	An Autonomous Robot Cleaner for Solar Panel Systems	International Journal for Science and Advance Research in Technology
59	M Prabu, S Mohamed Rifai, S Sreerag, S Suhaskumar, P S Yeswanth kumar	NA	Online Monitoring of Power Transformers to Improve Their Maintenance and Operation	International Journal for Science and Advance Research in Technology
60	R Vijayalakshmi, R Ragavan, S Rajkumar, I Sasikumar, S Sivakumar	NA	IoT Based Underground Cable Fault Detection using PIC Microcontroller	International Journal for Science and Advance Research in Technology
61	Bharathi A	NA	Future Forecasting using supervised machine learning models COVID-19	International Scientific Journal of Engineering and Management
62	Sri Abirami S R	NA	Efficient IOT service deployment vis decentralized edge to cloud load balancing	International Scientific Journal of Engineering and Management
63	R Ramraj, A Ajayprakash, B Dheena, M Gokul	NA	Fruit Freshness Detection using Raspberry Pi with GSM	International Journal for Science and Advance Research in Technology

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
64	Monica R, Mythili M, Narmatha GU, Steephanraj G, Thanigai vendan CJ,	NA	Detection and Classification Rice Plant Leaf Diseases using R-CNN Technique	International Journal of Research Analytical Reviews
65	B Velliyangiri, T Balamurugan, M Elango, S Pranava kumar, S Jegan	NA	Implementation of Overload Prevention System in Fly Ash Brick Machine	International Journal of Creative Research Thoughts
66	M Sengottaiyan, G Sivasankar, C V Barath, V S Ragupathy, G Vijayprasath	NA	Design and Fabrication of Standup Assistant Wheelchir for Physically Challenged Person	International Research Journal of Education Technology
67	R Rajkumar, J Boobalan, D Jeevan Prasath, S Kavinkumar	NA	Fabrication of Smart Food Product Vending Machine using Arduino	International Research Journal of Education Technology
68	T Venkateshan	NA	Fabrication and Analysis of Double Pipe Heat Exchanger with Twisted Tapes	Journal of Emerging Technologies and Innovative Research
69	S Muruganatham	NA	Design and Fabrication of 360 Degree Fire Ptotection System	International Research Journal of Education Technology
70	Dr M K Murthi	NA	Smart Medical Vending Machine Technology	International Research Journal of Education Technology

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
71	Magibalan S Elango A.K Kavin K Sathish Kumar S	NA	Design and fabrication of minisize borewell rescue robot	International Journal of Creative Research Toughts
72	Velliyangiri B, Mukesh kumar G, Sathish kumar A, Sivaguru M, Vinoth S	NA	Design for automation of sand blasting	International Journal of Creative Research Toughts
73	Velliyangiri B, Gokulkumaran B,	NA	Design and fabrication of coolant separater	International Research Journal of Education and Technology
74	Ravichandran D, Arun kumar M, Kamban K, Karan S, Vignesh C,	NA	Design and fabrication of Solar wind turbine	International Research Journal of Education and Technology
75	K Pradeep Kumar	NA	Incorporation of Waffle by using Mushroom Powder	International Journal of Research Analytical Reviews
76	K Pradeep Kumar	NA	Design and Development of Cow Dung Cleaner	International Journal of Research Analytical Reviews
77	C Nandhini	NA	Traditional Rice Variety: Poongar Rice Flat Noodles	International Journal of Research Analytical Reviews
78	C Nandhini	NA	Development of Ice Cream using Vegan Milk and Herb	International Journal of Research Analytical Reviews

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
79	N Mukilan	NA	Review on Enhancement of Pressing the Dough for Chapathi Preparation	International Journal of Research Analytical Reviews
80	P Komalabharathi	NA	An Analysis of Zero Energy Cool Chambers to Evaluate Life of Fruits and Vegetables	International Journal of Research Analytical Reviews
81	Mrs.B.Deepa, MS.M.Deepika ,S.Mohanlal,S.Vithya sagar ,P.Balamurugan	NA	Food Review Analysis Using The Sentiment Analysis And Neural Network	International Scientific Journal of Engineering and Management
82	D Anandkumar Balamurugan K, Buvanesh S, Dharanesh A E, Kirubanithi S	NA	IoT Technology based new generation secured ATM using Biometric and OTP	International Journal of Science & Engineering Development Research (www.ijsdr.org),
83	Dr PJamuna, K Krishna Prasath, S Sakthivel, V Vijay	NA	Paralysis Patient Monitoring & Health Caring System by using IoT	International Journal for Science and Advance Research in Technology
84	Dr T Jayakumar, P Balamurugan, B Gokul, D Hariharan, J P Arun	NA	Implementation of Smart Military Jacket	International Journal for Science and Advance Research in Technology
85	Dr P Jamuna, A Bhuvanesh, R R Chowdry Prakash, M Kathirvel, R Aswin	NA	Battery Pack Modeling by Battery Management System of An Hybrid Electric-Vehicle using ANFIS	International Journal for Science and Advance Research in Technology

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
86	C Pratheeba, D Gunaa Sri, S Kaviya, K Dharanya	NA	Smart Wireless Charging System for Electrical Vehicle	International Journal for Science and Advance Research in Technology
87	R Vijayalakshmi, G Kowsalya, K Gnanashri, D Gopika	NA	Footstep Power Generation using Piezoelectric Sensor	International Journal for Science and Advance Research in Technology
88	M Prabu, S Gokul raj, M Gowtham, S Gunasekaran , A Karthikeyan	NA	IOT Based Air Filter	International Journal for Science and Advance Research in Technology
89	M Manjula, V Jothinivetha, R Keerthana, A Dharanya	NA	Reactive Power Compensation using Induction Motor Driven by Four Switch Converter	International Journal for Science and Advance Research in Technology
90	V Arun Kumar, M Karthi, G Karthikeyan, B K Arvind, M Navaneeth	NA	Control of Permanent Magnet Chain Driven Drive System of An Electric Four Wheeler	International Journal for Science and Advance Research in Technology
91	M Manjula, N Kowsalya, S Prathiksha, K Priyadharshini	NA	Designing of Automated Seed Sowing and Water Pump Switching Robot for BT Cotton	International Journal for Science and Advance Research in Technology
92	Dr T Jayakumar, N Manikandan, R Premkumar, N Ranjithkumar, P Vasantha Kumar	NA	Manhole Detection and Monitoring System using GSM Module and PIC Microcontroller	International Journal for Science and Advance Research in Technology

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
93	V Arun Kumar, S Sukesh, M Parthiban, M L Mathan Lal, V Sivasubramani	NA	Home Security & Protection System using ESP32-CAM and PIC Microcontrollers	International Journal for Science and Advance Research in Technology
94	Dr G Ramani, T Mohanapriya,M Nirmala, R Srima	NA	Multiple Battery Fast Charging using Multisource Inputs for E-Vehicle	International Journal for Science and Advance Research in Technology
95	S Elango, P kowshik, J Naveen kumar, S Naveen	NA	Implementation of IoT Based PV Monitoring and Measure Current and Voltage using Smart Mobility System	International Journal for Science and Advance Research in Technology
96	C Pratheeba, K Suganya, P Nivetha, G Prithiga, R Rachel	NA	Automated Electric Vehicle Based on Wireless Communication	International Journal for Science and Advance Research in Technology
97	Bharathi A	NA	Detection and classification of fruit diseases using image processing	International Scientific Journal of Engineering and Management
98	Kiruthika D	NA	Private network file sharing nd messaging platform	International Scientific Journal of Engineering and Management
99	Arunkumar M	NA	Food Recommendation system	International Scientific Journal of Engineering and Management
100	Saranya R	NA	Big mart sales predictive analysis using machine learning	International Scientific Journal of Engineering and Management

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
101	Thangamani S	NA	Excel Preparer using Optical character recognization technique	International Scientific Journal of Engineering and Management
102	Vasuki C	NA	Optimizing share size in efficient and robust secret sharing scheme for big data	International Scientific Journal of Engineering and Management
103	Prabhakaran D	NA	Efficient Medical data transmission in mobile hospital systems with wireless body area network	International Scientific Journal of Engineering and Management
104	Suguna Angamuthu	NA	Vehicle breakdown assistance management system	International Scientific Journal of Engineering and Management
105	Ragunath R	NA	Forecasting Rainfall with machine learning	International Scientific Journal of Engineering and Management
106	Sharmila S	NA	Agriculture crop recommendation based on protectivity and season	International Scientific Journal of Engineering and Management
107	Kiruthika D	NA	Online course in-active student prediction	International Scientific Journal of Engineering and Management
108	Logeswari V, Dhamothar P, Karthikeyan A, Kavinraj R , Viknesh E Vishnu B	NA	Design of 16 Stack Micro Strip Patch Antennas Using for Millimeter Wave Applications	International Journal of Scientific Development and Research

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
109	Logeswari V , Ajith R , Elavarasan K , Hariharan S , KarthikRaja J	NA	Double Ridge Horn Antenna Design for Microwave X-Band Applications	International Journal of Scientific Development and Research
110	Arulkarthick E.K, HemadharshiniK, Jambukeswaran S, Dhanesh C, Keerthana G	NA	Polyhouse Automation and Environment Monitoring System using Arduino Platform	International Journal of Research Analytical Reviews
111	Dr. D. Arulanantham, S. Snekha , K. Logeshwaran, R. Nishanth, K. Lavanya,	NA	Utilizing OCR to Retrieve Text from Identity Documents	International Journal of Applied Science & Engineering Technology
112	S Muruganatham, S Dinesh, M Lathershaw, L Lokesh kumar, K William Richard	NA	Design and Fabrication of Fish Feeding Drone	International Research Journal of Education Technology
113	Eswaran S Meinathan V Mesiyavikash M J Praveen Kumar M Udhaya M	NA	Fabrication of Portable green energy mobile laptop charging station	International Research Journal of Education and Technology
114	Ravichandran D, Boopathi S, Prabhakaran M, Pavitharan P, Suntherasan S, Suntharesan E	NA	Design and fabrication of friction less electricity generator using drive shaft of elecdric vehicle	International Research Journal of Education and Technology

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115	Loganathan V N, Abijith M, Bharath G, Gowtham S, Dharoon V,	NA	Design and fabrication of dual axis steering mechanisam	International Journal of Creative Research Toughts
116	Prawin A Srikanth G Pradeep Kumar S Praveen Kumar V	NA	A Review on Performance and Operation of Grass Cutter	International Journal of Research Analytical Reviews
117	R M Subramanian	NA	Design of Solar Dryer for Turmeric	International Journal of Research Analytical Reviews
118	V Chandramohan	NA	Development of Turmeric Sower and Harvester: A Review	International Journal of Research Analytical Reviews
119	K K Suvain	NA	Performance and Evaluation of Power Weeder - A Review	International Journal of Research Analytical Reviews
120	Ms.P.Uma,P.S.Sharvesh,M.Pradeep,P.Sathishkumar,R.Senthilnathan	NA	Automatic Timetable Generation	International Journal for Research in Appled Science & Engineering Technology
121	Mrs.M.Premalatha , A. Heymath Kumar , M.Manoj kumar , P.Pavithran , K.Shatyadeep	NA	Drugged Eye Detection Using Image Processing	International Journal for Research in Appled Science & Engineering Technology

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
122	Mrs. O. Abhila Anju, Koushick Kumar K, N. Manoj, A. Samuel, K. Sandhana	NA	Chatbot Automation for Student Educational Purpose	International Journal for Research in Appled Science & Engineering Technology
123	Mrs. M Premalatha, G M. Delipan, V. Kavyashri, S. Sanjay, K. Srijayakanth	NA	Human Symptoms Based on Diseases Predictor	International Journal for Research in Appled Science & Engineering Technology
124	S.Maheswari, S.R.Ashwin, S.Aswin, DharaniDharan.A.C, P.Logesh	NA	Development Of Employee Performance Management System Using Web Based Technology	International Scientific Journal of Engineering and Management
125	MS.P.Devika,D.Kiruthika,B.S.Akshayapriya,S.Nitharshna,M.Sowmisankari	NA	Marketing Masonaries And Stock Handling	International Scientific Journal of Engineering and Management
126	Ms. D. Vinoparkavi , P. Pradeep, M. Dhyan Aparna, A.G. Kavin, M. Pandi Durai	NA	Efficient Classification Of Brain Tumors Images Using Neural Network Technique	International Scientific Journal of Engineering and Management
127	M Deepika, P. Jayasimman, G. Sanjay, M. Sivaprakash, T. P. Vignesh	NA	Significant Features and Identification of Heart Disease Prediction by using Data Mining Techniques	International Journal for Research in Appled Science & Engineering Technology
128	D.Kavin Kumar, Ms.S.Kavitha	NA	A Survey On Analysis And Prediction Of Data Using Data Science	International Journal of Engineering Technology and Management Sciences

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
129	B.Anubhama, Ms.M.Parvathi	NA	A Survey On Medical And Diseases Prediction Using Machine Learning	International Journal of Engineering Technology and Management Sciences
130	A.Thenmozhi, Dr.D.Vanathi	NA	A Survey On Efficient Auditing Scheme For Secure Data Storage In Fog-To-Cloud Computing	International Journal of Engineering Technology and Management Sciences
131	K.U.Ranjith, Dr. S. Karuppusamy	NA	A Survey On Toward Effective Response To Natural Disasters: A Data Science Approach	International Journal of Engineering Technology and Management Sciences
132	S.Keerthana, K.Shanmugapriya	NA	A Survey On Cancer Subtyping Based On Deep Learning Using Pan-Cancer And Multiomic Data	International Journal of Engineering Technology and Management Sciences
133	V.Madhumitha, Dr.P.Thirumoorthy	NA	A Survey On Identification And Diagnosis Of Diseases Using Machine Learning	International Journal of Engineering Technology and Management Sciences
134	S.Maheswari, B.Deepa, S.Keetha, G.Suganthi	NA	Machine Learning At The Edge: A Data-Driven Architecture With Applications To 5g Cellular Networks	International Journal of Engineering Technology and Management Sciences
135	R.Thamarai selvi, Ms.E.Padma	NA	A Survey On Mobility-Aware And Delay-Sensitive Service Provisioning In Mobile Edge-Cloud Networks	International Journal of Engineering Technology and Management Sciences
136	S.Shanmugapriya, Ms. P.Devika	NA	A Novel Software Engineering Approach Toward Using Machine Learning For Improving The Efficiency Of Health Systems	International Journal of Engineering Technology and Management Sciences

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
137	A.Naveenkanth, Ms.B.Deepa	NA	A Survey A Hybrid Model For Central Bank Digital Currency Based On Blockchain	International Journal of Engineering Technology and Management Sciences
138	Surya Kant Prajapati, Mrs. C. Navamani	NA	Effective Approach For Face Recognition And Active Shape 3d Models Using Kernel Principal Component Analysis	International Journal of Engineering Technology and Management Sciences
139	Dr.S.Karuppusamy, Gokul R, Chathriya K, Dineshbabu K, Karthikeyan G	NA	Academic Management System	International Scientific Journal of Engineering and Management
140	Mrs.P.Savitha, M.Bhaskar, M.Gowtham, M.Tamil Arasan, P.Gokul Krishnan	NA	Inventory Management System	International Scientific Journal of Engineering and Management
141	Ms. S. Kavitha, J. Farhana, S. Saran Shanker, K. Dineshkumar, G. Darshan	NA	Office Administration System	International Journal for Research in Applied Science & Engineering Technology
142	Mrs. V. Mythily, Hariharan S, Kavin U, Kowsik K, Sakthivel S	NA	Social Network Mental Disorders Detection via Online Social Media Mining	International Journal for Research in Applied Science & Engineering Technology
143	Kavinprasath T S, Praveen Santhosh Kumar G, Gunasekaran P, Kavinkumar S, Dinesh P	NA	PLC Based Multichannel Temperature Monitoring And Controlling System	International Journal of Emerging Technologies and Innovative Research

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
144	Parameshwari V., Deepika S., Harini R., Keerthana N., Keerthana N,	NA	IoT Enabled Smart Television Control System for Children	The Ciência and Engenharia - Science and Engineering journal
145	Mr.G.Prabhakaran , S.Sutharsanan , S. Vigneshwaran , S. Gnanakumar , G.Sridhar	NA	A Hybrid Full Adder Using A Noval XOR Gate For Low Power Application	International Journal of Science & Engineering Development Research
146	Murugasamy R,abinesh j , arunsk , dinesh s , kavin h,	NA	Wastewater Monitoring and Controlling using Cloud-Based IoT System	International Journal of Science & Engineering Development Research (www.ijsdr.org),
147	Ms.S.Brindha, R.Balavenkatesh, A.Karuppusamy ,C.Karthick , D.Abishek	NA	Advanced suction based static trash collector using IOT	International Scientific Journal of Engineering and Management
148	S Elango	NA	Internet of Things based smart Water Leakage Monitoring and Alert System	International Conference on Advanced Computing & Communication Systems-ICACCS 2023
149	V Arun Kumar	NA	IoT Based Food Spoilage Detection Monitoring using Blynk	International Conference on Advanced Computing & Communication Systems-ICACCS 2023
150	Jamuna P	NA	IoT based energy efficient smart metering system	International Conference on Electronics and Renewable Systems

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151	Dr K Parthiban	NA	The influence of socia media marketing on consumer buying decision through brand image in the fashion apparel brand	Social Science Journal
152	Balakrishnan S	NA	A review of solar operated hybrid vehicle	International Conference on advanced materials and technologies for industry 4.0
153	Balakrishnan S	NA	Experimental investigation and analysis of wind turbine blades with different aerofoil model	International Conference on advanced materials and technologies for industry 4.0
154	Balakrishnan S	NA	A Review on wind turbine blades with different aerofoil model	International Conference on advanced materials and technologies for industry 4.0
155	Velliangiri B	NA	Implementation of overload Prevention System in Fly Ash Brick Machine	International Conference on Engineering Technology and Science
156	P S Niji , Vikash D , yoganath J , vinoth P , balasanthos J	NA	Implementation of low power full adder using CMOS	International Journal for Research Trends and Innovation
157	G Rathanasabhapathy	NA	Analysis of High Radiation Efficiency Ultra Wide Band Bowtie Antenna for Identification of Tumor Cells	International Journal of Scientific Development and Research
158	Dr D Arulanantham, S V Raguram, S Sridhar, K Madavan, T Bhavanvithyathi	NA	IoT Enabled Smart Water Control and Monitoring System	International Journal of Modern Trends in Science and Technology

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
159	Mohamed Ajmul Mahasin M Boopathi S Naveen Kumar Dhinakaran V Dheepeswaran S G	NA	Design and fabrication of four wheel off road electric scooter - a review	International Research Journal of Modernization in Engineering Technology & Science
160	Mohamed Ajmul Mahasin M Jambukeshwaran K Dharaneesh P Dilip Kumar T Sathish M	NA	Design and fabrication of chainless Bicycle with Slip Joint Helical Gear	International Research Journal of Modernization in Engineering Technology & Science
161	Rajkumar R Vignesh M Sasi kumar A Rajeshkumar V Dinesh M	NA	Design and fabrication of compressed air vehicle	International Journal of Creative Research Toughts
162	Sengottaiyan M, Sivasaankar G, Barath C V, Ragupathi V S, Vijayprasath G	NA	Review of standup assistance wheelchair for physically challenged person	International Research Journal of Modernization in Engineering Technology & Science
163	Sengottaiyan M, Mohanraj K, Moulishwaran G, Naveen M K, Susintharan J	NA	Design and fabrication of semiautomatic coconut dehusking machine	International Research Journal of Modernization in Engineering Technology & Science
164	Mrs.E.Padma, Vignesh Kumar.M, Nithyasri.R.B, Poovizhi.M,	NA	Implementation Of Smart Restaurant	International Scientific Journal of Engineering and Management

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165	Dr.S.Karuppusamy, M.Kowsalya, R.Dhanapriya, S.Logeshwaran, S.Vijayprabu	NA	Best Brain Draft And Fabricate	International Scientific Journal of Engineering and Management
166	Mrs.K.Shanmugapriya,Divya Sri L, Mohamed Fareeth F, Mohamuda Rila M A, Murali Kumar R	NA	Warehouse Management And Inventory Control	International Scientific Journal of Engineering and Management
167	Mrs.C.Navamani, R.Ranjitha, S.Saran Kumar, S.Sheela, G.Thiyagu	NA	Event Management System	International Scientific Journal of Engineering and Management
168	Ms.S.Kavitha,C.Nandhakumar,S.Chenniyangiri,G.George Wilson,P.Madhan Prasanth	NA	Machine Learning Enabled E-Commerce Analytics	International Scientific Journal of Engineering and Management
169	Mrs.K.Shanmugapriya, P.Bharathraj, C.Nishanth, S.Nithishkumar, R.N.Pranesh	NA	Confectionery Shop Web Application	International Scientific Journal of Engineering and Management
170	B Deepa,S Geetha,R Gokuladharshini, B Kalaiyarasi, S Lavanya, P Srimathi	NA	Textile Production Management System	International Scientific Journal of Engineering and Management

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171	Mrs.Uma P, Gnanapraveena R, Pavithra M, Sneka K, Vaishnavi K	NA	Online Furniture Shopping Management	International Scientific Journal of Engineering and Management
172	Mrs. E. Padma, dhivyabrabha m, kavin kumar g, kaviya v n, mahalakshmi r	NA	Intelligent Sales Prediction Using SVM Algorithm	International Scientific Journal of Engineering and Management
173	B.Deepa, K.Anbarasu , V.Gowtham , E.Jagadeep , Harsh Saxena	NA	Data Analysis Report	International Scientific Journal of Engineering and Management
174	P.Devika , R.Gowthaman , S.Hari Haran , N.Ishwarya , P.Somnath Gorai	NA	Textile inventory management system	International Scientific Journal of Engineering and Management
175	Mrs.P.Savitha, D.Dhakshin Prasath, K.Bhuvaneswaran, P.Kamesh, S.Mohammed Thoufik	NA	Online Textile Shopping Cart	International Scientific Journal of Engineering and Management
176	Brindha. S, Deepak. S, Deepak. M, Richarson. P. I, Hariharan. R.	NA	IOT Based Paraplegia Patient Communication Device Using Smart Glove	Biosc.Biotech.Res.Comm.

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177	Murugasamy R, Abirami P, Aruna P, Dharani S, Divyasri M	NA	IoT Based Antenna Positioning System	International Journal for Research in Applied Science and Engineering Technology (IJRASET)
178	Dr S Kavitha	NA	Secure Multimodal Biometric system based on Robust LSB-DWT Digital Watermarking algorithm	Second International Conference on Computational Systems and Communication(ICCSC2023)
179	Mrs.T.G.Dhaarani, Megala K., Praveen M., SavithaP.S., Varshini N	NA	Performance Evaluation Of Cooperative Eigen value Spectrum Sensing GLRT Under Difference Impulsive Noise Environments In Cognitive Radio	International Journal for Science and Advance Research In Technology
180	B Ramraj	NA	Internet of Things(IoT) Feedback System using Raspberry Pi	International Conference on Computing Methodologies and Communication(ICCMC 2023)
181	T. Jayachandran	NA	A Novel Efficient AI Based EEG Work load Assessment System Using ANN-DL Algorithm	Proceedings of the International Conference on Paradigms of Computing, Communication and Data Sciences
182	Dr.S.Magibalan Boopathi raja C Prabu S Sanjai Krishnan P Thivagar A	NA	Design and fabrication of planting machine	International Journal for Research and Development in Technology
183	Muruganantham S, Arunkumar T, Harharasuthan K K, Sasikumar S, Jagadesh S	NA	A review of design and fabrication of remote controller 360 degree fire protection system	International Research Journal of Modernization in Engineering Technology & Science

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184	Ms.V.Parameshwari, Mr.M.Srinevasan, Ms.S.Kavitha, Ms.D.Vinoparkavi	NA	An Efficient Real Time Smart Speed Control System For Motor Vehicles Using Internet Of Things	Scandinavian Journal of Information Systems
185	Mrs.T.G Dhaarani, Monish R, PuviyarasuS, Ramya V,Subasri S	NA	Multi-Antenna Assisted Spectrum Sensing for Cognitive Radio in Nakagami-M Fading Channel	International Journal of Advanced Research in Science, Communication and Technology
186	Dr D Arulanantham	NA	Intelligent Control system for BLDC Motor Driven Solar Water Pumping System Using Wode Algorithm	3rd International Conference on Artificial Intelligence and Smart Energy(ICAIS-2023)
187	S Brindha	NA	IOT Based Paraplegia Patient Communication Device Using Smart Glove	International Conference on Emerging Trends in Industry 4.0 and Sustainable Concepts
188	S Brindha	NA	Avanced Suction Based Static Trash Collector Using IoT	International E-Conference on Recent Innovation in Science,Technology,Education,Management and Medicine
189	Ms Jeyapoornima Dr A Manimaran Dr D Arulanantham Dr M Ramkumar Prabhu	Digital Signal Processing	Digital Signal Processing -All chapter	NA
190	M Prabu	NA	Healing and Preventing Trees From Beetles Using Pesticides	International Conference on Computer Communication and Informatics

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191	Dr S Sathyasundari Dr C Saraswathi Mr N Senthil kumar	Marketing Management - Book	NA	NA
192	N Senthilkumar Dr V Manimegalai	NA	Social media marketing and buying intentions among the consumers og home appliances	Journal of survey in fisheries sciences
193	K Nandhini K Sivasankari	NA	A Study on the impact of Covid LOCKDOWN on women's mental health with special reference to erode city	Journal of survey in fisheries sciences
194	Dr V Manimegalai K Arulini	NA	Influence/Impact of Economic factors towards the domestic gender equality of rural women self help groups - An analytical approach	Journal of survey in fisheries sciences
195	Dr K Parthiban	NA	Effects of COVID-19 on employee engagement among the bank employees	Journal of Xidian University
196	Dr K Parthiban	NA	A Study on impact of service quality in customer satisfaction in E-Commerce	Social Science Journal
197	T.Jayakumar	NA	A Review of hybrid wind- solar PV technology in generation of electricity	International Conference on Computer Communication and Informatics
198	Senthamarai M Jahina Sanjai T S	NA	Artificial Intelligence in Mitidating Climate changes	International Conference on Advanced Science and Engineering Research

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199	Jahina J Indhumathi T	NA	Block Chain waste management using secure data standard a novel approach	International Conference on Advanced Science and Engineering Research
200	Indhumathi T Senthamarai M	NA	A Block chain-based Decentralized Frame work for Fair Data Processing	International Conference on Advanced Science and Engineering Research
201	K S Punithaasree	NA	River the Reviver: A Construal of Gita Mehta's A River Sutra	Blue ava ford publications
202	Dr.M.Mythili	NA	Incongruence to Congruence: Immigration-An Expedition towards self Realization in the Select Novels of Bharati Mukherjee	Blue ava ford publications
203	Dr.P.Kavitha	NA	Infringement of Conviction - a Swing towards Exuberance in the Novels of Anitha Nair	Blue ava ford publications
204	Anbarasu N. ,S. Karuppusamy, S. Prabhu and P. Sobana	Advanced Practical Approaches to Deepfake Detection and Applications	Experimental Work and Discussion of Results on Deepfakes in Stock Prices Using Sentiment Analysis and Machine Learning	NA
205	P. Boobalan, K. Gunasekar, P. Thirumoorthy, J. Senthil	Advanced Practical Approaches to Deepfake Detection and Applications	An Introduction to Deepfakes on Cryptographic Image Security	NA

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206	A. Anisha Sanjeetha, R. Sivaraj and P. Uma	Advanced Practical Approaches to Deepfake Detection and Applications	An Overview of Available Deepfake Datasets in Neural Network-Based Soil and Weather Prediction Models for High Quality Crops	NA
207	P. Sobana, S. Prabhu, S. Karuppusamy and N. Anbarasu	Advanced Practical Approaches to Deepfake Detection and Applications	Deepfakes on Smart Devices in Stock Price Prediction Using Machine Learning	NA
208	N. Sridhar, K. Shanmugapriya and C. N. Marimuthu	Advanced Practical Approaches to Deepfake Detection and Applications	Machine Learning Algorithms to Detect Deepfakes Fine Tuned for Anomaly Detection of IoT	NA
209	K. Vinitha, P. Thirumoorthy and S. Hemalatha	Advanced Practical Approaches to Deepfake Detection and Applications	Data Storage, Data Forwarding, Data Retrieval With Big Data Deepfakes in Secure Cloud Storage	NA

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210	L. Subhashini , S. Maheswari and S. Prabhu	Advanced Practical Approaches to Deepfake Detection and Applications	A Privacy Protection Method for Deepfake Hybrid Cloud Computing	NA
211	S. Keerthana , P. Thirumoorthy , S. Maheswari and S. Karuppusamy	Advanced Practical Approaches to Deepfake Detection and Applications	Deep Learning Algorithms in Cluster Analysis on an E-Learning System in Data Mining	NA
212	E. Manimehalai , D. Vanathi and C. Navamani	Advanced Practical Approaches to Deepfake Detection and Applications	COVID-19 Diagnosis Using Transfer Learning Techniques and Applications on Chest X-Ray Images	NA
213	J. Priyadharshini , E. Padma and S. Prabhadevi	Advanced Practical Approaches to Deepfake Detection and Applications	Features Manipulation of Classification and Recognition of Images Under Artificial Intelligence Using CNN Algorithm and LSTM	NA

Sl. No.	Name of the Teacher	Title of the Book published	Title of the Chapter published	Title of the proceedings of the conference
214	V. Gunasundhari , M. Parvathi and S. Prabhu	Advanced Practical Approaches to Deepfake Detection and Applications	Security Enhancement in Cloud Computing Using CBC Technique	NA
215	Dr.A. Murugesan	NA	Investigation on Production of Edible Oil from Rice Husk	Journal of Manufacturing Engineering
216	Velliyangiri B, Gokulkumaran B, Manoj Kumar T, Mukesh Kumar T. Pradeep kumar T	NA	Recent developments in multipurphose tiller machine design a critical review	International Research Journal of Modernization in Engineering Technology & Science
217	Velliyangiri B, Pranavakumar S, Priyadhrshan R, Elango M, Jagan S,	NA	Design and fabrication of Casting defect segregation machine	International Research Journal of Modernization in Engineering Technology & Science
218	Dr.M.K Murthy, Manikandan M,	NA	A review : Design and development of integrator 2&3 - wheeler electric vehicle	International Journal of Engineering and Technology
219	Dr Kakoll benerajee A P Gobinath Satheesh kumar reddy C Dr M Dhipa	Embedded Systems-Book	NA	NA

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220	Dr K Indira Devi, Dr P Jamuna, Dr G Ramani , Dr W Rajan Babu & R.Premkumar	Electric Vehicle Technology	NA	NA
221	A.Abdul Hameed & S.Shahul Hameed	NA	Experiment on the Flexural functioning of cold formed steel built -up complexHat section	International Journal for Research in applied Science & Engineering Technology
222	K.Selvi & S.Karthi	NA	Experimental strength on Polypropylen fiber reinforced concrete	International Journal for Research in applied Science & Engineering Technology
223	Ku.Manikandhan & S.Jeevanantham	NA	Comparative Study about AAC Block with Porotherm Brick	International Journal for Research in applied Science & Engineering Technology
224	Dr.E.K.Mohanraj & R.Vasanth	NA	A Review the effect and Behaviour of concrete using lime stone powder	International Journal for Research in applied Science & Engineering Technology
225	A.Abdul Hameed & G.Kalaiyarasan	NA	study on strength of glass fiber reinforcement concrete with fragmentary replacement of cement with fly ash	International Journal for Research in applied Science & Engineering Technology
226	Ms. S. Krithika, Dr. S Prabhu	NA	A Technical Survey on Identification and Diagnosis of Diseases Using Deep Learning	International Journal of Engineering Technology and Management Sciences
227	P.Kokila, Kishore Kumar S, Arun U T, Gowshik B, Jeeva M,	NA	Viable Detection Of Fractures In Superficial Bones Using High Gain Vivaldi Antenna	IJRAR - International Journal of Research and Analytical Reviews (IJRAR)

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228	Dr.D.Arulanantham, S.Snekha, K.Logeshwaran, R.Nishanth, K.Lavanya.	NA	Text Extraction From Identity Documents Using Optical Character Recognition	IJRAR - International Journal of Research and Analytical Reviews (IJRAR)
229	V.Parameshwari, C.D.Ponrathesh, S.Pranesh, A.Sanjay, R.Sathya	NA	An IoT Enabled Smart Speed Control System For Vehicles	IJRAR - International Journal of Research and Analytical Reviews (IJRAR)
230	V Parameshwari	NA	IoT Enabled Automatic security control system for smart television	Virtual International Conference: 3rd ICRCSET-2022
231	Dr.D.Arulanantham	NA	Smart Water control and Monitoring system with IoT enabled	Virtual International Conference: 3rd ICRCSET-2022
232	Praveen Santhoshkumar G	NA	PLC Based Multi channel Temperature Monitoring & Controlling System	Virtual International Conference: 3rd ICRCSET-2022
233	Anandkumar D	NA	IoT Technology based new generation secured ATM using Biometric and OTP	Virtual International Conference: 3rd ICRCSET-2022
234	Ragul A, Sarankumar M, Rajprasth B, Krishnaprasath P, Murugananthan S	NA	Design and fabrication of fire extingushing drone CO2 ball and sprayer	International Journal for research in Applied science & Engineering Technology
235	Ravichandran D, Bharath kumar R, Gowtham S, Guna T, Janeshwaran V	NA	Design and anaysis of Heligal spring in two- wheeler shock absorber by changing its geometric parameter and matrial	International Journal for Science and Advance Research in Technology

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Study on Online Branding Effectiveness and Future Trends with Special Reference to Angel Starch & Food Pvt Limited,1 St Floor H 19 Periyarnagar, Erode, Tamil Nadu 638009 .

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ABSTRACT: In today's digital age it is essential to analyse the factors that influence the success of online branding. Pure play e-tailer, Brick and mortar, click and mortar companies are required to follow online branding strategy. As online branding is the need of the hour companies are moving on the track where the ultimate destination is to adopt online branding as the strategy to stay ahead. Online branding is moving at the pace of the light. To keep up, companies need a robust foundation with the judgment to think precariously about the critical success factors for online branding. The purpose of the paper is to identify factors that influence the success of online branding, interrelationship among those factors and categories them in line with its driving and dependence power. These factors will help to prepare the model for companies who are planning to go for online branding strategy. Interpretative Structural Modelling approach is used to construct this model. The result found that both online factors and offline factors influence the success of online branding.This paper examines the effectiveness of online branding and trends that are likely to shape the future of digital branding. It will provide a comprehensive overview of the current state of digital branding, focusing on how it has been used in recent years, and how it is likely to evolve. The paper will review the latest research on the effectiveness of digital branding, including the impact of digital branding strategies on consumer perceptions, customer loyalty, and the overall brand image. Additionally, the paper will analyse current trends in digital branding and examine how they could shape the future of digital branding. Finally, the paper will provide practical recommendations for marketers looking to capitalize on the potential of digital branding.

I. INTRODUCTION OF THE STUDY

Online branding is defined as a brand management technique that uses online channels as a powerful medium to position a brand in the target market. You may also understand it as internet branding or online marketing.

It can also be understood as a digital-centric method for developing brand presence and conversions. As the online platform is advancing, internet marketing channels have become the opportunity for expanding the identity online. It uses search or social platforms to grow businesses.

No matter what is the specialization of the business, the internet can prove to be beneficial for every niche. Most of the companies have now chosen to expand their brands by making an identity online. Key uses of building an internet branding campaign are-

- Creating and Sharing a Brand story
- Identifying the target customer base
- Optimizing Brand awareness
- Building a dialogue with target audiences
- Creating and sharing the Value proposition of the brand

- Widening reach, boosting lead generations, and driving sales

Statement of the study:

The importance of branding:

In an age of ever-growing competition, striking the right emotional chord is key to standing out from the crowd. The most successful brands today are those that build lasting relationships with their customers.

- Struggling to commit to the process
- Lack of creativity
- Skipping steps
- Creating products without a brand foundation

Objectives:

- To identify the current trends in online branding.
- To analyse the effectiveness of online branding techniques.
- To examine the impact of online branding on customer preference.
- To suggest strategies to improve online branding.

Scope of the Study:

The research on online branding could have a significant impact on the future of marketing, as it has the potential to enable companies to build and maintain a strong online presence.

This could help to increase brand awareness, customer loyalty, and ultimately lead to more sales. Additionally, research on online branding could help to create a more personalized experience for customers, as companies can use online data to better understand and target their customers.

Finally, research on online branding could help to create more efficient marketing campaigns, as companies can better understand and optimize their campaigns to reach the right people at the right time.

Limitations of the study:

As we don't have direct contact with customers we meet difficulties understanding the customer preferences, difficulty in tracking customer engagement it haves Limited access to customer feedback and Difficulty in measuring the impact of online branding activities, they creating Lack of comprehensive data analysis capabilities.

- Shortage of skilled personnel to manage online branding campaigns.
- Difficulty in predicting customer behaviour.
- Difficulty in creating a unified online brand identity across multiple channels.
- Difficulty in measuring the ROI of online branding initiatives.
- Difficulty in maintaining consistency across all online channels.

II. REVIEW OF LITERATURE

Online branding, also known as digital branding, refers to the process of building and managing a brand's online presence. It involves developing a brand image, communicating the brand's message, and engaging with customers through various online platforms. Online branding has become increasingly important in the digital age, as more and more consumers are turning to the internet to research products and services.

1.Mohr and Nevins (2010)The Impact of Online Branding on the Formation of Brand Image found that online branding has a significant impact on brand image formation. They suggest that companies should focus on creating a consistent brand image across all online platforms to increase trust and credibility with consumers.

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A Study on Impact of Employee's Working Condition on Employee's Performance and Organizational Productivity with Reference to Cycle World

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ABSTRACT: This study examines the impact of employee working conditions on employee performance and organizational productivity with reference to Cycle World, a leading bicycle manufacturing company. The study aims to investigate the relationship between the physical and social working environment of employees and their job satisfaction, motivation, and productivity. The research methodology employed in this study includes a quantitative survey of 150 employees from Cycle World, which was analyzed using descriptive statistics and ranking analysis. The results indicate that employee working conditions significantly influence employee job satisfaction, motivation, and productivity, which, in turn, affects organizational productivity. The study concludes that organizations must prioritize creating a positive working environment that promotes employee well-being to improve organizational performance.

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I.INTRODUCTION

The cycle industry is a global sector that includes the production, distribution, and sale of bicycles and related accessories. Bicycles have been around for over 200 years and have evolved significantly over time, from the early wooden bicycles to the modern high-tech machines of today. The industry is driven by a range of factors, including transportation needs, environmental concerns, health and fitness trends, and recreational activities. Bicycles are used for a variety of purposes, from daily commuting and transportation to recreational activities and competitive sports. The industry is highly competitive, with a large number of players operating in the market, including manufacturers, retailers, and distributors. Major players in the industry include companies such as Giant Manufacturing Co., Ltd., Trek Bicycle Corporation, and Specialized Bicycle Components, Inc.

II.OBJECTIVES OF THE STUDY

To examine the physical and social working conditions of employees at Cycle World.
- To analyze the relationship between employee working conditions and productivity.
- To identify the factors that influence employee job satisfaction and motivation at Cycle World.
- To provide recommendations to Cycle World and other organizations on how to improve employee working conditions to enhance organizational productivity.

III. STATEMENT OF THE PROBLEM

The problem statement of this study is that many organizations, including Cycle World, struggle to maintain a positive working environment that promotes employee well-being and job satisfaction, which can ultimately lead to lower employee productivity and decreased organizational performance. Poor working conditions such as inadequate physical facilities, low employee morale, and ineffective management practices can contribute to high employee turnover rates, absenteeism, and low productivity levels, all of which negatively impact an organization's bottom line.

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An Empirical Study On Employee Welfare Scheme With Reference To S&T Welcare Equipment Pvt. Ltd., Peelamedu, Coimbatore

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ABSTRACT: Making a decision on how to look at employee well-being metrics is the goal of the study work. The phrase "employee welfare" describes any measures done by a business for the advantage or comfort of its workers, including the provision of services, facilities, and benefits. In an effort to boost output and motivate employees, it is done. The improvement of working-class life, the promotion of the whole development of the employee's personality, and other objectives are the purposes of knowing employee welfare. There are several advantages for employees' welfare, including housing alternatives, free healthcare, retirement benefits, educational benefits for kids and adults, welfare programs for employees' families, loan possibilities, etc.

INTRODUCTION OF THE STUDY

According to the labor welfare, founded in 1969 to investigate the labor welfare system, social security programs that enhance the working conditions for employees in India are referred to as such. Labor assistance schemes are among the social and economic indicators of the working class. The working circumstances that are relevant to health have improved. As a result, the workers' standard of living has increased. The word "welfare" indicates and improves one's physical and mental well-being as well as organizational and human resource development. It affects everything from health, housing, medical care, insurance, leisure time, andstable employment. The nation's industrial production has benefited significantly from labour, on which industrial progress is based.

STATEMENT OF THE PROBLEM

To assess the amenities provided for employee wellness.
To build friendly working relationships.
To enhance efficiency and productivity among employees.
To ascertain the level of satisfaction with welfare measures among workers

OBJECTIVE OF THE STUDY

To research the numerous amenities offered to employees.
To investigate the employees' perceptions of their awareness of safety precautions within the company.
To guarantee the welfare of workers and their families &to aid in employees' intellectual development.

SCOPE OF THE STUDY

The scope of the labor welfare program comprises both statutory and non-statutory facilities, which are growing daily and are generally accepted by society as being beneficial to workers. The overall goal of labor is to lessen the stress and strain placed on industrial workers.
It notes that employees enjoy a tidy and clean working environment. The scope varies from industry to industry and country to country. They should have safe working circumstances with the least amount of workplace risk. They should be able to live lives with status, dignity, and self-respect.

LIMITATIONS OF THE STUDY

The survey respondents were concerned that the management would see their answers.
The study has a 60-day maximum duration due to time constraints.A few workers were reluctant to respond to the

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A Study on Impact of Working Environment on Employee's Performance with reference to manufacturing units in Erode district

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ABSTRACT: This study tries to examine how the workplace environment affects workers' productivity. Finding the elements that influence an employee's performance in a positive or negative way is the main goal. The study will concentrate on how working conditions, organizational culture, hours worked, job security, and rewards affect employee performance. Data will be gathered for the study from a variety of sources, including surveys, interviews, and focus groups.

1. INTRODUCTION

An employee's job happiness and overall performance are significantly influenced by their workplace. Their devotion to their jobs, productivity, and motivation can all be dramatically impacted. The working environment can have a big impact on a worker's safety and well-being in the industrial sector, since they are frequently exposed to risky and physically demanding situations. For assuring employee well-being and the success of the organization, it is crucial to research how the workplace affects employee performance. This study's goal is to look into how the workplace environment affects workers' productivity in Erode industrial facilities. The textile and apparel manufacturing business is well-known in the city of Erode in the Indian state of Tamil Nadu

2. STATEMENT OF THE PROBLEM

The goal of the study is to determine how the workplace environment affects workers' performance in Erode-based manufacturing facilities. The manufacturing sector of the economy of Erode issignificant, and employee performance is greatly influenced by the workplace culture. Despite the significance of the workplace, not much research has been done in the context of Erode manufacturing facilities. The solutions to these research questions will assist manufacturing businesses in Erode in identifying the critical elements that affect worker performance and in creating practical plans to enhance the working environment. This will improve employee wellbeing, boost job satisfaction, and improve organizational performance.

3. OBJECTIVES OF THE STUDY

- To evaluate the relationship between job satisfaction and working environment in terms of its influence on employee performance.
- To investigate the disparities between employee performance in various working settings.

4. SCOPE OF THE STUDY

- To evaluate how well-being and safety in the workplace affect productivity.
- To investigate how supportive work environments affect how well their employees perform.
- To research how employee performance is impacted by job satisfaction.

5. LIMITATIONS OF THE STUDY

- Due to a dearth of trustworthy sources or prior research on the subject, it could be challenging to get pertinent data for the study.

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A Study on Impact of Gender Discrimination and Performance in Workplace Foods and Inns With Special Reference to Vellore

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ABSTRACT: In underdeveloped nations where women have far fewer rights and opportunities than in wealthy ones, the economic case for gender equality and female empowerment has drawn more attention. The arguments in favour of gender equality are therefore far more compelling and well-supported in the former. Despite the fact that there are still significant differences in wealthy countries, It is more difficult to analyse the existing gender inequality in terms of barriers that need to be removed in order to achieve a fair and effective division of labour in developed countries, despite the fact that there are still significant differences in labour force participation, income, and power.

I.INTRODUCTION

The concept of "gender equality" refers to the equal appreciation of the many roles that men and women fill. The topic works to dispel preconceptions and stereotypes so that both sexes can equally benefit from and contribute to social, political, cultural, and economic advancements in society. An immediate and steady increase in the economy is the direct result of men and women having equality. Women who are educated, in good health, and supportive of their families and countries tend to be more prevalent in society. It is expected that males tend to work harder, riskier jobs that are typically located outside of their homes.

II.STATEMENT OF THE PROBLEM

To reach the ambitious goal of full and equal participation of women, we have to tacklecritical remaining challenges and address the structural causes of gender inequality, such asviolence against women and girls, early and violence against women's and girls, early andforcedmarriage,sexualandreproductive healthandreproductive rights,persistent gender

III.OBJECTIVES OF THE STUDY

- To analyses the awareness level about gender equality
- To analyses about the opinion of employee towards the problem faced due to gender in equality
- To analyses the opportunities provided to male and female

IV.SCOPE OF THE STUDY

- The study will also be helpful in analysing the problems faced by due to gender in equality
- The present study will be helpful in understanding the factors influencing employee expecting gender equality

V.LIMITATIONS OF THE STUDY

- Some respondents are hesitant to reveal their name as the survey is on a sensitive issue
- The awareness about the cyber bullying among the respondents were less

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A Study on Impacts of Flexible Work Schedule on Organization Performance and Employee Satisfaction with Reference to Manufacturing Sectors Erode

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ABSTRACT: The study will be used to compare how well the organisation performed before and after implementing a flexible work schedule in terms of employee satisfaction, job performance, and overall organisational success. The results of the poll will also be used to find viable solutions and tactics for putting the timetable into action in a way that maximises its potential advantages and minimises its potential disadvantages. Finally, in order to better understand the effect that flexible work schedules have on organisations, the research will draw on previously conducted studies on the subject.

I.INTRODUCTION

The study on the impacts of flexible work schedules on organizational performance and employee satisfaction in production units in Erode can provide valuable insights into the benefits and challenges of implementing flexible work arrangements in the workplace. Flexible work schedules refer to alternative work arrangements that allow employees to adjust their work hours, location, and/or workload to better suit their personal needs and responsibilities. Some examples of flexible work arrangements include telecommuting, job sharing, compressed work weeks, and flexible start and end times.The implementation of flexible work schedules has the potential to improve organizational performance by increasing employee productivity, reducing absenteeism and turnover rates, and enhancing employee engagement and job satisfaction. Additionally, flexible work arrangements can benefit employees by providing them with greater work-life balance, reducing stress levels, and improving job satisfaction. However, implementing flexible work schedules can also present challenges for organizations, such as coordinating work schedules across teams, managing remote employees, and ensuring consistent communication and collaboration among employees.

II.STATEMENT OF THE PROBLEM

The purpose of this project is to analyse the effects of a flexible work schedule on employee productivity and job satisfaction. The research will focus on two separate businesses in the same industry and compare the effects of the flexible work schedule on their respective employees. This study will also assess the impact of the flexible work schedule on workers' individual stress levels, job satisfaction, job motivation, and overall productivity. Additionally, the research will determine the cost-effectiveness of implementing a flexible work schedule in comparison to traditional 9-5 employment.

III.OBJECTIVES OF THE STUDY

- To study the organizational performance and employee satisfaction towards flexible work schedule.
- To identify the work policies and practices on organization performance.
- To analyze the effects of flexible work schedule on employee satisfication.
- To evaluate the potential benefits and drawbacks of flexible work arrangements.

IV.SCOPE OF THE STUDY

- To examine the impact of flexible work schedules on employee productivity and engagement.
- To identify the factors that influence the success or failure of flexible work schedules.
- To explore the benefits and challenges associated with flexible work schedules for employers and employees.

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A Study on Perception and Challenges of Mobile banking with reference to Union Bank of India,M.Anumanpalli

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ABSTRACT: The reference to Union Bank of India, this study attempts to look into the attitudes and challenges associated with mobile banking, which has gained popularity in recent years as a quick and convenient way for customers to access financial services. A survey of Union Bank of India branch managers and customers was incorporated as part of a mixed-methods approach. The study's findings demonstrate that there are still a number of problems that need to be fixed even though customers generally have positive opinions about mobile banking

I.INTRODUCTION

.In recent years, mobile banking has become a well-liked method of handling financial transactions. The Union Bank of India has also entered the mobile banking market and provides a variety of mobile banking services to its clients. With relation to Union Bank, the goal of this study is to look into how mobile banking is seen and its difficulties. The study will use a mixed-methods research approach, collecting data in both quantitative and qualitative ways. Customers of Union Bank of India will be surveyed as part of the study's quantitative phase to learn more about their attitudes towards and use of mobile banking. In-depth interviews with a subset of Union Bank of India users will be done as part of the qualitative phase to learn more about their experiences with mobile banking

II.STATEMENT OF THE PROBLEM

Finances although managing accounts via mobile banking has grown in popularity, there are still difficulties to be resolved. However, there are also drawbacks to internet banking, including technical ignorance, high setup costs, legal complications, a loss of customer-banker interaction, security concerns, and privacy concerns.

III.OBJECTIVES OF THE STUDY

- The amount of customer comfort with using new mobile banking services provided by Union Bank of India, with a focus on identifying factors that may affect their level of comfort.
- To determine the elements that affect a certain population's adoption and use of mobile banking with an emphasis on the reasons for those decisions.

IV.SCOPE OF THE STUDY

- The study can focus on several consumer categories, such as age, gender, income level, and educational attainment level, to better understand how various aspects may affect participants' perceptions of and difficulties with mobile banking.
- To understand the rate of adoption, the barriers to adoption, and the factors that influence the adoption of mobile banking among its consumers, the study might concentrate on the adoption of mobile banking technology in the context of Union Bank of India's clients.
- To assessing the dependability, usefulness, and accessibility of mobile banking services, among other aspects.

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A Study on Employee Welfare Measures and It's Impact on Employee Performance At Star Health and Allied Insurance Co Ltd...

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ABSTRACT: This study aims to explore the impact of employee welfare measures on employee performance. It will provide a survey-based analysis of employees' perceptions of the welfare measures they receive and its impact on their job satisfaction, motivation and performance. The survey will assess the following welfare measures: financial and non-financial rewards, benefits and services, work-life balance, health and safety initiatives, and social activities. The study will also examine the relationship between the welfare measures and employee performance. The results of this study will provide important insights into the effectiveness of employee welfare measures in enhancing employee performance and will aid in developing effective strategies for employee welfare.

I.INTRODUCTION

The study focuses on the impact of employee welfare measures on employee performance at Star Health and Allied Insurance Co Ltd, a standalone health insurance company in Chennai, India.Employee welfare measures refer to the various policies and programs implemented by organizations to improve the overall wellbeing of their employees.The study aims to understand the relationship between employee welfare measures and employee performance, specifically at Star Health and Allied Insurance Co Ltd.The study will analyze the various welfare measures implemented by the company and their impact on employee motivation, job satisfaction, productivity, and overall performance.

II. STATEMENT OF THE PROBLEM

- The purpose of this study is to understand the impact of employee welfare measures on employee performance.
- The study will help employers and human resource managers in understanding the need for providing employees with welfare measures and the impact it has on their productivity and performance.
- The research will also help in understanding the factors that affect the implementation of these welfare measures, such as the cost and benefits associated with it, the organizational culture, and the role of employers in providing a healthy workplace environment.

III.OBJECTIVE

- To identify areas for improvement in existing employee welfare measures.
- To analyze the impact of employee welfare measures on employee performance.
- To investigate the cost-effectiveness of different employee welfare measures.
- To explore suitable employee welfare measures to ensure improved employee performance.

IV.SCOPE OF THE STUDY

- Examining the impact of employee welfare measures on employee motivation and job satisfaction may help in understanding the employee's preference.
- Examining the impact of employee welfare measures on organizational performance can pin point the ways to improve organizational performance.
- Analysing the impact of employee welfare measures can pin point the ways to reduce employee retention.
- Investigating the influence of employee welfare measures can pin point the ways for the absolute loyalty of the employees.

[illegible] LIMITATION OF THE STUDY

- The sample size of the study is limited to 150 employees.
- Some important control variables may not be available in the study, which may affect the results.
- Measuring the impact of employee welfare measures on employee performance is a subjective task, and the results can be affected by personal opinions.
- The scope of the study may be limited to the specific industry.

III.LITERATURE REVIEW

[illegible] Tiwari (2014) Health, safety and welfare are the measures of promoting the efficiency of employee. The [illegible] welfare measures provided by the employer will have immediate impact on the health, physical and mental [illegible] alertness, morale and overall efficiency of the worker and thereby contributing to the higher productivity. The basic purpose of employee welfare is to enrich the life of employees and to keep them happy and conducted. [illegible] welfare measures may be both statutory and non-statutory, laws require the employer to extend certain benefits to [illegible] in addition to wages or salaries. In the present study an attempt has been made to study the employee welfare facilities and its impact on employee's efficiency at VindhaTelelinks Ltd. Rewa Madhya Pradesh. The study [illegible] the Employees welfare facilities and its impact on employees' efficiency at VindhaTelelinks Ltd. Rewa [illegible] The average mean scores and percentage score of the overall of 22 items has been computed at 3.64(66%). It can [illegible] conclude that the employee welfare facilities provided by the company to employees are satisfied and it is [illegible] but still of scope is there for further improvement. So that efficiency, effectiveness and productivity can [illegible] enhanced to accomplish the organizational goals.

[illegible] Waititu (2017) The general objective of this study was to determine the effects of employee welfare programs on employee performance in Kenya Railways Corporation while the specific objectives was to assess the influence of occupational health on employee performance in Kenya Railways Corporation, to investigate the influence of succession plans on employee performance in Kenya Railways Corporation, to establish the influence of training and development on employee performance in Kenya Railways Corporation, to determine the influence of employee referral scheme on employee performance in Kenya Railways Corporation and to examine the influence of remuneration policies on employee performance in Kenya Railways Corporation. The study used descriptive survey research design. The study targeted a population of 1720 employees. The target population was stratified into two: administration and academic staff. Out of this population, a sample of 172 respondents was obtained through stratified random sampling. The primary data was collected through a semi structured questionnaire. The questionnaires were administered to the academic and administrative staff at Kenya Railways Corporation. The questionnaires were administered through personal contact to allow for further investigation. The questionnaires were then picked later by the researcher to be used for data analysis. Both qualitative and quantitative data analysis methods were used to analyze [illegible] that was collected in this study. Specifically, descriptive statistics was used to summarize the data and put it in [illegible] formats and prepare it for correlation and regression analysis and inferential statistical analysis. Descriptive [illegible] was preferred for summaries and presentations because they presented the facts and they also made it easier to [illegible] and interpret. The study established that the five variables of employee welfare programmes (occupational health, succession plans, training and development, employee referral scheme and remuneration policies) have an [illegible] on employee performance at Kenya Railways Corporation. From the regression model, the study established that remuneration policies had strongly positively influenced employee performance at Kenya Railways Corporation. This was followed by occupational health which had a weak positive influence on employee performance at Kenya Railways Corporation. Training and development showed a weak positive influence on employee performance at Kenya Railways Corporation. On the other hand, employee referral scheme showed a weak negative influence on employee performance at Kenya Railways Corporation while succession plan recorded the least weak and negative influence on employee performance at Kenya Railways Corporation. The study recommends that remuneration policies; occupational health and training and development should be adopted by the Kenya Railways Corporation to improve on employee performance in the organization.

IV.RESEARCH METHODOLOGY

The process used to collect information and data for the purpose of making decisions. The methodology may include Publication research, Surveys and other Research techniques and could include both historical and present information.

4.1 Research Design

Research Design refers to the overall strategy that we choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring that we will effectively address the Research problem. It constitutes the blueprint for the collection, measurement and analysis of data.

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A Study on Impact of Warehousing on Production with Difference to Angel Starch Erode

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ABSTRACT: This study examines the effects of warehousing on production in the context of Angle Starch, a manufacturing company that produces starch products. The research explores the various aspects of warehousing, including its role in the supply chain, its impact on inventory management, and its influence on production processes. The study utilizes a mixed-methods approach, incorporating both qualitative and quantitative data, including surveys, interviews, and case studies. The findings suggest that effective warehousing can positively impact production by reducing lead times, improving inventory accuracy, and increasing product availability. However, inadequate warehousing can lead to production delays, inventory shortages, and decreased customer satisfaction. Overall, the study highlights the critical role of warehousing in the production process and provides valuable insights for manufacturing companies seeking to optimize their warehousing operations.

I. INTRODUCTION

The warehousing industry is a critical component of the supply chain, providing essential services such as storage, inventory management, and distribution. Angel Starch, a leading starch manufacturer in Erode, India, is no exception. As a growing company, Angel Starch has recognized the importance of effective warehousing in supporting their business operations and meeting the needs of their customers. In light of this, Angel Starch has undertaken a study to assess the impact of warehousing on their production operations. The study aims to identify areas where improvements can be made to optimize their warehousing processes, reduce costs, and improve overall efficiency. By conducting this study, Angel Starch hopes to gain insights that will enable them to continue to grow and meet the needs of their customers in an increasingly competitive marketplace.

II. OBJECTIVES OF THE STUDY

- To investigate the current warehousing practices at Angle Starch and identify any inefficiencies or challenges in the process.
- To determine the impact of warehousing on production processes at Angle Starch, including lead times, inventory accuracy, and product availability.
- To analyses the effectiveness of Angle Starch's inventory management system in relation to its warehousing practices.
- To provide recommendations for improving Angle Starch's warehousing operations and optimizing production processes.

III. STATEMENT OF THE PROBLEM

- Angle Starch is experiencing production delays and inventory shortages, which may be due in part to inefficiencies in its warehousing operations.
- The company has not conducted a comprehensive analysis of its warehousing practices to determine the impact on production processes and overall business performance.
- There may be challenges in coordinating warehousing activities with other aspects of the supply chain, such as transportation and customer demand.

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A Study on Evidence Based HRM in Sakthi Auto Component Limited

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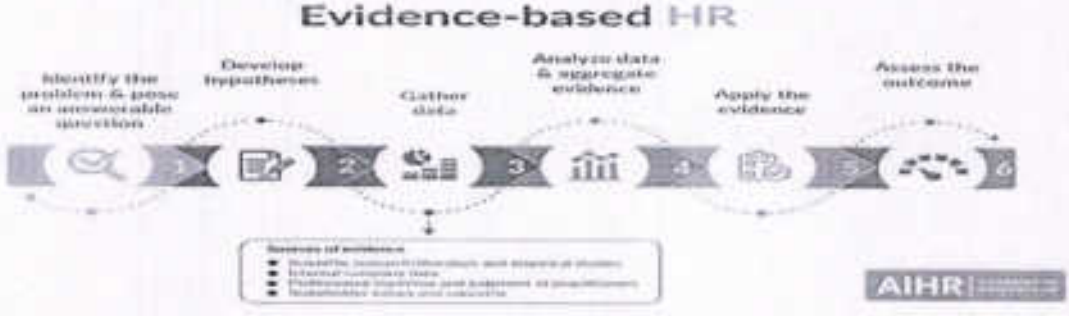
ABSTRACT: The finest available scientific evidence, corporate data, and critical thinking are all used in the decision-making process known as "evidence-based HR" (EBHR). We outline the steps to becoming an HR professional who uses evidence. Managing professional decisions actively is a crucial component of EBHR. To do this, it is necessary to make decisions that are supported by high-quality research, particularly those that are significant or frequent. We outline a series of step-by-step methods for becoming an expert in evidence-based human resource management, starting with getting started and ending with incorporating EBHR into your company. This article emphasises the relationship between successful practise and organisational research while providing advice for evidence-based practise.

I.INTRODUCTION

Many of the issues and difficulties that companies experience is related to people at work. Organisational objectives are accomplished in part by the performance, effort, ideas, and cooperation of individuals within those organisations. Work is important to people because it gives them purpose, fulfilment, and money to sustain their life and the lives of those they care about. Work and organisations help make communities and the national economy richer. Employees in organisations have the capacity to think, act, and feel. Although they are not machines, people have control over every aspect of their activity at work. People's attitudes and habits at work can also be a problem for organisations: power struggles, a shortage of competent workers, authoritarian managers, opposition to change, and demotivation can all make it difficult to have a pleasant and effective workplace. Every form of situation involving humans requires.



II.OBJECTIVES OF THE STUDY

- To research evidence-based human resource management in Sakthi auto parts.
- Making choices based on evidence from the following sources is known as evidence-based HR.
- To assist in ensuring the achievement of the intended business goals
- The internal data at hand.
- Findings from empirical studies and research. Real-world experience and expert judgement.

III.SCOPE OF THE STUDY

- The research study, A study on evidence-based HRM in Sakthi Auto Component Limited.
- Takes into account the employees' assumptions and perceptions of the evidence-based HRM practises in place there.

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- The major goal of this study is to understand evidence-based HRM in the Sakthi Auto Component.
- The researcher examines the many employee dimensions and their effects. Thus, the study aids the organisation in taking the necessary actions to improve evidence-based HRM to make the organisation function efficiently.
- It also aids management in dealing with the workforce.

IV.LIMITATION OF THE STUDY

- This investigation is only focused on Sakthi Auto Component Limited.
- Some employees are hesitant to respond to the questions because they fear that the management may misinterpret what they have to say.
- The employee's perspective could be skewed.

V.LITRETURE REVIEW

The condition of human resource management: evidence from employees' perceptions of HRM staff and systems, **Gibb, S. 2001 In assessing the state of human resource management (HRM),** recent research has looked into a variety of claims about trends in HRM. Methods for assessing the condition of HRM have primarily used fit with "best practise" or fit with contingencies. The "point of view" of the employees is being looked into as an alternative in some recent research. This alternate approach served as the foundation for the study presented here. Employees say that training and development, awards, and levels of individual motivation are among HRM's strong points.

Investigating the role of HRM practises on service innovation: empirical data from UAE government agencies, **Alosani, M.S., Al-Dhaafri, H.S., and Awadh Abdulla, 2021** Governmental organisations are working to create strategies to enhance their innovative endeavours. Employees are hesitant to work innovatively in such agencies, nonetheless, as a result of numerous difficulties and barriers. Practises in human resource management (HRM) and a suitable culture can enhance service innovation. However, there is not enough empirical support for this association, notably in the government sector.

P. Prowse and J. Prowse (2010), The objective of this essay is to critically examine the data supporting the notion that human resource management (HRM) can enhance both organisational and individual performance. It tries to look at how HRM has evolved historically and how it become a separate management profession. According to the research, HRM is the result of a variety of traditions, ranging from a concern for employee welfare to the growth of workplace connections. The dearth of empirical research on the relationship between HRM and corporate performance is particularly significant. In the corporate, public, and growing non-profit sectors, this article will advocate for a re-evaluation of more modern criteria for how people contribute to organisational effectiveness.

Employees' perceptions of human resource management practises and employee outcomes: Empirical evidence from small and medium-sized firms in China, **Li, S., Rees, C.J., and Branine, 2019** This study looks at how employee commitment and turnover intention (TI), two outcomes in small- and medium-sized firms (SMEs) in mainland China, are related to how employees perceive HRM practises. Employee commitment is significantly predicted by how employees view HRM practises such training and development, reward management, and performance management. Employee perceptions of the use of HRM practises and TIs are found to be negatively correlated.

VI.FINDINGS

- For both groups of installers, the variations in motivational factors and attitudes towards bonuses were examined during evaluation.
- The findings of the study indicate that although bonuses may be able to encourage in-house installers, they are so different from contract installers in terms of their overall work motivation that implementing bonuses is not likely to be a success.
- Step 4 dealt with ethical issues and the implications of the research's findings.

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A Study On Buyer Satisfaction And Behaviour Of Bajaj Automobile Platina H Gear (110CC)With Special Reference dharapuram

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ABSTRACT : This topic is selected in order to Study and identify the Customer Satisfaction Level of Platina 110 H Gear in Coimbatore city.A questionnaire was prepared consisting of 16 questions. Around 100 respondents were questioned. The questionnaire circulation covered customers of Platina 110 H Gear in Coimbatore City.A descriptive study was undertaken. Simple Random Sampling technique was used. Simple percentage analysis and chi square method was used.In this project the following were researched and studied in detail. The Customers attitude towards Platina 110 H Gear to determine the effects of the company image on the sales and also to find the reason for buying pulsar motorcycle.

I.INTRODUCTION

Customer satisfaction is the measure of how well a product or service meets the expectations and needs of its customers. It is an essential component of business success because satisfied customers are more likely to become loyal, repeat customers and to recommend the product or service to others.

Customers expect high-quality products or services that meet their needs and expectations. Products or services that consistently meet or exceed customer expectations can lead to higher levels of customer satisfaction. Effective customer service can significantly impact customer satisfaction. Customers expect to receive prompt, courteous, and knowledgeable assistance when they have a question or need help with a product or service. Customers expect products or services to be priced fairly and competitively. Pricing that is too high or too low compared to competitors can negatively impact customer satisfaction. Customers expect products or services to be easily accessible and convenient to use. This can include things like availability, delivery options, and ease of use.

II.STATEMENT OF THE PROBLEM

Despite Balaji Automobile's reputation for quality products and services, there are indications of declining customer satisfaction levels. The company declining customer satisfaction levels. The company has received complaints about the quality of its after-sales service and customer support. Additionally, customers have reported long waiting times for vehicle repairs, leading to dissatisfaction and a decline in customer loyalty

III.OBJECTIVES OF THE STUDY

- To study the socio-economic characteristics of respondents.
- To study the factors influencing for selection of Bajaj Platina 110 H-Gear model.
- To know the customers preference towards Bajaj Platina 110 H-Gear.
- To know the customers opinion about the Brand Image of Bajaj Platina 110 H-Gear.

IV.SCOPE OF THE STUDY

This study is useful for me as well as for the company for identifying the Customer satisfaction level toward Bajaj Platina 110 H-Gear, in Coimbatore city. For company, to identify the customer attitude towards Bajaj Platina 110 H-Gear. And also, this study helps me to create and maintain a good relationship between the customer and the management. Because of this study, the company may know what the customer is looking for and also how to satisfy him regarding Bajaj Platina 110 H-Gear bike.

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A Examine on Employee Retention Strategy on the Subject of SST Oil Corporation, Gobi, Erode

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ABSTRACT: "A have a look at on Employee Retention" is the focal point of the take a look at task. Knowing demographic parameters, purchaser behaviour, and employee retention is the examine's number one aim.

The study of the researcher is descriptive. To fulfil the want for the combination information, each number one and secondary information are amassed, and the tool is a predetermined questionnaire technique. One hundred fifty human beings had been chosen at random from a comfort sample of the surveys, which encompass more than one-desire, rating, and five-scale questions.

By means of putting the plan into preparation, the corporation will foster a way of life of determination to its goals and enhance employee pleasure, motivation, and productiveness.

I.INTRODUCTION

Advent of the have a look at

The purpose of worker retention is to preserve or inspire people to paintings for a employer for as long as feasible. Personnel have constantly been precious assets for any company. They might be considered the existence-blood of an organization due to their crucial nature. The majority of organizations are getting an increasing number of generation pushed due to technological development. However, due to the fact era calls for human resources to feature, this situation does now not lessen the really worth of employees in an organization.

Employee retention is a essential and ongoing pastime. Having managers who take into account that it's miles their obligation to set up and hold an environment that promotes retention is one of the toughest problems. So as for personnel to expand and sense satisfied in their roles, they need encouragement.

Declaration of the hassle

- So one can maximise their anticipated wages and protection, employees currently exchange occupations.
- Amongst different matters, personnel depart a enterprise searching for a higher pay bundle, higher profession and advancement possibilities, and task satisfaction.
- Preserving personnel will provide salary equity and job safety.

Targets of the have a look at

- To discover the factors affecting employee retention.
- to evaluate the strategies for keeping personnel.
- To look at employee retention and motivational techniques
- to assess the approaches for preserving workforce. • To provide insightful suggestions for the employees retention plan at SST OIL corporation.

II.SCOPE OF THE OBSERVE

- This examine, which is critical in that it is able to assist a number of parties, such as human sources managers who are designing their strategy, in addition to analytical and empirical researchers, aims to look at organisational tradition and worker retention.

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An Empirical Study on Work-Life Balance of Employees of Angel Starch & Food (P) Ltd., in Erode.

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ABSTRACT: To sustain enhanced performance efficiency, every organization must ensure that every employee has a strong Work-Life Balance (WLB) and sense of well-being, especially in this era of a highly competitive business climate. Work-life balance is a crucial subject for both professional business practice and scholarly research. Since family and job are the two things that matter most to everyone, work-life balance is a huge problem that has an impact on well-being, according to the research. The current study examines the work-life balance in India's telecom industry as well as the different challenges it is now experiencing. Through programs like this, several organizations in Chennai are aiming to popularise the concept of work-life balance (WLB).

I.INTRODUCTION OF THE STUDY

Raising income while simultaneously modifying daily routines, habits, and daily lives are top priorities for people in today's rapidly developing nations. Today's lifestyle differs from earlier generations' lifestyles. They have no idea how to balance their personal, professional, and job life. They also didn't care much about their health or the health of their families. Family wealth has surpassed family well-being as a result of the evolution of fashion. Work-life balance refers to the notion of appropriately placing lifestyle considerations like health, enjoyment, leisure, family, and spiritual development/meditation above "work" (career and ambition). It relates to the idea of "lifestyle choice."

II.STATEMENT OF THE PROBLEM

The acknowledgment of the detrimental effects of the stressful work environment in the contemporary, competitive world has led to an increase in studies on the topic of work-life balance, according to prior studies. This issue has recently piqued the curiosity of researchers. Several perspectives have been looked at to show the connection between employees' capacity to manage their personal and professional life and their job performance. The main goal of this study is to ascertain whether there are any associations between hectic workplaces and potential disruptions to employees' capacity to plan their families.

III.OBJECTIVE OF THE STUDY

- To evaluate the present Work-Life Balance at Angel Starch and Food (P). Ltd. and to pinpoint the variables that influence it.
- To investigate various Work-Life Balance practices used by firm personnel.

IV.SCOPE OF THE STUDY

To develop its initiatives, contribute to network growth in which it participates, and benefit the country as a whole, the Food and Starch Sector employs a variety of work-life balance tactics. This research intends to highlight these strategies. This study would be useful in educating managers of various Food and Starch sectors about the various effects of work-life balance practices on employees' performance in an organization. The study will also highlight the extensive work-life balance practices that the food and starch business has been able to provide its employees. It attempts to demonstrate, among other things, how encouraging and driven persons working in the food and starch industries are to perform their tasks properly. This study's importance is to stress.

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A Study on Recruitment & Selection Process of Candidate with the Special Reference of Boom HR Solution in Erode

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ABSTRACT: Better hiring and selection practises lead to improved organisational results. Finding suitable employees and encouraging them to apply for jobs inside the firm is the process of recruitment. The procedure by which an organisation chooses from among the applicants those people they feel would most closely match the job criteria in light of the current environmental circumstances is known as selection. Organisations nowadays must adapt to the requirements of their workforce in the highly competitive business environment. An organisation should have an effective recruitment policy that is well-structured and can be used to get the best results. This research helps businesses identify problem areas and makes recommendations for improving the recruitment and selection process. Understanding the recruiting and selection process is the main goal of this study.

I.INTRODUCTION OF THE STUDY

The utilization of human resources, a crucial corporate asset, affects the success of the business as a whole. The hiring of individuals with the necessary abilities, education, and experience is crucial for the achievement of corporate goals. While doing so, we must bear in mind both the current and future needs of the business. Effective hiring practices require in-depth examinations of the position and the labour market. Any management process nearly always begins with recruiting, and failure in this area may cause problems for any business, including a negative impact on profitability and insufficient workforce or skill levels. Recruitment issues may result in a workforce shortage or impair management's ability to make decisions. But hiring doesn't merely include a straightforward selection procedure; also needs careful preparation and managerial decision-making to choose the most qualified personnel.

II.STATEMENT OF THE PROBLEM

A crucial component of human resource management is the recruiting and selection process, which entails finding, luring, and employing qualified applicants for open positions within a company. The primary objective of the recruitment and selection process is to make sure that the organisation only recruits the most qualified and competent people who have the appropriate training, expertise, and experience to successfully carry out their job duties. But attracting a diverse pool of candidates, avoiding biases in the selection process, maintaining legal compliance, and assessing candidates' aptitude for the job can all be difficult tasks in the recruitment and selection process.

III.OBJECTIVE OF THE STUDY

- To identify the recruitment and selection of candidate in Boom HR solution in Erode.
- To analyse the recruitment and selection of process of candidate related qualification, communication, Experience, background and skills.

IV.SCOPE OF THE STUDY

The study can examine the various recruitment sources used by organizations, such as job portals, social media, employee referrals, and campus recruitment. The study can explore the effectiveness of these sources and the factors that influence their effectiveness. The study can examine the various selection methods used by organizations, such as interviews, tests, and assessments. The study can explore the effectiveness of these methods and the factors that influence their effectiveness.

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A Study on Employee's Perception towards HR Practices And Culture with Special Reference to Wonjin Auto Parts Pvt. Ltd.

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ABSTRACT: Human resources are the people and their characteristics at work either at the national level or at the organizational level. Management is concerned with people at work and with their relationships within an enterprise. It is the skill and knowledge gained by a worker through education and training." Since an organization performs a number of functions to achieve its objectives, it requires human resources of different types which may be categorized on the basis of functional areas like production, marketing, finance, etc., or organizational hierarchy or the levels at which these resources are placed. Thus, human resources across the functional areas may be arranged into top management, middle management, supervisory management, and operatives.

1. INTRODUCTION

Organizational Culture and HR Practices Basic HRM exercises like recruitment, selection, and training affect the performance and stability of an organization. Change in behavior defines how one acts or conducts oneself in any situation. Therefore, if HR exercises could positively affect the behavior, improving positive thinking about organizational initiatives towards the employees, it would lead to positive results for the business. Providing an exceptional employee experience and developing a valuable lifecycle have always been top priorities for every HR organization, but the global pandemic has taught us to rethink how businesses can implement practices to build an 'employee-first' culture.

2. STATEMENT OF THE PROBLEM

- Well-prepared HR practices can provide employees with better and more respectful working environments,
- So, they can commit to the current organization and be satisfied with their job. Our study emphasized the important role of HR practices to convey organizational culture and to link organizations and employees.

3. OBJECTIVES

- To identify the human resource practices.
- To analyze the perception of the employees with respect to HRM practices in Wonjin Auto Parts Pvt. Ltd

4. SCOPE OF THE STUDY

- It is necessary for any management to ensure that employees are satisfied with their job, for the benefit of the organization.
- A study on organization culture and HR practices which helps the management to understand challenges with the existing policies.

5.LIMITATION OF THE STUDY

- The study was restricted to Wonjin Auto Parts Pvt. ltd, Chennai which could have given a unique perception of the culture and HR practices.
- Data are collected randomly from the employees

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A Study on Factors Influencing Employees' Performance with Reference to Eatman Foods India Pvt Ltd

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ABSTRACT: This study investigates the factors that influence employee performance. The aim of the study is to examine the impact of key factors, such as motivation, job satisfaction, working environment, job design, and leadership styles, on employee performance. The study will be based on a survey of a sample of employees from a variety of organizations. The survey will collect data on the respondents' perceptions of the influence of each factor on their performance. The survey will also include questions about their job role, the number of years they have been in their current role, and their level of experience in the organization. The results of the survey will be analysed using descriptive statistical methods to identify significant relationships between the variables. The findings of the study will be used to provide organizations with an understanding of how to improve employee performance.

I. INTRODUCTION OF THE STUDY

The study on factors influencing employee performance with reference to Eatman Foods India Pvt Ltd aims to identify the key factors that impact the performance of employees in the food industry. Eatman Foods India Pvt Ltd is a leading food company in Erode that specializes in the production of a variety of food products. The study focuses on understanding the various factors that contribute to the performance of employees in the company, including job satisfaction, motivation, training, and development opportunities, among others. The study aims to help Eatman Foods India Pvt Ltd improve its performance by identifying the areas where it can focus its efforts to improve employee performance. It also aims to provide insights for other food companies in the region on the key factors that impact employee performance, and how they can improve their performance by addressing these factors.

II. STATEMENT OF THE PROBLEM

Despite the implementation of various HRM practices, employee performance at Eatman Foods India Pvt Ltd has not been consistent. The company has observed a decline in employee performance in recent years, which has led to concerns about the effectiveness of HRM practices. Therefore, there is a need to investigate the factors that are influencing employee performance at Eatman Foods India Pvt Ltd and identify areas for improvement in HRM practices to address these issues.

In summary, the study aims to identify the factors that are influencing employee performance at Eatman Foods India Pvt Ltd and provide recommendations for improving HRM practices to enhance employee performance.

1. **Objectives of the Study:**
   - To study the factors influencing Employees performance.
   - To analyse the factor that affect employee's performance the most.
2. **Scope of the Study:**
   - The study will focus on identifying the factors that influence employee performance at Eat man Foods India Pvt Ltd.
   - The study will cover all levels of employees, including executives, managers, and front-line employees.
3. **Limitations of the Study:**
   - Limited Sample Size: The sample size for the study may be limited, which could impact the representativeness of the findings.

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An Empirical Study of Retailers Preference Towards Ghee With Special Reference to Kangayam

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ABSTRACT: The goal of the current study is to ascertain retailers' preferences for ghee, particularly with regard to kangayam. The study's goals are to identify Ghee sales patterns and identify the major factors that impact how satisfied retailers are with Ghee. A retailer's level of satisfaction with Ghee is also determined by the project's findings regarding quality, demand, packaging, delivery, credit policies, profit margins, promotions, and brand. The structured questionnaire is used to collect the survey data. The statistical tools Chi-Square, Simple percentage, and Correlation are used to analyse the data.

1. INTRODUCTION

The typical packaging for ghee is an airtight glass jar. Direct sunlight should be avoided because it can lead to moisture buildup inside the jar. The dairy business, which includes the production, purchase, storage, processing, and distribution of dairy products, is crucial to India's agro-based economy. In the Middle East, camel or cow milk are typically used to make ghee rather than buffalo or mixed milk. There are many competitors in the market, and ghee has a flavour that is rich, sweet, and delectably nutty.

2. STATEMENT OF THE PROBLEM

The modern distribution system consists of whole set of people literally handling the goods. At each stage efficiency is not maintained the value of the ultimate product increases the retailers face difficulties when the festive season arrives to handle the customer and their demands maintain goodwill of the product with the competitors in market. The retailers have difficulties in the credit-based sales to the regular customers and daily users. To retain the customers

3. OBJECTIVES

- To find the awareness about RKG ghee among retailers.
- To analyze the efficiency and effectiveness of the distribution system
- To study the retailer's satisfaction on RKG Ghee

4. SCOPE OF THE STUDY

- Studies related to retailers' satisfaction with reference to effective distribution which is covering distribution channel, various promotional like price off, provided by the company to retailers.
- The study also consists of find out how much effective distribution helps to increase retailers' satisfaction
- The variables for measuring effectiveness of distribution are various services provided by the company like transportation, packing etc. the study is conducted to understand whether the employees are satisfied with various distribution services provided by company.

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An Investigation of Social Media Marketing At Angle Starch and Food PVT. Ltd. By

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ABSTRACT: The way that people distribute information has changed dramatically in the digital age. The Internet started out as a way to get information, but as it developed, it also made it possible for people and websites to trade information.

I. INTRODUCTION

Social media marketing is a potent tool for companies to use to advertise their goods or services online. It entails connecting with potential customers and raising brand exposure through the use of social media sites like Facebook, Instagram, Twitter, LinkedIn, and others.

II. CONCEPTUAL FRAMEWORK

Facebook marketing is a platform that allows a brand to put their products and services in front of the audience and promote with the help of organic and paid means.

Instagram is the perfect channel to reach an enormous audience – over 1 billion active users monthly. On average, users spend 53 minutes per day on Instagram. YouTube marketing can be an effective tool for businesses to reach their target audience and achieve their marketing goals. Here are some of the key reasons why YouTube marketing is important.

WhatsApp marketing allows you to stay in touch with your customers – more than half of WhatsApp users check the app every day. Better yet, you can be sure they will get your offers, as text messages have a 98% open rate.

A Twitter marketing strategy is a plan centered around creating, publishing, and distributing content for your buyer personas, audience, and followers through Twitter.

It can also be a means for potential employers to find you without you even applying for a position. With the help of the algorithm and keyword searching, recruiters use LinkedIn to scout for talent.

It helps to maintain brand consistency Your logo, brand colour, and fonts help you connect better with your audience as they recognize your brand once they see these things.

Telegram is an open source and free messaging app with a focus on speed and security. Telegram can be used on all devices at the same time — messages sync across any number of phones, tablets or computers.

Pinterest is a visual discovery engine for finding ideas like recipes, home and style inspiration, and more. With billions of Pins on Pinterest, you'll always find ideas to spark inspiration.

III. STATEMENT OF THE STUDY

Social media marketing is one of the most effective ways to raise brand awareness and lead people to your company. Executed well, it can help you create a solid community, grow your business and enjoy success.

IV. OBJECTIVES OF THE STUDY

- Heighten brand awareness
- Increase social community size
- Accurately target audiences
- Strengthen engagement strategies for increased brand loyalty
- Increase customer satisfaction and positive brand perception

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An Empirical Study on 360 Degree Performance Appraisal Special Reference to Erode

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ABSTRACT: Worker 360 degree One of the key indicators of office life is the performance review process. Organizations make sure that workers are not exposed to levels of risk that could harm their bodily, emotional, or mental health. Additionally, organizations do not permit any activity on their property that could interfere with employees' ability to accomplish their jobs. Employees receive the necessary training on their jobs as well as all safety precautions that may be taken to reduce workplace mishaps. measures to improve worker skill through performance appraisal. The many welfare and safety measures offered by the business will have a direct impact on the worker's health, physical and mental efficiency alertness, morale, and general proficiency, which will lead to higher production.

I. INTRODUCTION

Construction labour is regarded as the foundation of human civilization and is essential to the growth of any modern economy. The degree of building consumption per capita is seen as a key indicator of a nation's socioeconomic development and living standards. It is a byproduct of a sizable, technologically advanced sector with robust forward and backward connections for material flows and revenue production.

II. STATEMENT OF THE PROBLEM

Employee performance appraisals are actions made by any manufacturing company to improve the quality of life for its staff members and help the business expand and produce more. The evaluation of an employee's performance takes into account a variety of factors, including skill level, attendance, experience, commitment, and compliance, among others.

III. OBJECTIVE

- To study about the various factors influencing performance appraisal by the company.
- To analyze the effectiveness of 360-degree performance appraisal adopted by the company.
- To suggest the company for effective utilization of 360-degree performance appraisal measures.

IV. SCOPE OF THE STUDY

- This study helps to find out the difficulties in performance appraisal measures
- Through this study company can be able to know the satisfaction level of employee on performance appraisal measures

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A Study On Employee Absenteeism With Reference To Big Bulls –Bangalore

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ABSTRACT: The report's article is titled A study of employee absenteeism aims to ascertain the workers' health, pay, amenities, attendance plan, training programme, motivational strategies, and advancement opportunities. The article includes goals, restrictions, a corporate profile, a study methodology, findings, recommendations, and conclusions. Primary and secondary data have both been used to collect the information required for the study. Various statistical tools, such as percentage analysis, Chi square analysis, and weighted average approach, are used to analyse and evaluate the response provided by the company's employees. with the purpose of boosting organisation growth and productivity. The article's sample size, drawn from a population of 656, is 111. The basic data is gathered using the survey approach with questionnaires. The questionnaire was created.

1. INTRODUCTION

Absenteeism is one of the main threats to Indian industry. Absentee employees are those who don't show up for work when they're scheduled to. Employees who take official holidays, vacations, authorised periods of absence, or other time off from work are not counted. Absenteeism is a major issue in industries that are labor-intensive, especially in large organisations where there are many employees. It is a significant concern for the managers and supervisors. They need to learn how to manage absences.If our absenteeism can be reduced, India will have a problem with unemployment on the one hand and anomalous absenteeism in industries on the other. Absenteeism results in inefficient usage of the plant.

2. STATEMENT OF THE PROBLEM

Absenteeism has become a significant problem in almost all industrial sectors. Excessive absenteeism imposes a major cost on the industry, even when a missing employee is not compensated. Work schedules are created by delays and inconsistent workflow, which makes it challenging for management to meet delivery dates. When sick leave is allowed, the cost of absences increases more quickly.

3. OBJECTIVES OF THE STUDY

- To investigate the primary reasons for absence.
- To investigate the consequences of missed work.

4. SCOPE OF THE STUDY

Understanding the various levels and reasons for employee absence in an organisation is the study's aim. It can be examined, and corrective action can be taken to reduce absenteeism at work, which encourages organisational development. An absent employee suggests idle machinery or unused space, both of which lead to direct losses and slower output. Because it creates a chaotic workplace, absenteeism has a negative impact on a plant's ability to produce. Future researchers might use the study to improve their own research.

5. LIMITATIONS OF THE STUDY

- One of the study's key weaknesses was the time factor.
- Because most of the workers were unfamiliar with the concepts and phrases, filling out the questionnaire took a long time.
- The respondents were hesitant to be forward with their opinions.

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A STUDY ON EMPLOYEE ENGAGEMENT STRATEGIES WITH SPECIAL REFERENCE TO WONJIN AUTO PARTS PVT. LTD.

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ABSTRACT: Employee engagement is an important issue in management theory and practice. Two kinds of definitions of employee engagement are identified: employee engagement as a multi-faceted construct (cognition, emotions, and behaviors) and as a unitary construct (a positive state of mind, a dedicated willingness, the opposite of burnout). lack of research on demographic variables, personality differences, and cross-cultural differences in employee engagement, lack of research on the mediating or moderating role of employee engagement, and lack of intervention mechanisms for employee engagement.

1.INTRODUCTION

Employee engageoent is the level of commitment and involvement an employer has towards their organization and its values. It is a positive attitude held by the employees towards the organization and its values. Job engagement is a characteristic where an individual approaches his or her work with enthusiasm, energy, focus, and commitment such that the person is entirely present in his/her work and is able to bring his or her full potential to the work effort.

2. STATEMENT OF THE PROBLEM

It is exactly said that a problem clearly defined is half solved. Thus, defining the research problem is of the highest importance. The researcher was basically interested in the study of Employee engagement strategies of RRL in order to analyze the various strategies implemented by RRL. Hence keeping in mind, the importanceand of implementing engagement strategies, an attempt has been made to analyze the various engagement strategies of RRL.

3. OBJECTIVES OF THE STUDY

- To identify the diagnosis of the factors for employee engagement.
- To understand the Attitudes of your employees.

4. SCOPE OF THE STUDY

- Studying employee engagement in an organization provides clues for employers to contribute to bottom-line business success.
- To understand & identify the problematic areas and make a plan and take action towards improvement.

5. LIMITATION OF THE STUDY

- Inconvenience in meeting all the associates and collecting data.
- The study has been done mainly for academic purposes and the duration of the data collection period is a major constraint.

6. REVIEW OF LITERATURE

T. Suhasini and Dr. K. Kalpana (2018): The study reveals that Employee Engagement is a comprehensive task and cannot be accomplished by effective training programs also. Organizations can improve engagement by opportunity

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A Study on the Causes and Consequences of Cybercrimes with Reference to Erode

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ABSTRACT: Cybercrime has become a pervasive and persistent issue that affects individuals, organizations, and even nations worldwide. The purpose of this project is to explore the causes and consequences of cybercrime with specific reference to Erode, a city in Tamil Nadu, India. This project will provide an in-depth analysis of the various types of cybercrime prevalent in Erode, such as phishing scams, identity theft, and online harassment. The research will also investigate the reasons why cybercrime is on the rise in Erode, including factors such as technological advancements, lack of awareness, and inadequate cybersecurity measures. Additionally, the project will examine the legal framework in place to combat cybercrime in Erode, including the role of law enforcement agencies and the judicial system. Finally, this project will discuss the social and economic consequences of cybercrime on individuals and organizations in Erode. The research will highlight the impact of cybercrime on businesses, including financial losses, reputational damage, and loss of customer trust. The project will also explore the psychological effects of cybercrime on victims, including anxiety, depression, and trauma. Overall, this project aims to provide a comprehensive understanding of the causes and consequences of cybercrime in Erode, and how the issue can be effectively addressed through improved awareness, education, and collaboration between stakeholders.

I. INTRODUCTION

Cybercrime is a growing threat in Erode, a city located in the Indian state of Tamil Nadu. With the rapid growth of technology and the increasing use of the internet, cybercriminals have found new ways to exploit vulnerabilities and target individuals and businesses for financial gain or other malicious purposes. As a result, there is a need for research to understand the causes and consequences of cybercrime in Erode.

This study aims to investigate the causes and consequences of cybercrime in Erode. It will explore the various types of cybercrime that are prevalent in the city, the factors that contribute to the occurrence of cybercrime, and the impact that cybercrime has on individuals, businesses, and society as a whole. The study will also examine the current cybersecurity measures in place in Erode and evaluate their effectiveness in preventing and combating cybercrime.

II. STATEMENT OF THE PROBLEM

The problem addressed by this project is the rising incidence of cybercrime in Erode, a city in Tamil Nadu, India. Despite the increasing use of technology and the internet in the city, many individuals and organizations remain vulnerable to various forms of cybercrime, including phishing scams, identity theft, and online harassment. The causes of cybercrime in Erode are multifaceted and complex, including factors such as lack of awareness, inadequate cybersecurity measures, and the rapid pace of technological advancements. Furthermore, the legal framework for combating cybercrime in Erode is not always effective in addressing the issue, and law enforcement agencies may not always have the resources or expertise to investigate and prosecute cybercriminals. The consequences of cybercrime on individuals and organizations in Erode can be severe, including financial losses, reputational damage, and psychological trauma. As a result, there is a need for increased awareness and education about cybersecurity, as well as improved collaboration between stakeholders to address the issue of cybercrime effectively. Therefore, the statement of

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An Empirical Study of Ooccupational Stress amongst Faculty in Self Financing Engineering College with Special Reference to Erode

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ABSTRACT: There has been extensive and varied research on stress in general and occupational stress in particular. Working in higher education has traditionally been regarded as being both extremely fulfilling and relatively stress-free. Faculty members employed by higher education institutions in India are being asked to do more academic and nonacademic work, which is raising their occupational stress. In order to identify the stressors and generate fresh ideas for future study in this area, the purpose of this work is to give a critical assessment of the existing literature on occupational stress of teaching faculty in different streams of higher educational institutions in India.

KEYWORDS: Stress, Faculty, Self financing, Education, Work overload, Physical, Mental and Psychological health.

I.INTRODUCTION

Technical education is essential for the development of the nation's human resources because it produces trained labour, boosts industrial production, and raises overall standards of living. . In the workplace, stress is typically thought to originate from conditions that are challenging for an individual to manage. One of the major causes of academics leaving their professions is stress.Stress is a reality of modern life. Modern living includes stress. Stress is brought on by a variety of life events, beginning with the birth of a child and lasting until the loss of a loved one. Rising stress is attributed to a number of factors, including urbanisation, industrialization, and the expansion of societal processes. Some people have a high tolerance for stress and do well when they are exposed to a variety of environmental stresses.

II.STATEMENT OF THE PROBLEM

The level of work stress experienced by employees in various industries and software businesses has been studied extensively worldwide. According to these studies, employees are under a lot of stress at work because of the intolerable pressure. The researcher chose the topic "An empirical study of occupational stress amongst faculty in self-financing engineering colleges with special reference to Erode district" to learn more about the various physical and psychological stresses that faculty members working in self-financing engineering colleges experience and to examine the effects of work stress on them.

III.OBJECTIVES OF THE STUDY

1. To determine the physical stress experienced by instructors at self financing engineering colleges in Eroding District
2. To determine the level of psychological stress experienced by instructors at at self financing engineering colleges in Eroding District
3. To examine how stress affects faculty, both physically and psychologically

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A Study on Job Satisfaction of Employees with Special Reference to Seyyon Hitech Poly Fabs Private Limited, Gangapuram

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ABSTRACT: In order to maintain the efficiency of the organisation by keeping their employees consistently engaged a nd motivated, employee job satisfaction is crucial.This project's primary goal is to evaluate work satisfaction in order to determine its effectiveness and to discover the various aspects, such as organisational and human factors, that affect jo b satisfaction.100 no.s of respondents were used as the sample size for this investigation.For study analysis, simple perc entages, Chisquare, and Henry Garrett Ranking have been incorporated.The study was useful in determining the extent to which employees were satisfied with the various organisational aspects.The company should take into account the e mployees' lack of motivation, the work environment, and job security.

I. INTRODUCTION

An unmeasurable statistic known as job satisfaction is described as a pleasant emotional response you have when perfo rming your duties or being present at work.With job satisfaction surveys becoming commonplace at most workplaces, l eading organisations are increasingly attempting to quantify this experience.It's critical to keep in mind that each emplo yee experiences job satisfaction differently.The assurance that career advancement would coincide with individuals' go als for personal development.The likelihood is that disgruntled staff will show this in their encounters with customers.P articularly contact centres cannot afford to have unhappy personnel since it will manifest itself in everything they say a nd every campaign they work on.For businesses that prioritise serving their customers, employee satisfaction is essentia l.When it brings in new talent, turnover can occasionally be advantageous to the company's operations.However, volunt ary turnover looks different since you run the risk of losing outstanding talent that you have spent years meticulously d eveloping.Additionally, once this talent leaves the firm, it takes its tribal knowledge with it, which could make it more difficult for your business to sell its goods and services.

2. STATEMENT OF THE PROBLEM

The purpose of the study is to evaluate the needs of the employees of Seyyon Hitech Poly Fabs Private Limited in term s of job satisfaction.The study assists in understanding the preferences and issues of the employees.To boost efficiency, employee dedication is crucial.An improvement in job satisfaction will increase employee dedication, which will furth er result in a rise in productivity.The entrepreneur views job happiness as a critical issue where efforts are made and pr ogrammes are started.If an employee is dissatisfied with their position, there is a risk of absenteeism, job turnover, decr eased productivity, making mistakes, and devoting attention to various issues.Keeping this in mind, all organisations w ork to pinpoint the areas where satisfaction can be raised in order to avoid the pitfalls mentioned above.

3. OBJECTIVES OF THE STUDY

1) To gauge respondents' levels of job satisfaction at Seyyon Hitech PolyFabs Private Limited
2) To determine the important aspects that contribute to job happiness at Seyyon Hitech Polyfabs Private Limited
3) To assess the mental health of the Seyyon Hitech Poly Fabs Private Limited workforce
4) To examine the difficulties that the workers at Seyyon Hitech PolyFabs Private Limited encounter
5) To recommend appropriate metrics for the study's goal,which is to ascertain the connection between job satisfaction and employee empowerment.

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Analysis of Online Promotional Activities in Indiamart

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ABSTRACT: This study examines IndiaMART's online promotional activities and their impact on business growth using a mixed-method approach. It evaluates social media, email, and search engine optimization strategies and their impact on revenue, customer base, and market share. The study also explores challenges and opportunities, providing insights into effective online marketing strategies for Indian companies.

I. INTRODUCTION

IndiaMART is a leading B2B online marketplace based in India that connects buyers with suppliers across various industries. The platform offers a range of products and services, including industrial supplies, machinery, electronics, apparel, and more. IndiaMART was founded in 1996 and has grown rapidly over the years to become one of the largest B2B marketplaces in India. With over 100 million registered users and over 5.5 million suppliers listed on the platform, IndiaMART has become a vital tool for businesses looking to connect with other businesses and grow their operations.

STATEMENT OF THE PROBLEM

The problem is recession and small-scale sectors not getting enough return on investment to invest. Some suppliers are satisfied and don't want to expand, while price is a key factor for generating leads. Some clients can't afford Indiamart's prices, and others have had bad experiences with unsatisfactory or fake inquiries.

OBJECTIVE OF THE STUDY

- To understand the online promotional activities of a product like - Trade fare ,Print media ,Electronic media.
- To know how international buyers are able to access the largest database of Indian suppliers through INDIA MART.COM.
- To gain knowledge about the various major components of online promotions like Online Directory/Indiamart Yellow Pages, Online Product Catalogs, Trade Leads , Product portals.

SCOPE OF THE STUDY

- study for a research project that aims to investigate the views and opinions of suppliers regarding the online promotional activities of IndiaMART.
- The study could focus on various aspects, such as the effectiveness of the online promotional activities, the extent to which suppliers are aware of these activities, their attitudes towards them, and the impact they have on their businesses.
- The results of this study could provide valuable insights into the effectiveness of IndiaMART's online promotional activities, identify areas for improvement, and help the company develop better strategies for reaching and engaging with suppliers.

LIMITATION OF THE STUDY

- The study's findings may be limited by the sample size of suppliers surveyed, and it may not represent the entire population of suppliers who use IndiaMART.
- The findings of the study may only be applicable to the suppliers who participated in the survey and may not be generalized to other suppliers in the industry
- The data collected in the study may be based on self-reported information provided by the participants, which may not be entirely accurate or may be biased.

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A Study on Employee Atraction and Retention Strategies with Special Reference to Big Bulls

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ABSTRACT: Employees are the company's or organization's property. Retention of employees is advantageous to both the employer and the employee. Extraordinary employee turnover would subsequently affect the group's production and viability. HR managers need to come up with practical methods for keeping personnel from different backgrounds. Retention of employees is advantageous to both the company and the employee.

1.INDRODUCTION

Employee attraction and retention strategies are implemented in organisations, and they serve to motivate staff members and keep them there for an extended period of time. The company's current employees pay close attention to the employer's efforts to recruit and keep top talent, and this makes a strong favourable impression on them.

2.STATEMENT OF PROBLEM

recognising and comprehending the requirements and preferences of various employee groups and providing competitive pay and benefits that satisfy employee expectations. creating professional growth options and pathways for employees by creating a welcoming, inclusive workplace that encourages participation and a sense of belonging. offering opportunity for continued training and development to improve staff skills and competences putting in place efficient feedback and communication channels to promote collaboration and employee engagement

3.OBJECTIVES OF THE STUDY

- To determine whether the strategies for staff attraction and retention are effective
- Be ignorant of the elements that affect workers' loyalty to their employers.

4.SCOPE OF THE STUDY

- Theorganizationcandevelopandmaintainthestrategiesthathelptoretaintheiremployees.
- Thisstudyhelpsthemanagementtoanalyzethefactorsthatmotivatestheemployees.

5.LIMITATIONS OF THE STUDY

- Due to their busy schedules, it was challenging to speak with the respondents and collect information from them.
- many were reluctant to share the data.

6.LITERATURE REVIEW

Morse (2009) comes to the conclusion that humour has existed throughout history. Few claim that laughter is one of the best medicines for reducing stress. If humour is excellent enough for a successful life, then how good may it be for luring and keeping employees? The article's goal is to explore the relationship between humour and employee recruitment and retention. The purpose of this article also includes highlighting the value of humour in luring and keeping personnel in the office. Therefore, the report also supplied the verifiable test for the future researchers, and it also provided useful advice for current managers with regard to its

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A Study on Stress Management of Employees with Special Reference Toartika Cotton Mills, Erode

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ABSTRACT: The level of stress management among workers at Artika Cotton Mills in Erode is examined in this essay. This study also investigates the degree to which individual factors affect stress management. The various aspects of courteous and responsible behavior, managing and communicating work, managing persons in a team, and managing challenging situations are used to quantify stress management. Stress is characterized as a response to a stimulus that throws off our mental equilibrium. These days, it is a part of everyone's life. Although stress cannot be completely avoided, it can be managed. A structured questionnaire was used to gather primary data from the 110 participants in the study. Journals, books, magazines, and websites were used to gather the secondary data.

I. INTRODUCTION

Stress is a fact of life; changes occur in a person's life and cause tension. Examples of these scenarios include starting school or college, getting married, changing jobs, or experiencing health issues. The pressure of work and studies, travelling to the college, if it's far away, and living in a hostel all contribute to an individual's stress levels. On the other hand, situations that cause stress can also be advantageous, such as when a person applies for admission to college, which benefits his personality development, knowledge enhancement, life and career prospects, and well-being. Stress is inevitable because of the scenarios and circumstances that occur in a person's life. However, if a person learns how to successfully manage stress, he or she can cope with a stressful situation and prevent negative repercussions like trauma and hypertension. One encounters stress in a variety of professions, including medicine, the military, teaching, etc., but one should be equipped with the knowledge necessary to understand the situation and respond appropriately.

II. STATEMENT OF THE PROBLEM

The consequences of stress on an individual and an organization might vary. There is little doubt that absenteeism, work-related accidents, turnover, and poor decision-making do more than only harm the individual; they may also have an impact on the organization. Understanding the underlying causes and effects of occupational stress on the staff at Artika Cotton Mills is the goal. It is employed to gauge workplace stress levels. There are various stress management approaches that can be used to maintain harmony and balance depending on the problems that cause stress. Beyond a certain point, stress ceases being beneficial and begins to seriously harm one's health, mood, relationships at work, and quality of life.

III. OBJECTIVES OF THE STUDY

- To identify the existence of stress among employees.
- To identify the causes of the stress of employees.
- To find out how the employees manage stress in their work environment.
- To analyze the problems faced by the respondents due to stress.
- To suggest suitable measures for better stress management.

IV.SCOPE OF THE STUDY

- This study will help to spot the major stressors and ways to overcome anxiety and depression.
- The scope of the study included finding stress levels in the organization and overcoming them through effective steps.
- To assess the ability of the employees to manage stress.

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A Study on Factors Influencing Company's Profitability with Reference to Cycle world

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ABSTRACT: This study is aimed at exploring the factors influencing a company's profitability. It will investigate how various aspects, such as market conditions, economic conditions, management decisions, financial decisions, and technology, can affect a company's profitability. It will also analyze how the external environment can influence the success of a company. The study will use quantitative and qualitative methods to collect data, including interviews with company executives, financial analysis of company performance, and an analysis of the industry environment. Results of the study are expected to provide insights for companies on how to better manage their profitability.

I. INTRODUCTION

The cycle industry is a global sector that includes the production, distribution, and sale of bicycles and related accessories. Bicycles have been around for over 200 years and have evolved significantly over time, from the early wooden bicycles to the modern high-tech machines of today. The industry is driven by a range of factors, including transportation needs, environmental concerns, health and fitness trends, and recreational activities. Bicycles are used for a variety of purposes, from daily commuting and transportation to recreational activities and competitive sports.

II. STATEMENT OF THE PROBLEM

The purpose of a study on factors influencing a company's profitability is to identify the key factors that contribute to a company's profitability, and to identify strategies to improve profitability by addressing those factors. The study could look at both internal and external factors, such as costs, prices, competition, market conditions, and other economic forces, as well as company-specific factors such as management, operations, and marketing.

III. OBJECTIVES OF THE STUDY

- To identify the key factors impacting company profitability.
- To evaluate the impact of changes in the economic environment on company profitability.
- To analyse the impact of marketing and pricing strategies on company profitability.
- To suggest ways to increase company's profitability

IV. SCOPE OF THE STUDY

- The analysis of company's strategic decisions and their impact on profitability can be used to increase the company's profit.
- The analysis of the company's marketing and sales strategies and their influence on profitability can be used to increase the company's profit.
- The analysis of the company's product mix and its effect on profitability can be used to increase the company's profit.
- The analysis of the company's technology and its effect on profitability can be used to increase the company's profit

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A Study on Finding the Interest of the People in Property Management with Special Reference to Erode District

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ABSTRACT: This study will investigate customer interest in property management services by identifying influencing factors, assessing marketing strategies, preferences, and areas of improvement. It will conduct a survey to collect data on customer understanding, satisfaction, perceived benefits and drawbacks, and likelihood of recommending such services. The study's findings will inform property management companies on how to improve services to meet customer needs and expectations and future research on customer interest in property management services.

1. INTRODUCTION

Property management is the operation, control, and oversight of real estate, including residential, commercial, and industrial properties. It involves tasks such as maintenance, repairs, tenant screening, rent collection, and lease management. Property management is a critical aspect of real estate investment, as it ensures the efficient use and profitability of properties.
Property management is essential for property owners who want to maximize the return on their investment while minimizing their risks. By entrusting the day-to-day operations of their properties to professional property managers, property owners can free up their time and resources to focus on other aspects of their business or personal life

II. STATEMENT OF THE PROBLEM

This study aims to identify the factors that influence people's interest in property management services, which is currently poorly understood. The research seeks to address this gap in the literature and provide insights to service providers and policymakers to improve their services and attract new customers. The study's findings can help property management companies meet their customers' needs more effectively.

III. OBJECTIVES OF THE STUDY

- To determine the current level of customer interest in and understanding of property management services.
- To explore the customer's preferences and expectations regarding property management services.
- To identify potential areas of improvement in property management services to better meet customer needs and expectations.

IV. SCOPE OF THE STUDY

- Exploring property owners' preferences and expectations regarding property management services, including the types of services they value the most.
- Investigating the factors that influence property owners' decision to use property management services, such as cost, quality of service, and reputation of the service provider.
- Providing insights and recommendations to property management service providers and policymakers to enhance the overall quality of the property management industry

V. LIMITATIONS OF THE STUDY

- The sample of participants might not be fully representative of the population of property owners, which could limit the generalizability of the findings.
- Condition in Indian residential market

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A Study on Roles of Human Resource Management in Developing Employee Engagement with Reference to Anamallais Agencies (Stadium) Erode

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ABSTRACT: This study explores the role of human resource management (HRM) practices in developing employee engagement in the context of Anamallais Agencies (Stadium) Erode, a leading automotive company in India. The study is based on a qualitative research design, using interviews and focus group discussions with employees and HR professionals at Anamallais Agencies (Stadium) Erode. The findings reveal that HRM practices such as employee training and development, performance management, compensation and benefits, and communication and feedback play a significant role in enhancing employee engagement. Specifically, the study highlights the importance of effective communication and feedback channels, opportunities for skill development, and recognition and rewards for employee performance in promoting engagement. The study concludes by discussing the implications of these findings for HRM practices in Anamallais Agencies (Stadium) Erode and other organizations, and highlighting the need for ongoing research in this area.

Keywords: role of human resource management (HRM) practices in developing employee engagement, employee training and development, performance management, compensation and benefits, and communication

I. INTRODUCTION OF THE STUDY

Employee engagement is a critical factor in the success of an organization, as engaged employees are more committed, productive, and motivated to achieve their goals. Human resource management (HRM) plays a significant role in developing employee engagement, as it involves managing and supporting the workforce in a way that aligns with the company's goals and objectives.

A study on the role of HRM in developing employee engagement with reference to Anamallais Agencies can provide valuable insights into the strategies and practices that the company uses to engage its employees. Anamallais Agencies is a leading automotive company in India, known for its high employee engagement and low turnover rates.The study could begin by exploring the concept of employee engagement and the various factors that contribute to it. It could then focus on the role of HRM in fostering engagement, including recruitment and selection practices, training and development programs, performance management systems, and employee benefits and rewards.

II. STATEMENT OF THE PROBLEM

The problem addressed in this study is the lack of employee engagement in the service industry. Despite the importance of having an engaged workforce in this industry, many organizations struggle to motivate their employees to perform at their best. The study aims to investigate the role of human resource management (HRM) in developing employee engagement in the truck and bus service industry, with a specific focus on the case of Anamallais Agencies. The study will examine the current state of employee engagement at Anamallais Agencies, identify the factors that contribute to employee disengagement, and evaluate the effectiveness of HRM practices in enhancing employee engagement. By addressing this problem, the study aims to provide insights into how HRM can improve employee engagement in the truck and bus service industry, ultimately leading to better productivity, safety, and profitability.

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A Study on Organizational Climate in Engineering College Reference to Erode

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ABSTRACT: The purpose of the study is to ascertain a relationship between employee work engagement and organisational atmosphere. The study's theory was strengthened by a survey of relevant literature. A descriptive correlational research design was employed in the study. Questionnaires were utilised to acquire the data. The whole faculty and staff of the colleges in the Ilocos area made up the study's population. The statistic was utilised to interpret the data because it was a quantitative study. It is clear from the findings that there is a strong relationship between organisational climate and work place.

KEYWORDS : Organizational climate, work engagement, clarity, recognition, and rewards, cognitive, affective, conative

I.INTRODUCTION

Higher education is always undergoing significant transformation. The traditional techniques of instruction are becoming obsolete. Modern technology supports education in engineering institutions with a variety of teaching tools.The importance of Quality of Work Life (QWL) in today's organizations cannot be overstated. Every effective organization is driven by its workforce. No organization can achieve success just through the use of technology since in order to leverage technology, firms also need to have a strong workforce. The initial focus of Quality of Work Life was on how employment affected the general well-being and health of the workforce. But today, the emphasis has shifted.

II.STATEMENT OF THE PROBLEM

Regarding satisfaction and overall performance at the institution, quality of work life is important. Also, the employees experienced stress and disappointment due to others' disdain and a lack of skill use. People feel alienated, which could be the outcome of inadequate socio technical system design. Increased absenteeism, stress, and eventually job unhappiness may result from poor quality of work life. Engineering colleges must therefore implement a plan to enhance faculty members' "Quality of Work Life" (QWL) in order to meet the needs of both the institution and the faculty.

III.OBJECTIVES OF THE STUDY

- To research the racial and ethnic makeup of engineering college faculty.
- To evaluate the academic members' quality of work life at engineering colleges.
- To research how demographic factors affect the professors at engineering colleges' quality of work life.

IV.SCOPE OF THE STUDY

This study focuses on the faculty members' quality of work life in engineering colleges in the Coimbatore District. The main elements affecting faculty members' quality of work life at engineering colleges are highlighted in the current study. After the investigation, it is anticipated that generalization of the findings would offer solutions. Only the quality of their work is examined by the researcher. There is room for future extension in studies in numerous aspects that are related to the Quality of Work Life of the faculty members because the study is limited to only a few factors based on the researcher's examination of the literature he or she has gathered.

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A Study on Employees Welfare Measureswith Special Reference Sakthi Sugars. Ltd.

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ABSTRACT : Within the confines of the current industrial structure and the cultural norms of the workforce, businesses voluntarily work to establish labour welfare. It is incredibly extensive and covers a wide range of actions made for the labour community's moral, intellectual, social, and economic advancement. Due to their social illiteracy, disorganisation, lack of organisation, and poverty, construction workers are frequently exploited. The need for the comprehensive and independent welfare measures was therefore recognised. The current study, which looks at unorganised construction workers, explores the relationship between economic variables and labour welfare in this environment.

1.INTRODUCTION OF THE STUDY

Anything offered above and beyond salaries for the benefit and comfort of employers is considered welfare. In order to retain employees for a long time, welfare helps to keep their morale and t high. The welfare measures need not only be in terms of monitoring but can take many different forms. Employer welfare comprises keeping an eye on working conditions, fostering industrial harmony with a health infrastructure, and providing health insurance for workers and their families against diseases, accidents, and unemployment. According to Flippo, "human resource management is the planning, organising, driving, and controlling of the procurement.

2. STATEMENT OF THE PROBLEM

Finding out how Sakthi Sugar HR services are implementing employee welfare initiatives is the main goal of the study. The lack of employee job satisfaction is a problem for manufacturing sector organisations, which has led to an increase in staff turnover. To address this issue, these organisations are doing everything in their power to increase employee motivation and keep them on board. In addition, these organisations are offering a range of welfare benefits to their staff in an effort to raise employee satisfaction levels.

3. OBJECTIVES OF THE STUDY

- To understand how welfare measures improve the motivation of the Employees.
- To know about the satisfaction level of employees through the welfare measures.

4. SCOPE OF THE STUDY

- A welfare facility is a serious problem management because is involves heavy expenses A noticeable feature in the industrial life in India is the welfare facilities. The scope of this research work is to analyses the problem of welfare facilities affecting Sakthi Sugars Ltd, Modakurichi
- The common problems faced by the employees were also lime lighted in this study. It also highlights certain remedial measures eradicate the problems.

5. LIMITATION OF THE STUDY

- The data was collected during the working hours of the employees, they were well busy in their routine work, so they were less responsive.
- The perception bias or attitude of the respondents also affect the effectiveness of the study.

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A Study on Performance Appraisal among the Employees with Special Reference to Amirthaa Dairy Private Limited, Erode

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ABSTRACT : The study entitled "A Study on Performance Appraisal among the employees, Erode.Its primary goal is to examine the employee performance management system and determine whether it meets the goals of the organisation. Employees who are employed in Erode are included in the population. Utilising a straightforward random sampling technique, the researcher selected 150 participants from the company's entire population. The analysed data were used to make an interpretation.

I.INTRODUCTION

The step where management determines how successful it has been at hiring and placing personnel is performance appraisal. If issues are found, actions are taken to communicate with the employee about them and fix them.Another definition of performance appraisal is "the process of evaluating the performance and qualifications of employees in terms of the requirements of the job for which he is employed, for purposes of administration, including placement, selection for promotions, providing financial rewards, and providing other actions which require differential treatment among the members of a group as distinguished from actions affecting all members equally."

II.STATEMENT OF THE PROBLEM

1. Employee performance has traditionally been accorded prime focus by human resource managers.
2. As a result, a number of performance appraisal techniques have over time beendevised to help establish employee's performance.
3. In the contemporary times, the use of performance appraisal has been extended beyond rating of the employee's performance to aspects such as motivation.

III.OBJECTIVES OF THE STUDY

1. To analysis the satisfaction level of employees regarding the present performance appraisal system
2. To identify increment rewards and to provide reliable index for promotions and transfers to positions of greater responsibility
3. To determine the factors in evaluating the present performance appraisal system

IV.SCOPE OF THE STUDY

1. It helps each employee understand more about their role and become clear about their functions.
2. It helps to be instrumental in helping employees to better understand their strengths and weakness with respect to their role and functions in the organization
3. It helps in identifying the development needs of employees, given their role and function

V.LIMITATIONS OF THE STUDY

1. This study was undertaken only on Employee's performance and it does not cover any other problem.
2. TheresearchworkwasdoneatAmirthaaDairyPrivateLimitedandisnotgeneralizedtoanyother industry

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A Study on Employee's Awareness and Utilization of ESI Benefits in Feather Touch Cura, Coimbatore

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ABSTRACT: Employee State Insurance (ESI) Scheme is a very large social security. It is different from other types of insurance like Health Insurance, it gives the full measure of medical care and reasonable financial help to the recipients for benefits like sickness, maternity, disablement, and death due to work injury. Proving the health facilities also the employee's dependents not only motivates them to work but also helps the company hold their staff for a more extended timeframe. The study also attempts to audit the varied Employee State Insurance (ESI) benefits available to the workers inside the company.

KEYWORDS: ESI scheme, Employees benefits, Social Security, Insured Employees

I. INTRODUCTION

ESI scheme is a comprehensive social security program that was created to socially protecting "employees" in the organized sector from sickness, maternity, disability, and death as a result of work-related injuries and provide medical care to injured workers and their families.

The ESI Act was declared by the Parliament of India in the year 1948. The ESIC plan was first propelled on second February 1952 at just two modern cities in the country--Kanpur and Delhi with a total of approximately 1.20 lakh employees. After that, the plan was carried out in stages across the country with the active participation of state governments.

II. STATEMENT OF THE PROBLEM

Extended relatives have supported Indian households in the event of illness or other tragedies. The danger of illness and other unforeseen events for the working class has grown as a result of the breakdown of joint families and the development of nuclear families. Low-earning employees in India are covered by the ESIC, the country's social security law, which offers them basic healthcare and social security benefits. This paper aims to identify the challenges that insured people face when applying for ESI benefits.

III. OBJECTIVES OF THE STUDY

- To evaluate the level of employee's awareness and satisfaction with the ESI scheme.
- To know about the most important ESI benefits for employees.
- To know the ESI benefits are efficiently used in a company.

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A Study on Factors Affecting the Work Life Balance with Reference to Artika Cotton Mills Erode

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ABSTRACT: This study aims to examine the variables affecting workers' work-life balance in a particular organization. The study will concentrate on organizational-level elements including organizational culture and policies, leadership styles, and work environment as well as individual-level ones like job satisfaction, stress levels, work hours, and family responsibilities. A survey of a representative sample of the organization's employees will be used to gather data. The results of the survey will be used to assess how the organization's policies and practices, as well as the employees' opinions of their Work-Life Balance, may affect it. The important elements influencing Work-Life Balance in the organization will be determined through analysis of the survey data. The findings of this study will give the organization insightful information about the factors.

I. INTRODUCTION

The purpose of this study is to look at the variables influencing work-life balance at the Artika Cotton Mills in Erode, Tamil Nadu. Work-life balance is the harmony between the amount of time and effort spent on work and on personal responsibilities, such as family, leisure, and social activities. This study is important since it has been discovered that work-life balance affects employee satisfaction, health, and productivity. It has also become an essential component of the modern workplace. This study can shed light on how to enhance employee wellbeing and raise productivity at work by identifying the elements that influence work-life balance in the textile industry. The issues experienced by workers in the textile sector in Erode, Tamil Nadu, will also be better understood via this study.

II. STATEMENT OF THE PROBLEM

The goal of a study on factors influencing work-life balance is to provide insights into how to enhance overall work-life balance as well as a deeper understanding of the underlying causes and effects of the imbalance between work and life. The study aims to assist organisations, employers, and workers in developing more beneficial and efficient policies, procedures, and initiatives that support and uphold a healthy work-life balance.

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A Study on Career Planning and Development towards Ran India Steels PVT Ltd with Special Reference to Tiruchengode

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ABSTRACT: Without policies, restrictions and baselines related to the Organizations missions and objectives would not exist. It should be a cultural expression of the ethics, ideas and philosophy of the organization. It should be very concise and understandable so that everyone in the organization can realize it and so that objectives are seen clearly as steps to accomplish the mission. Objectives are like target for the organization; they direct the staff's awareness to important aspects in running the organization and help define exclusive ways to improve performance of folks and the organization too. This all is achievable if the human resource department of the organization is working fighting fit. If the employees feel that the policies edged and the activities achieved are in sync then only are they inspired and persuade. The present work is a descriptive effort to appraise the perception of employees in the steel firms industry towards Career planning and development on HR policies framed by the organization. Based on the responses of the employees, chi-square was applied and the inference was given based on the results.

I. INDRODUCTION

Career planning is an ongoing process through which an individual sets career goals and identifies the means to achieve them. The process by which individuals plan their life's work is referred to as career planning. "Career planning is a process of systematically matching career goals and individual capabilities with opportunities for their fulfillment."(Schermerhorn: 2002)

"Career Planning is a deliberate process of becoming aware of self, opportunities, constraints, choices, and consequences; identifying career-related goals; and "career pathing" or programming work, education, and related developmental experiences to provide the direction, timing, and sequence of steps to attain a specific career goal." (McMahon and Merman: 1987)

II. STATEMENT OF THE PROBLEM

This research explores the influence of career planning and career management on career development and the subsequent effect on job satisfaction and career commitment. This integrated perspective assumes that career development can increase job satisfaction and career commitment. Career planning ensures a constant supply of promotable employees. It helps in improving the loyalty of employees. Career planning encourages an employee's growth and development. It discourages the negative attitude of superiors who are interested in suppressing the growth of the subordinates. It ensures that senior management knows about the calibre and capacity of the employees who can move upwards. It can always create a team of employees prepared enough to meet any contingency. Career planning reduces labour turnover.

III. OBJECTIVES OF THE STUDY

1. To identify positive characteristics of the employees.
2. To develop awareness about each employee's uniqueness.
3. To respect feelings of other employees.
4. To attract talented employees to the organization.
5. To train employees towards team-building skills.
6. To create healthy ways of dealing with conflicts, emotions, and stress in steel Products.

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A Study on Urbanization and its Impact on Bicycle with Special Reference to Cycle World Bangalore

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ABSTRACT: Planners require reliable techniques to evaluate the built environment in order to improve cycling shares through urban planning and development. This article outlines a process for determining bike ability, or how feasible and enjoyable it is to bike in or through a specific region. Four kinds of built environment traits that influence bike ability are evaluated holistically. Iteratively, secondary data and registrations from maps, aerial images, and fieldwork are combined to create an assessment. The methodology can be used for a variety of urban environments and purposes and doesn't call for particular instruments. Two instances are given to illustrate potential applications: evaluating current built environments to create a knowledge basis for creating short- and long-term cycling plans and strategies; and evaluating anticipated urban transitions.

I.INDRODUCTION

The purpose of the study is to investigate how urbanisation has affected bicycle use in relation to the bicycle industry, notably in Bangalore. Sustainable ways of transport are required since urbanisation has increased traffic congestion and pollution. The usage of bicycles in urban areas has increased as a result of the fact that they provide an economical and environmentally beneficial solution to this issue. The study will offer details on the expansion of Bangalore's bicycle industry, the different kinds of bicycles that are offered, and the variables affecting the use of bicycles as a form of transportation in the city. Policymakers, urban planners, and the cycle industry will find the study's conclusions useful in comprehending the

II.STATEMENT OF PROBLEM

Despite the potential benefits of bicycles as a sustainable mode of transportation in urban areas, there is limited research on the impacts of urbanization on bicycle use.
Urbanization has led to increased traffic, pollution, and sedentary lifestyles, making it important to identify sustainable transportation options such as bicycles.
Lack of dedicated cycling infrastructure and storage facilities in urban areas can discourage people from using bicycles for transportation.

III.OBJECTIVES OF THE STUDY

- To examine the impact of urbanization on the level of cycling infrastructure and its impact on the number of cyclists.
- To investigate the role of the government in promoting cycling in cities and its impact on urbanization.

IV. SCOPE OF THE STUDY

- Examining the impact of urbanization on bicycle sales and production in the cycle industry.
- Investigating the health and environmental benefits of bicycle use in urban areas.

V.LIMITATIONS OF THE STUDY

- The study relies on self-reported data from surveys and interviews, which may be subject to response bias.
- The study may be limited by the availability and quality of secondary data sources on the cycle industry and bicycle use in Bangalore.

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A Study on Impact of Human Resource Management on Organizational Performance

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ABSTRACT: This study investigates the impact of Human Resource Management (HRM) on organizational performance. The research will use a quantitative approach to examine the relationship between the implementation of HRM practices and organizational performance. The data will be gathered from surveys and interviews with HRM practitioners in organizations of different sizes. The data will be analysed using statistical methods such as correlation analysis, regression analysis and factor analysis. The results of the study will provide an understanding of the influence of HRM practices on organizational performance. The findings from the study will be useful for organizations in determining the best practices for implementing HRM to achieve optimal performance. Furthermore, the results can be used to inform policy makers about the importance of investing in HRM to ensure optimal organizational performance.

I.INTRODUCTION

The purpose of this study is to investigate the impacts of Human Resource Management (HRM) on the organizational performance of Rapid Care Group Pvt Ltd, a healthcare information company based in Chennai, India. The healthcare information industry is a rapidly growing sector that relies heavily on skilled employees to drive innovation and growth. Therefore, effective HRM practices are essential to attract, retain, and develop talent, which can ultimately contribute to the company's success. The study will provide an overview of the healthcare information industry in Chennai, India, and will focus specifically on the HRM practices of Rapid Care Group Pvt Ltd. The study will examine the various HRM practices that the company has implemented, such as recruitment and selection, training and development, compensation and benefits, and employee engagement.

II.STATEMENT OF THE PROBLEM

The purpose of the study is to examine the impact of Human Resource Management (HRM) on organizational performance. Specifically, the study will examine how HRM practices, such as recruitment and selection, training and development, compensation and benefits, performance management, and employee relations, impact the performance of an organization. Additionally, the study will look at the impact of HRM on employee engagement and motivation, and how this impacts organizational performance. Finally, the study will investigate the relationship between HRM and organizational culture, and the implications of this relationship on performance.

2.1.OBJECTIVE

- To analyze the effect of Human Resource Management practices on Organizational Performance.
- To investigate the impact of Human Resource Management on Employee Retention and Satisfaction.
- To analyze the impact of Human Resource Management on organizational productivity and efficiency.

2.2.SCOPE OF THE STUDY

- It helps the organization to improve staff retention and motivation.
- It helps to enhanced job satisfaction of the employee.
- It will improve organizational culture and climate of the organization.
- It will be improved employee development and training of the employee.

2.3.LIMITATION OF THE STUDY

- The sample size of the study is limited to 100 samples.

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Study on Organizational Culture And Impacts on Employees Behavior with Special Reference for Paddico Co., Ltd

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ABSTRACT: Bibliography of articles titled Research on organizational culture and its impact on employee behavior to determine conditions, wages, facilities, attendance schedules, class schedules, creation strategies motivationand promotion for employees. The article includes objectives, obstacles, company profile, research methods, results, recommendations, and conclusions. The desired factsfor the studies were accumulated from primary and secondary statistics. Responses given through the means of company employees are analyzed and interpreted with the help of special types of statistical equipment be it percentage evaluation, chi-squared and correlation . 1. INTRODUCTION

Organizational tradition refers to a device of shared assumptions, values, and ideals that help workers understand what is appropriate and alongside behavior. These values have a significant impact on employee behavior in addition to the overall performance of the organization. Culture is vehicle and invisible to individuals. Tradition creates the employer's internal environment and influences the character of the long-term plans that lead the employer towards his or her vision. Human behavior is radically determined by the means of organizational tradition.

1. PROBLEM STATEMENT

It should provide able to provide employees with a comfortable working environment with harmonious interpersonal relationships to bring out their full potential. Company tradition allows employees to have a sense of assignment and experience responsibility, working together towards the common goals of the company. The competitiveness of companies is not always best reflected in their generation but also in their corporate traditions. A high-quality organizational tradition can sell a company's healthy improvement, positively mobilize employees' overall performance,2 and make them paint with more enthusiasm. Therefore, the inspection recognized the organizational tradition and behavior of PADDICO Co., Ltd.'s employees. father.

2.OBJECTIVES OF THE STUDY

To see the organizational tradition and employee behavior at PADDICO Co., Ltd

Recognizing the influence of organizational traditions and employee behavior at PADDICO Co., Ltd Examine

organizational traditions and employee behavior

3. RESEARCH SCOPE

It values the tradition of triumphal patronage. He discovered the impact of employee behavior on organizational traditions. He knows the reasons behind the overall performance issues. It helps each worker better understand their function and become clear about their function.

4. RESEARCH LIMITATION

The issue of timing has become one of the main obstacles to verification. The technique of filling out the form takes a long time because most of the staff are no longer aware of the standards and conditions.

5. OVERVIEW DOCUMENT

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The Impact of Hybrid Working Model on Work-Life Balance in Arihant Maxsell Technology

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ABSTACT: The effect of the hybrid work model on work-life balance is the subject of this study. The ability of an individual to meet their family, work, and other non-work obligations and activities is referred to as having a healthy work-life balance. Those who are interested in the relationship between the work-life quality and the marginal quality of life have been concerned about work-life balance. Equal time allocation for work, family, and personal needs is only one aspect of work-life balance. While some people adhere to the "live to work" mindset and consider work as the end goal, others believe that "work to live" and place work at the core of their lives. It allows the worker the freedom to decide when, where, and how to be more productive

KEYWORDS: Hybrid, Work-life,Hybrid workforce, Blended work model.

I. INTRODUCTION

Our company philosophy is to Make Technology – Usable & Affordable. We develop products that meet the growing demand of Customers who seek best utility and performance at an Affordable Price. Our belief is in Creating values all over our activities. With ever changing economy and dynamism age, We always try to recreate ourselves to ensure that our Ethics remain as our core and dynamism ensures impressive development & growth. Our source of strength and energy are our Valuable customers and An excellent Work team which gives our Organization produce Better products, Better Service and Adding up value to our each perspective. We care about our customers, and it shows in the way we conduct business

OBJECTIVE OF THE STUDY

- To study the Impact of hybrid working model on work-life balance in ArihantMaxsell Technology Pvt Ltd,
- To find the challenges faced by the employee in Hybrid working model,
- To examine the Impact of Hybrid Work Model on work-life balance in the company,
- To suggest ways to improve work-life balance of the employee.

SCOPE OF THE STUDY

- The study aims to analyse the impact of hybrid working model on work-life balance in ArihantMaxsell Technology Pvt Ltd,
- It is also expected to provide an insight on work-life balance and the hybrid working model,
- The study can collect data through surveys, interviews, and focus groups from employees of ArihantMaxsell Technology Chennai. The data collected can be analysed to determine the impact of the hybrid working model on work-life.

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A Study on Employee`S Loyalty and Retention with Special Reference to Angel Starch and Foods PVT Ltd Erode

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ABSTRACT: Employee Retention refers back to the capacity of the organization to keep its personnel and it`s rising as a massive venture to organisations. Organisation culture, pay and remuneration, flexibility and task delight quite affect the retention charge for any business enterprise. The paper gives the popular and capacity motives for an worker to depart his task and additionally talks significantly approximately the troubles confronted through an organization related to the excessive worker turnover. The paper elaborates at the retention elements inclusive of education, talent recognition, profession development, and so on and enables in knowledge the significance of powerful conversation and worker motivation for the reason of worker retention.

I. INTRODUCTION

Employee retention includes taking measures to inspire personnel to stay withinside the organization for the most duration of time. It is useful for the enterprise in addition to the worker. Effective worker retention is a scientific attempt through employers to create and foster an surroundings that encourages cutting-edge personnel to keep through having regulations and practices in location that deal with their various needs. Retention of key personnel is vital to the long time fitness and fulfillment of any enterprise. It is understood truth that preserving the high-quality personnel guarantees client delight, extended product sales, glad colleagues and reporting staff, powerful, succession making plans and deeply embedded organizational know-how and learning. Employee retention matters, as organizational problems inclusive of education time and investment, misplaced know-how, insecure personnel and a highly-priced candidate seek are involved.

II. STATEMENT OF PROBLEM

One of the finest demanding situations confronted through the employers nowadays is to discover and keep correct personnel. The first step is to apprehend why worker go away from the enterprise and the second one is to put into effect worker retention techniques to get them to stay. Retaining the proficient worker through adopting an appropriate retention techniques may be very crucial to come to be a a hit enterprise. Angel Starch & Food Pvt Ltd. is one such business enterprise which carried out the techniques to keep their proficient personnel.

OBJECTIVES OF THE STUDY

- To recognise the personnel" opinion closer to the running situations withinside the enterprise.
- To discover personnel" blessings supplied through the enterprise.
- To locate the personnel" degree of delight withinside the enterprise.
- To recognise the elements that impacts the personnel" retention withinside the workplace.
- To discover the trouble confronted through the personnel withinside the enterprise.
- To offer numerous pointers to keep the personnel withinside the enterprise.

SCOPE OF THE STUDY

- The enterprise can broaden and keep the techniques that assist to keep their personnel.
- This take a look at enables the control to research the elements that motivates the personnel.
- By figuring out the elements of motivation, control might also additionally give attention to the ones motivating elements that allows you to create task delight.

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A STUDY ON SEARCH ENGINE OPTIMIZATION (SEO)

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ABSTRACT: Search Engine Optimization (SEO) is a critical aspect of digital marketing that involves optimizing websites and web content to rank higher in search engine results pages (SERPs) and drive organic traffic. This paper provides a comprehensive analysis of SEO, including its strategies, trends, and best practices. The paper first outlines the importance of SEO and discusses the key factors that influence search engine rankings, such as keywords, content relevance, and backlinks. It then delves into the various SEO strategies, including on-page optimization, off-page optimization, and technical SEO. The paper also provides best practices for each strategy. It discusses the future of SEO and how businesses can stay ahead of the curve by adopting new and innovative SEO strategies.

I. INTRODUCTION

This SEO project involves optimizing a website or web page to improve its ranking on search engine result pages for specific keywords and phrases. The project will include analyzing the website's current performance, identifying areas of improvement, and implementing various SEO techniques to increase visibility and traffic. The success of the project will be measured by an increase in organic traffic and improved search engine rankings.

STATEMENT OF THE PROBLEM

The problem we aim to address is the low visibility of our website on search engines, specifically Google, and the lack of traffic it generates as a result. Our objective is to optimize our website for search engines and improve its ranking on SERPs to increase traffic, engagement, and user interaction.The basic problem is Website analysis, before implementing any SEO strategy, it's crucial to conduct a thorough analysis of the website to identify any technical issues that might be preventing it from ranking higher on search engine result pages. This analysis may include examining the site structure, content, backlinks, site speed, and user experience.A crucial aspect of SEO is identifying the relevant keywords that our target audience is using to search for content related to our organization's niche. The keyword research process involves finding relevant search terms and phrases, analysing the competition, and selecting the best keywords that have a high search volume and low competition.

OBJECTIVE OF THE STUDY:

To analyse and increase organic website traffic through implementing a comprehensive search engine optimization (SEO) strategy. This objective is specific, measurable, achievable, relevant, and time-bound (SMART). It focuses on the desired outcome of the SEO campaign, which is to increase organic website traffic, and provides a specific target increase.To understand the concept of generating traffic over the Profile or site. The content that are targeted to the keyword produces direct traffic to the website. SEO generated direct traffic to the website when the site is optimized for relevant keywords selected by the users.

SCOPE OF THE STUDY:

The study will involve identifying relevant keywords and search terms that our target audience uses to search for content related to our organization's niche. This will include analysing the competition, search volume, and relevance of keywords.A thorough analysis of the website will be conducted to identify any technical issues that may affect its ranking on search engine result pages (SERPs). This will include examining the site structure, content, backlinks, site speed, and user experience.The study will cover optimizing the website's content and structure to ensure that the relevant keywords are strategically placed in the right places, including titles, headings, meta descriptions, and content. On-page optimization will also include optimizing images, improving page loading speed, and enhancing user experience.

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Analysis of Labour Welfare Schemes and Its Impact on Job Satisfaction. An Empirical Study with Special Reference to Baer Shoes (India) Pvt. Ltd

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ABSTRACT: This study aims to analyze the impact of labour welfare schemes on job satisfaction and employee motivation among employees of Baer Shoes India Pvt Ltd. The study collected data through a survey questionnaire administered to a sample of employees from different departments of the organization. The questionnaire included questions related to the different types of labour welfare schemes offered by the organization, employee satisfaction with these schemes, and factors that influence their effectiveness. The study found that the organization offers various labour welfare schemes, including health and safety measures, recreational activities, and social services. The results also indicate that the level of awareness of employees about these schemes is moderate, with some employees having limited knowledge of the schemes offered.

I. INTRODUCTION

The study aims to analyze the impact of labor welfare schemes on job satisfaction. The welfare of employees is a crucial factor in any organization, as it contributes to the productivity, efficiency, and overall success of the organization. Labor welfare schemes are a set of programs implemented by organizations to improve the working conditions and well-being of employees. This study will explore the different types of labor welfare schemes, such as health insurance, retirement plans, paid vacation days, and flexible work schedules, and analyze their impact on job satisfaction. The study will also investigate the factors that influence job satisfaction, such as salary, job security, working conditions, and opportunities for growth and development.

1. STATEMENT OF THE PROBLEM

- The company may be facing challenges in attracting and retaining employees in a competitive job market.
- The current labour welfare schemes implemented by the company may not be effective in enhancing employee job satisfaction.
- The company may not have a clear understanding of the factors that influence employee job satisfaction and how these factors relate to labour welfare schemes.

2. OBJECTIVE

- Identify the different types of labour welfare schemes offered by organizations.
- Identify the factors that influence the effectiveness of labour welfare schemes.

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An Empirical Study on Employees Job Satisfaction in Fitness Equipment's manufacturing company

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ABSTRACT: Managers in the organisation have concentrated job satisfaction as one of the main criteria in addition academics. Numerous studies have been conducted to determine the factors that influence job satisfaction and how it influences workplace productivity. Managers are quite worried about this issue even though there isn't any proof that work satisfaction has direct influence on productivity because productivity depends on so many other aspects. The positive mental attitude that a person has towards their work is known as employment satisfaction. The saying "A happy employee is a productive employee" is frequently used. individuals spend large amount of their life.

I.INTRODUCTION TO THE STUDY

Job satisfaction refers to a person's level of contentment with their position. It is a relatively new phrase because, in earlier ages, a person's occupation and level of job satisfaction frequently controlled the jobs that were open to them. The amount of compensation and benefits, the perceived promotion structure inside a company, the standard of working conditions, leadership qualities, and interpersonal interactions are a few of these variables. The phrase refers to the entire working arrangement between an employee and his or her employer. Lack of motivation at work does correlate with job happiness. The variables influencing both job satisfaction and job discontent were described differently by research participants. Surveys on job satisfaction might provide the most useful data on perceptions and causes. Regarding contentment or discontent.

II.STATEMENT OF THE PROBLEM

An organisation can only succeed if its employees are effective, who are the driving forces behind an industry. The corporation can achieve success only with a group of contented personnel. The corporation must offer sufficient welfare measures to ensure employee contentment. By performing a job satisfaction survey, we may determine whether the employees are satisfied or not, as well as whether general, welfare, financial, and other relevant reasons are motivating them.

III. OBJECTIVE OF THE STUDY

To evaluate employees' happiness with their pay and other advantages.
To evaluate an employee's satisfaction with their wages and other benefits.

IV. SCOPE OF THE STUDY

The organisation can use this analysis to pinpoint the areas where its staff are unsatisfied.
The level of employee satisfaction with welfare measures can be measured and determined.

V. LIMITATIONS OF THE STUDY

The project's findings might not be useful in the long term because of the following reasons:

1. Respondent bias may have an influence on the results;
2. People's tastes and attitudes change over time.

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A Study on Customer Satisfaction on Digital Marketing in Angle Starch and Food Pvt. Ltd

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ABSTRACT: Many businesses have embraced digital marketing technologies to interact with and fulfil their consumers' requirements and wishes. Every organisation now uses digital marketing strategies to educate customers about the products and services they are receiving and to highlight their benefits. The primary goal of the study is to evaluate how Guaranty Trust Bank Nigeria plc's customers are affected by digital marketing. Customers of Guaranty Trust Bank at three branches in Ilorin South, Kwara State, made up the study's population, which used a descriptive survey methodology. To get a representative sample of 384 respondents, the study usesinfinite sample size calculation.

I. INTRODUCTION

Digital marketing and advertising refers to the promotion of businesses or goods across all conceivable digital stages. It involves much more than simply being aware of the goods or services advertised and marketed through available digital platforms, namely the internet. The goal of digital marketing is to preserve a reliable digital lifestyle. The main worldwide companies in the world, from Dominos to Google, Amazon to Apple, have one thing in common: they employ virtual advertising and marketing platforms to compete in dynamic and modest environments.

II. CONCEPTUAL FRAMWORK

It is a marketing procedure that is envisioned to draw visitors and probable customers in, rather than externally pushing a brand, product or service onto prospects in the hope of generating leads or customers.
Search Engine Optimization (S1EO) is the arrangement o1f moving t1he reflectivity of a web w1ebsite or an online pa 1ge in an astoundingly web se 1arch tool's regular or1 1un-paid/characteristic hunt results.
SEM is a variety of web advertising that contains the pro1motion of internet sites by rising their visibility in database results pages SERPs through enrichment and advertising.
SMM is1the strategy for accomplishment of web site website guests or responsiveness through web-based life sites. Social media marketing showcasing programs clearly an inside on battles to make content material that destroys intrigue and brings out persers to share it over their informal organizations.
Email selling is straightforwardly advertising a blurb message to a group of people mistreatment email. In its biggest sense, each email sent to a likely or current customer can be pondered email selling.
Mobile promoting may be a multi-channel, digital endorsing strategy aimed toward reaching a target market on their Smartphone's, tablets, and/or different mobile devices, via websites, email, SMS and MMS, social media, and apps. Mobile marketing is unsettling the means individuals interact with brands.

Article Marketing- To build links for your site, enhance your website's search engine ranking and getting traffic.

- Forum Marketing- Forum is a place where people gather and discuss their problems, strategies etc. Again, a good traffic builder.
- Search Engine Marketing - This involves search engine optimization of your website design and content.
- Pay per click Advertising - This is a paid service where you pay the service provider every time your link is clicked

III. STATEMENT OF THE STUDY

Today's era of Internet has opened a gate of vast variety of opportunities for businesses. The speed and ease with which the digital media transmits information and helps boost a business is amazing.

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A Study on Employee Attraction and Retention Strategies with Special Reference to Velavan Agencies

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Abstract: Inventory management is a critical component of any business organization. It is essential for controlling the stock of goods and services and ensuring that the right amount of resources is available to meet customer needs. Proper inventory management helps businesses to reduce costs, increase efficiency, and improve customer satisfaction. It allows businesses to optimize the use of their resources, including their financial resources, by ensuring that their stock of goods and services is used in the most efficient way possible. Additionally, effective inventory management helps businesses to track inventory levels, forecast demand, and plan production accordingly. This enables businesses to avoid stock-outs, reduce the likelihood of overstocking, and ensure the availability of goods and services when needed. In summary, inventory management is an important part of any business strategy and helps organizations to maximize the efficiency and effectiveness of their operations.

I.INTRODUCTION OF THE STUDY

Inventory management is a critical aspect of any business, particularly in manufacturing and retail industries. It plays a crucial role in ensuring that the right products are available at the right time, in the right quantity, and at the right price. Effective inventory management helps companies to optimize their operations, reduce costs, improve customer satisfaction, and increase profitability.

This study focuses on the importance of inventory management with reference to Hindusthan, a company based in India. The company operates in a highly competitive market and faces significant challenges in managing its inventory effectively. The study aims to analyze the inventory management practices of Hindusthan and identify areas for improvement.

II.STATEMENT OF THE PROBLEM

Velavan Agency is a leading distributor of Fast-Moving Consumer Goods (FMCG) in Erode, Tamil Nadu. The company is facing challenges in effectively managing their inventory levels, which is leading to overstocking or understocking of products. This is resulting in increased carrying costs, lost sales, and decreased customer satisfaction. The problem is exacerbated by the highly competitive nature of the FMCG industry and the need to meet customer demand quickly and efficiently. Therefore, the study aims to analyze the inventory management practices of Velavan Agency and to identify potential solutions to optimize their inventory levels, reduce costs, and improve overall efficiency in the delivery of their products.

III. OBJECTIVES OF THE STUDY

- To study the importance of the inventory management at velavan agency.
- To analyze whether a good inventory management increase the efficiency of the sales.
- To Know the software and technologies used to maintain the inventory in the company.
- To identify areas of improvement in inventory management processes.
- To analyse how records of inventory transaction helps in forecasting of demand

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A Study on Effectiveness of Grievance Handling Procedure with Respect to Subasri Textile TIRUPPUR

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ABSTRACT: This project entitled "A Study on Effectiveness of Grievance Handling Procedure with respect to Subasri Textile is done to understand the effectiveness of the grievance handling procedure followed by Subasri Textile to resolve employee's grievance. The primary objective of this study is to find the effectiveness of grievance handling procedure of the company. The secondary objective of this study is to identify the awareness level of the employees about the grievance handling mechanism of the company and to know the level of satisfaction towards the grievance handling procedure of the company.

The research type used in this study is descriptive in nature, which helped in developing the concept and in decision making. Primary data is used for analysis, which is gathered using questionnaire. Secondary data is also used for the study, which is gathered from internet and already done project reports.

I. INTRODUCTION OF THE STUDY

Identify the awareness level of the employees about the grievance handling mechanism of the company and to know the level of satisfaction towards the grievance handling procedure of the company.

The research type used in this study is descriptive in nature, which helped in developing the concept and in decision making. Primary data is used for analysis, which is gathered using questionnaire. Secondary data is also used for the study, which is gathered from internet and already done project reports.

Convenience sampling is used while selecting samples for data collection. A sample size of 100 was taken out of 308, the population of the company. The gathered information is critically analyzed using percentage method and, statistical tools such as Chi Square and Spearman Rank Correlation to arrive at a conclusion.

From the findings of this study, it is concluded that Grievance Handling Procedure followed by the company is effective and satisfactory and suggestions are given for the further improvement of the procedure so that all employees can be highly satisfied.

II. PROBLEM OF STATEMENT

A study on effectiveness of grievance handling procedure with respect to subasri textile.

OBJECTIVE OF THE STUDY:

PRIMARY OBJECTIVE:

- To study the effectiveness of Grievance Handling Procedure in SUBASRI TEXTILE.

SECONDARY OBJECTIVE:

- To identify whether the employees are aware of the grievance handling mechanism.
- To know the level of satisfaction towards the grievance handling procedure of the organization.

SCOPE OF THE STUDY:

- The study throws light on need for Grievance handling procedure and this study facilitates the management for further improvement on the same.
- This study will be useful when similar kind of research is undertaken.

NEED OF THE STUDY:

- Employees differ as individuals, in their needs, expectations and behavior. When their needs are not satisfied or their objectives are not achieved, the result is employee dissatisfaction. It is not an easy task for the management to keep all the employees satisfied and motivated, all the time.

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A Study on the Impacts of Search Engine Marketing with Reference to Angel Starch Erode

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ABSTRACT: This study investigates the impacts of search engine marketing in the digital marketing landscape. Specifically, it focuses on the effects of search engine marketing on businesses' online presence and brand awareness. The study will analyse the data from a variety of sources, including Google AdWords, Bing Ads, and other search engine marketing platforms.

I. INTRODUCTION

The study aims to examine the impacts of search engine marketing (SEM) on the business growth and marketing strategies of Angel Starch, a marketing company in Erode. SEM has become an increasingly popular digital marketing strategy for businesses looking to increase their online visibility and drive more traffic to their websites. By understanding the impacts of SEM on Angel Starch and the digital marketing industry in Erode, the study aims to provide valuable insights and recommendations for businesses looking to implement SEM as a part of their digital marketing strategy.

STATEMENT OF THE PROBLEM

The purpose of this study is to identify the impacts of search engine marketing (SEM) on businesses. Specifically, this study seeks to understand how SEM strategies and tactics can be used to increase website visibility, attract targeted customers, generate leads, and increase revenue. Additionally, this study aims to examine the most effective strategies and tactics used by businesses to maximize their return on investment (ROI) when it comes to SEM. Finally, the study seeks to provide insights into how businesses can utilize SEM to maximize their online presence and achieve their goals.

OBJECTIVE OF THE STUDY

- To examine the impact of SEM on website rankings in major search engines, such as Google and Bing.
- To investigate the effects of different SEM strategies on consumer behaviour and website engagement.
- To identify the best practices for SEM campaigns and their impact on website performance.
- To suggest ways to improve SEM strategies among customers.

SCOPE OF THE STUDY

- It connects with potential customers and develops a more comprehensive marketing strategy.
- It will increase website traffic to improve search engine rankings and generate higher quality leads.
- It will maximize return on investment and identify target customers and their needs.

LIMITATION OF THE STUDY

The study may have been conducted on a small sample size, which may not be representative of the entire population. A larger sample size could have provided more accurate and reliable results.

- The study may have focused on a specific industry or product, such as Angel Starch, and the results may not be applicable to other industries or products.
- The research conducting the study may have had their own biases and assumptions, which could have influenced the study design and interpretation of the results.

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A Study on Employee Relationship Towards Working Environment in Spinpack Industries.Co, Erode

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ABSTRACT: The main assets of a company are its employees. Employee relationship management is a new method of managing human resources that relies on information technology to establish and sustain personalised relationships with staff members that are mutually advantageous. The main assets of a company are its employees. It is crucial that the workers work as a team and each make an equal contribution to the achievement of the overall objective. The goal of employee relationship management has been to enable employees and their employers to work together on conventional managerial duties involving the contributions of both parties to the employment relationship. This survey was carried out by the researcher to ascertain how employees felt about their workplace.

I.INTRODUCTION OF THE STUDY

The term "staff member connection" relates to the overall mindset, relationship, satisfaction, and confidence that employees feel at work. Morale among staff members is high if employees are happy about their place of employment and believe they can meet their most basic demands there. belief in themselves and in their company, including their mission, goals, tactics, and daily decisions.

II.STATEMENT OF THE PROBLEM

- Human resource managers have always placed a high priority on employee performance.
- As a result, numerous methods for establishing the performance of employees in the workplace have been developed over time.
- In the modern day, the utilization of the workplace environment has gone beyond rating employee performance to include factors like motivation.

III.OBJECTIVES OF THE STUDY

- To research the working environment at SPINPACK INDUSTRIES.CO, to understand the effects of the working environment system there, and to gauge employee satisfaction with the current working environment system.
- To perform data analysis and interpretation using the employee's perspective of the organisation.
- To be aware of the causes of both positive and poor interactions among employees.
- To offer comments and recommendations based on the completed study.

IV.SCOPE OF THE STUDY

- Assists in implementing the finest safety and workplace-friendly measures, which enables employees to live peacefully and contentedly in the long run.
- Each employee gains a clearer understanding of their role and its responsibilities thanks to this.
- It also plays a crucial role in helping workers identify their own strengths and weaknesses in relation to their roles and responsibilities within the company.

V.LIMITATIONS OF THE STUDY

1. The time factor is one of the key constraints.
2. The respondents' biases and prejudices can affect the study's findings.
3. The respondents were unable or unwilling to provide a thorough answer to a particular topic.
4. The study involved 150 employees, therefore it wasn't necessary for it to reflect the consensus position.

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A Study on Impacts of Purchase and Material Management on Production Department With Reference to Seyyon Hi-Tech Poly Fabs Pvt Ltd Erode

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ABSTRACT: However, from "humble" origins to the strategic relevance it now enjoys in some organizations and as a significant area of academic research, this recognition has evolved. To better comprehend and value the significant function that purchasing today plays, it is worthwhile to analyses the historical development of the practice. To help explain numerous phenomena in the subject of purchasing, a lot of literature and theoretical frameworks have been generated. Economics of transactions is one of these theories that has been put to use.

I.INTRODUCTION OF THE STUDY

A function called materials management seeks to handle materials in an industrial activity in an integrated manner. Its primary goals are to save costs and manage materials effectively throughout the entire effort. Its role encompasses a number of crucial material-related activities, including acquiring, storing, controlling inventories, handling materials, standardizing,

II. STATEMENT OF THE PROBLEM

The word "purchasing" refers to the act of buying. It involves understanding the requirements, choosing a supplier, and negotiating a price. Ordering, expediting, receiving, and paying are just a few of the many tasks that are included in the purchasing function, which is a part of the larger procurement function. Purchasing is in charge of acquiring the components, tools, supplies, and labour required to create a good or render a service. Large purchases and minor purchases can be classified into two major categories, Additionally, for retail and wholesale businesses, the percentages for purchased stocks are significantly greater, occasionally topping 90.

III. OBJECTIVES OF THE STUDY

- To determine the company's need for purchasing and material management.
- To ascertain the effects of material management and purchasing on output.
- To evaluate how purchasing and material management affect the company's profitability.
- To find ways to make the company's purchasing and material management better.
- To make honest ideas for Seyyon hi tech poly Fabs pvtltd's future development.

IV. SCOPE OF THE STUDY

- It is possible to improve the production system by analysing inventory control strategies.
- The flaws in the production system can be identified by looking at how outsourcing affects the production process.
- The implementation strategies can be determined by looking into the advantages of just-in-time (JIT) production systems.
- It is possible to enhance the production system by investigating how sustainability affects purchasing and material management practises.

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Electricity Generation Using Dynamic Bifacial Solar Panel Using IoT

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Abstract- *Recent developments on Bifacial Photovoltaic (PV) modules have captured a significant amount of attention as this technology is becoming more affordable and is able to produce more output compared to the traditional monofacial solar panels. The advantage of this technology comes from its ability to absorb additional irradiance from the rear which the monofacial panel is in capable of. Bifacial photovoltaic (PV) is a renewable energy technology that can increase the power density by harvesting both incident and albedo radiation. Integration of these resources into the power grid can offer benefits including improved energy efficiency and power continuity. The Bifacial modules mounted flush to a rooftop block any reflected light from reaching the backside of the cells. That's why bifacial modules perform better on flat commercial rooftops and ground mounted arrays, because there is more room for tilt and bouncing reflected light to the rear of the modules. This paper examines the performance of bifacial solar panels in the real-time climate of Qatar under winter and summer.*

This paper contains even though in the dull sunlight it generates the electricity. The four LDR are used observes the sunlight and generates the electricity in the PV panel. In this project two DC gear motors were connected in that PV panel one for to rotate the panel and another one for up and down purpose This paper will also enhance the feasibility, reliability and efficiency of the system.

Keywords- PV Panel, DC gear motor, LDR, LCD Display, PIC microcontroller, DC-DC Inverter.

I. INTRODUCTION

The global growth of photovoltaic (PV) cells has been exponential for the last 25 years. The usage of PV technology has evolved from a market of small scale applications to become a commonly used energy source in large parts of the world. As a result of the increasing demand, the development of PV has evolved rapidly and lowered the production costs. [1] This has enabled fairly unrecognized PV technologies to become more implemented. One of these technologies is Bifacial PV. Bifacial PV is a technology that produces power from radiation striking the front, as well as the rear side of the module. This gives the module a higher energy output potential than a standard one, without covering any more physical area. Since the main feature of a Bifacial panel is its ability to absorb radiation reflected on the rear side, the albedo of its surroundings is of high importance. Research studies have shown that modules installed on high reflective surfaces can produce 5-30 percent more than a standard module. [2] The Bifacial technology is becoming more recognized globally, however it has not yet been implemented at any large scale in Sweden. One company currently looking into the potential of this technology in Sweden is the energy consultancy company Stuns. Stuns is based in Uppsala Science Park where they have, in cooperation with Region Uppsala, installed a PV system consisting of both standard and Bifacial solar cells. The system has been operational since the beginning of November 2017 and due to it being so new, most of the data has not been thoroughly analyzed. [3] This report aims to analyze the data from the system in Uppsala Science Park to compare the power and energy outputs of the Bifacial panels to the standard ones. It will also investigate how different parameters can enhance the additional energy yield of bifacial modules, focusing primarily on the albedo. This study will examine the potential for Bifacial PV in Sweden, and whether investing in this technology is financially reasonable. This will be done by running simulations overlooking various financial aspects.

II. SYSTEM ANALYSIS

The design of these bifacial solar panels involves a glass-to-glass structure which makes it possible to capture the incidental reflective sunlight from the rear end along with the direct sunlight from the front surface. This allows them to produce more energy than regular modules. It's been observed that these solar panels produce up to 30% more energy than the conventional monofacial solar cells of the same area. So, if the monofacial panel is giving an output of 30kWh in a month, it can be sure 32kWh, or more, per month, switch to bifacial panels.

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Uninterruptible Power Supply With Multiple Power Sources By Using Fuzzy Controller

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Abstract- *The uninterruptible power supply with multiple power sources helps to switch the power supply depends upon the load demand (or) need. This system helps to run critical load wherever the load must to run constantly. However, from the point of view of energy saving, reducing cost and reduces the usage of EB supply which is lead to reduce the usage of fuels. This project proposes the efficient power management system for critical loads.*

This project has presented the critical load which is driven by the multiple power sources. The performance of the multiple power source system has been realized by our control scheme which has been implemented both in the simulation and in the experiments. By using fuzzy control method which is sophisticated method, to encounter the problem PIC controller is used which is controlled by fuzzy controller to driven the system with the help of feedback.PIC control is a very popular and advance method in microcontroller, which is run, depends upon the algorithm stored in the memory. The control system will work whenever the load variations were detected. By considering the load demand, controller will gives a feedback to operate the relay (or) inverter. The nature of the system is dynamically changing the incoming power supply whenever the need was occur. As the load is satisfied with the power source, the triggering angle of the thyristor will vary to make a correction in the incoming power which is in the inverter section.

Keywords- Multiple power source UPS, Fuzzy logic control, PIC microcontroller, quick response relay, Adaptive depends on load.

I. INTRODUCTION

The unequal provision of resources such as constant electricity supply, good road network, quality health care delivery, and adequate security policies to the rural areas as compared to the urban areas in developing countries has brought about the quest for rural-to-urban migration and high demand of individuals leaving their country to another. thus the need for an alternative means of power generation.

More recently, these farm products are being preserved with the aid of newly developed power electronic system appliances. These appliances are environmentally friendly, thereby making the dependency on fossil fuels a thing of past. It is common knowledge that inadequate power supply results in low productivity and slow economic development. This challenge has made investors shift their attention to the urban areas.

In developed countries, alternative/uninterruptible power supplies are ubiquitous, thus eliminating prolonged power interruptions or total blackout to the utility subscribers. This has encouraged many investors to invest in such regions, leading to reduced cost of living and improved economy. Numerous research efforts have been directed in the area of uninterruptible power supplies (UPS) and changeover systems with different merits and demerits.

There are many classifications of UPS such as OFF-line UPS, ON-line UPS and Line interactive UPS. In OFF-line UPS, the inverter is normally set OFF. The connected loads are fed from the mains utility supply. Once the mains supply is not accessible, a static power switch switches on the inverter and connects it to the load automatically. When the supply is brought back, the inverter is again shut off. The problem with the OFF-line UPS is that they are interrupted momentarily each time the utility supply fails.

In most cases, uninterruptible power supplies are known to change from one AC power source to another AC power source or from AC power source to DC/AC power source in order to maintain stable power to the connected loads in case of any interruption on the actively supplying end.

For instance, if utility power is suddenly off under UPS state, the loads are meant to be connected to a standby AC generator or the output of inverter system (DC/AC power system) in an uninterruptible power supply system between utility power supply and DC/AC system network.

This paper presents a multiple power source for the purpose of uninterruptible power supply to the remotest rural

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Harmonics Analysis in Distribution System With Integration of PV System

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Abstract- *The harmonic characteristics of the system are analyzed by using a theoretical model and simulation results. The results show that, when the PV system is integrated into the distribution system, the total harmonic distortion in the system increases significantly. A comparison of the total harmonic distortion with and without the PV system is provided to analyze the impact of the PV system on the system. Furthermore, the harmonic resonance effects caused by the integration of the PV system into the system are also discussed in detail. The proposed work provides a useful tool for the harmonic analysis of a distribution system integrated with a PV system.*

I. INTRODUCTION

The battery energy storage system can provide flexible energy management solutions that can improve the power quality of renewable-energy hybrid power generation systems. Several control strategies and configurations for hybrid energy storage systems, such as a battery energy storage system, superconducting magnetic energy system (SMES), a flywheel energy system (FES), an energy capacitor system (ECS), and a fuel cell/electrolyzer hybrid system have been proposed to smooth wind power fluctuation or enhance power quality.

II. SYSTEM ANALYSIS

This concept involves the integration of a solar photovoltaic system with a distribution system to analyze harmonic distortions in the system. The components of the system include a solar panel, Maximum Power Point Tracking (MPPT) controller, DC to DC converter, Pulse Width Modulation (PWM), Harmonic Current Compensator, AC Voltage Supply, SAHF filter, and Non-Linear Load.

The solar panel will be used to capture solar energy and convert it into electrical energy. The MPPT controller will be used to maximize the solar energy that is converted into electrical energy. The DC to DC converter will be used to convert the electrical energy from the solar panel into a usable voltage for the system. The PWM will be used to control the energy flow from the solar panel to the other components. The Harmonic Current Compensator will be used to reduce harmonic distortions in the system. The AC Voltage Supply will provide the main source of voltage for the system. The SAHF filter will be used to reduce noise and interference in the system. Finally, the Non-Linear Load will be used to represent the other loads connected to the system.

The system analysis will involve analyzing the power flow and harmonics in the system. This will involve determining the magnitude and phase of harmonic currents and voltages as well as the power factor of the system. The analysis will also involve determining the effects of the PV system on the harmonics in the system, as well as the effects of the harmonic current compensator and the SAHF filter on the system. The analysis will also involve determining the efficiency of the system and any potential issues with the system.

III. PROPOSED MEODOLOGY

The system implements a new methodology called Segmented Storage Energy System. The system provides the solution for power wasted by the photovoltaic when the battery is in full charge condition. The system has a two or more number of batteries which is integrated with the inverter hence the power can distributed to the batteries one by one and it is stored. (i.e., Instead of using dump load, we use an additional battery to store the excessive power) Fuzzy logic control strategy is implemented. To get a pure sine wave output we also introduce a modified sine wave topology.

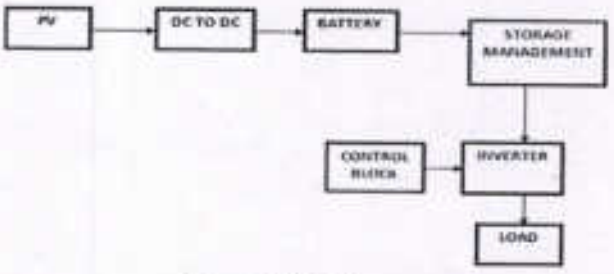

Figure1.Block Diagram

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Self Design And Self Adjustment of Stabilizers And UPS During Runtime

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Abstract- *UPS installed stabilizer is an innovative way of producing a device or a component which helps the circuit that helps in constant power transmission from start to the end. The component extends a compact and dischargable battery with its elements which supplies current in low voltage situation. It helps and works in all kinds of current situations that can be expected. The need of current processing in-between was also tend to neutralize with the battery connected with the equipment. All the other components installed works automatically calculating the input power and output power needed by the system.*

This paper presents a support device based on power electronics systematic design from top to the end which provides all the necessary functionalities required for the constant and un-interrupted power management of the regular and componential electronic systems. The way of monitoring and identification of voltage drop and current frequencies are variably caught and manipulated automatically by the system in its own phase and availability medium of components installed in the system. Most of the voltage variance occurring situations are easily reduced and the constant supply of current is produced.

Keywords- AC Supply, Transformer, Rectifier, Filter, DC Supply, Voltage Regulator, AC to DC converter, DC to DC converter, DC to AC converter, PWM(Pulse Width Modulation), PIC Micro Controller, Battery(Lead-Acid).

I. INTRODUCTION

Nowadays, there is no life without electricity. From the beginning of mankind, there always has been the necessity of power, which brought us to the inventions of fire, steam engines and most importantly, electricity. The power grid electric supplies are used for residential and commercial applications. In general, the resident and commercial consumers need alternating supply only because the generated power is alternating supply only, hence it may be preferable for further applications. At the same time the generated power is fully utilized by the resident and commercial consumers then for the industrial consumers the generated power is transmitted through overhead transmission lines with respect to step up and step-down operation.

Over all the electric supply played a vital role in our daily life means without considering the electric supply nothing will improve or satisfied. Hence, it's important to keep the electrical supply in our life.

Till now there are many inventions that are aroused to bring a constant current supply to the machine or to the system. There are systems that can save electricity and allows us to use it later and even there are some systems that limits the electricity that is being received for the system if the received electricity is exceeds the current needed.

The above systems are both having a separate capabilities and installed with a certain set of Components needed to carry the work given for them. We can't expect a single system to the both different work simultaneously. But it can be possible for a single equipment to carry the whole process mentioned above.

Among the various literature and research both the capabilities of energy storing and retrieving and energy reduction was achieved in the power electronics scheme of methodology .

II. PROPOSED METHEDOLOGY

A non-linear stabilizer combining an extended NDO technique and an adoptive backstepping algorithm is proposed for the N-level DC-DC MBC with CPLs in DC microgrid. This was carried out in various number of multiple sequential combinations until we get the desired result according to the system design and system input and output capabilities. To simplify the stabilizer model, a canonical form state-space model of the system, which consists of the converter total energy and the total input power is developed.

There is a usage of estimated value in the system, a back stepping controller is designed to guarantee the signal stability of DC bus voltage of the MBC fed DC microgrid with

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IoT Based Smart Energy Monitoring System For Home Appliances Using Machine Learning Algorithm

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Abstract- *Advancement in IoT based application has become the state-of-the art technology among the researcher due to the availability of Internet everywhere. The benefit of the Internet of Things (IoT) and connected nodes has been on a steep incline in recent years. Inefficient energy use has been a major issue globally. Residential energy consumption has been on a steady increase due to the growing population as well as a lack of awareness within households regarding proper energy utilization that causes significant amount of energy wastage. The emergence of Internet-of-Things(IoT) is a consequence and convergence of several key technologies such as real-time analytics, machine learning, sensors and embedded system.*

The proposed system consists of a set of sensors that monitor the energy consumption of various home appliances, a microcontroller unit that collects the sensor data and sends it to a cloud server, and a machine learning algorithm that analyses the data to predict future energy consumption. The system can also be used to alert users when energy usage exceeds a certain threshold based on the predicted energy consumption. This system demonstrates the potential of IoT-based smart energy monitoring systems in reducing energy waste and promoting energy efficiency.

Keywords- Machine Learning, Energy Monitoring, Relay, Wi-Fi module (ESP8266),PIC Controller, GSM module.

I. INTRODUCTION

Electricity is a source of energy which is non-recyclable, thus it must be utilized cautiously for it to be sustainable. Inefficient energy use has been a major issue globally, as a large percentage of current energy sources are generated using fossil fuels. Inefficient energy usage habits within households such as keeping unused appliances turned on, lowering air conditioner temperature to 16°C etc. results in energy wastage. Therefore, it is essential to monitor and optimize energy usage to promote energy efficiency and sustainability. One of the solutions to a growing urban population and household energy consumption is a smart energy monitoring and management system that utilize Internet of Things (IoT) technology.

Internet of Things (IoT) is a network of physical devices which are embedded with certain type of electronics which enable these devices/objects to connect and communicate with each other by exchanging data.IoT devices play a critical role in collecting and transmitting data related to energy consumption, production, and distribution. Smart energy metering systems will mainly assist empower customers with data to track, handle and regulate the use of energy, optimize efficiency and decrease the loss of energy. These features can help visualize these data better to the average household and in theory, help them manage their energy more efficiently. This system shall send the data to the assigned cloud when it is connected to the Wi-Fi router. The user simply can access the cloud on the device, and hence monitor the appliance energy consumption for the required amount of time. However, the most existing energy monitoring systems lack the element of CIoT with machine learning that enables the manipulation of data from users' energy habits.

Cognitive IoT(CIoT)refers to the application of intelligence in IoT, uses a new computing paradigm called Cognitive Computing which is essentially the convergence of IoT with machine learning.This paper proposes an IoT-based smart energy monitoring system for home appliances which implement machine learning algorithm like linear regression to predict future energy consumption level.To use linear regression for energy consumption prediction, historical energy data is collected and used to train the algorithm. Once the algorithm has been trained, it can be used to predict future energy consumption based on previous energy consumption pattern.

This allows energy providers to better manage their resources and plan for future demand. Such systems can help individuals and organizations monitor their energy usage,

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Solar Based Wireless EV Charger

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Abstract- *The industry is rapidly transforming from an IC engine vehicle to an electric vehicle. The demand for an electric vehicle is increasing, these lead to an in- crease in charging station as well. In this project, a wireless charging system is used to charge the vehicle wirelessly via inductive coupling. We just simply need to park the car on the charging spot. The transmission of electrical energy from source to load from a distance without any conducting wire or cables is called Wireless Power Transmission. The system checks if the person has sufficient balance and then deduct the charging charges and update the balance. The Internet of Things describes the network of physical objects that uses sensors, software, and other technologies for the purpose of connecting and exchanging data with other devices and systems.*

I. INTRODUCTION

Electric vehicles are poised to be the future of transportation, and improving charging station efficiency will be critical to their widespread adoption. The lack of a reliable charging infrastructure has been a primary factor hindering EV demand in the market. To address this issue, we have developed a portable EV charger that leverages renewable energy to reduce charging time. The vehicle battery charging station employs a hybrid power system and provides a unique service to travelers looking to cover long distances in their electric vehicles. Often, there are no electric charging stations available for such users between motorways to recharge their vehicles. In this scenario, a wireless EV charger is the ideal alternative for charging their electric vehicles.

II. METHODOLOGY

Solar power has increasingly become popular over the past year. With its uncountable improvement and cost-effective ways, more and more people are opting to switch over to solar energy rather than their regular form of energy. Solar charging is based on the use of solar panels for converting light energy into electrical energy (DC). The DC voltage can be stored battery bank. There is Reverse charging protection circuit is provided for the backflow of energy from the battery to a solar panel. The transfer coil is located at charger side and receiver coil is placed on vehicle side. A wireless power transfer module (WPT) is used for transferring electric power which is generated from the solar panel to the Electric vehicle by using the principle of Electromagnetic Induction.

To measure battery voltage, a voltage sensor is used. The battery voltage will be measured by microcontroller & showed on a 16x2 LCD. It will also display battery low status, whenever battery voltage falls below a certain level. L239D is the motor driver which is used for movement of wheels of that vehicle.

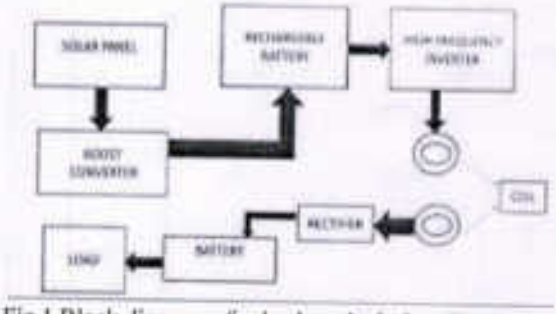

Fig.1 Block diagram of solar-based wireless EV charger

Wireless power transfer module (WPT): In electric vehicles charging of battery through a charger and wire is inconvenient, dangerous, and expensive. The existing gasoline and petrol engine technology vehicles are responsible for air, and noise pollution a well as for greenhouse gases. The implemented wireless charging system of batteries for Electric vehicles by the inductive coupling method has been studied in this paper. The transmitting circuit is used between the transmitter coil & receiver coil where MOSFET is usedfor switching operation. The system is achieving a 61% efficiency level while providing safety, reliability, low maintenance, and long product life. This is easy to use Wireless Power Transfer Module. This module consists of Transmitter Section & a receiver Section. Both the sections have a coil that acts as a transmitting/receiving antenna. This product can be used for wireless charging of mobile phones and various small electronic products. It is in a very small form factor and is extremely easy to use efficient & low costing. It can be used for wireless charging of your product thus making the product completely sealed, dustproof & waterproof thus increasing your product's life.

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An Autonomous Robot Cleaner For Solar Panel Systems

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Abstract- *Solar energy, being a noteworthy wellspring of sustainable power source, is significant in satisfying future energy need. To ensure efficient operation of photovoltaic panels, it is fundamental that the system presents proper cleaning operation to all obstructed materials that may impede the solar light-based radiation. The amassing of dirt or particles like residue, water, sand and greenery on the outer surface of the solarbased photovoltaic panel deter or divert light vitality from achieving the solar oriented cells. This is a noteworthy issue since the light obstruction materials play as resistance that diminishes the performance of solar photovoltaic. The target of this study is to delineate innovation of robotics technology for cleaning photovoltaic boards. The proposed strategy screens the power generation and cleans the photovoltaic surface when required progressively on mobile app. The enhancements accomplished by the unique structure and the created model confirmed the common sense of the proposed design.*

Keywords- Materials and Methods, Motor Driver

I. INTRODUCTION

The power generated by using conventional methods is a costly process and has a harmful effect on the environment that steer the attention towards utilizing and developing the renewable and sustainable energy sources. The most common renewable energy is solarbased energy. It has gotten a huge attention from researchers and industrial sectors for several reasons like: inconstancy of crude oil prices, awareness of environment friendly power sources, backing of local government by creating rules and policies for supporting renewable energy sector, low prices of PV panels. The ability of glass cover of the solar system to break through the sunlight radiation across the collector surface would determine the efficiency of solar systems.

The solar system utilizes solar cell to generate electricity by converting sun energy radiation. The system involves four components, namely: panels, battery, charge controller unit and load. Regularly fixed on rooftops and wired by an inverter into a building, solar PV board changes over the direct current generated by solar cells into electric current. The deposition and accumulation of dirt and residue particles called as soiling highly degrades the energy production. Residue deposition and dirtying of the board glass is one of the serious issues in the quickly extending solar powered vitality advertise particularly in situations that experience the ill effects of residue, airborne particles and moistness which results in changes in board's electrical qualities. The amassing of residue particles break down the performance of solar powered cells and results in measurable misfortunes in the produced power because of the sun irradiance dispersing consequences for the surface of the solar board. The efficiency of solar based panels subsidence radically when a little segment is obstructed by fallen trash or a film of residue and precipitation is found to have practically no cleaning impact. Cleaning of solarbased boards after the installing on the top of a building is troublesome as residue particles do not enable the sunoriented radiations to enter in the board appropriately causing a decrease in conversation productivity of the board and prompting expanded charging time of the batteries.

II. RELATED WORK

Materials and Methods

Fundamentally, robots are designed in such technique that they lessen human intercession from work escalated and unsafe work environment. The cleaning robot for PV panel with Android bolstered block diagram consists of three elements, namely: input, processor and output as shown in Figure 1. The primary element of the project is input mechanism, which includes each of the Android control switch unit, IP camera, sensors of voltage and current. This info information and data later send to the second element, which is a processor advancement (type Wemos D1 ESP8266 based microcontroller) that integrated by using the Arduino IDE. The last element is the output source consists of DC-motor for controlling robot movement, media server for sending video from the IP camera to the android apps, and Bluetooth module integrate with android apps to test the level of both voltage and current. A camera is appended at the forehead of the robot to register and show the perspective on

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Online Monitoring of Power Transformer To Improve Their Maintenance And Operation

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Abstract- *The primary point of the paper is to secure continuous information of transformer remotely over the web falling under the class of Internet of Things (IOT). For this constant perspective, we take one temperature sensor, one potential transformer and one current transformer for observing T, V, I information of the transformer and afterward send them to a remote area. These three simple qualities are taken in multiplexing mode and associated with a programmable microcontroller of PIC16f877a families through an ADC 0808. They are then sent straightforwardly to a Wi-Fi module under TCP IP convention to a committed IP that shows the information continuously graph structure in any web associated PC/Laptop for show in 3 unique diagrams. Thus, This Transformer Health Measuring will distinguish or perceive startling circumstances before any genuine disappointment which prompts a more prominent unwavering quality and huge cost reserve funds.*

Keywords- Current Sensor, Microcontroller Relay Overload, transformer, internet of things

I. INTRODUCTION

This system is designed for online monitoring of distribution transformers parameter can provide useful Information about the transformers health which will help the utilities to optimally use their transformers and keep the asset in operation for a long time. Transformer is used for providing electricity to the consumers. It provides the required voltage to the consumers by stepping down the voltage in distribution side.

So, monitoring the distribution transformer is the unapproachable task for the electricity department to monitor those transformers regularly. This paper provides a solution for reducing the man power in monitoring of the transformer in online by analyzing various parameters like voltage, current, temperature. The power system any unbalance cortication informed IOT.AB switch open without permission informed officer using IOT Line voltage stress & power transformer winding stress for premier & sectary controlling & monitoring using IOT.

The on-line monitoring system integrates a Global Service Mobile (GSM) Modem, withstand alone single chip microcontroller and sensor packages. It is installed at the distribution transformer site and the above mentioned parameters are recorded using the built-in 8-channel analog to digital converter (ADC) of the embedded system.

Customers by measuring those parameters voltage, current, temperature of a windings, oil Level of a transformer by using various sensors and in the future trends various updates may be come across towards the innovative ideal system.

It installation on Wireless technology.

II. SYSTEM ANALYSIS

Power transformer monitoring and controlling is a process used to measure, monitor, and control the performance of power transformers. This process involves collecting data on the performance of the transformer, analyzing it, and then making adjustments to the transformer to ensure that it is operating properly.

1. Data Collection: The first step in the power transformer monitoring and controlling process is to collect data on the transformer's performance. This data can include measurements such as voltage, current, temperature, and other parameters. This data can be collected directly from the transformer itself, or it can be gathered from other sources such as sensors and meters.

2. Data Analysis: After the data has been collected, it must be analyzed to determine the transformer's current condition and performance. This analysis typically involves comparing the data to normal parameters and thresholds to identify any issues or anomalies.

3. Adjustments: Once any issues or anomalies have been identified, adjustments can then be made to the transformer to ensure that it is operating properly. This can include making

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Iot Based Underground Cable Fault Detection Using PIC Microcontroller

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Abstract- *Monitoring and detection of High voltage stress in Underground cables. The monitoring of UG cables can be done by I2C protocol using embedded technology. Hall sensor is placed to measure the current level. Thus conversely provide the information about the UG cables. The data can be stored in master controller. Here, using PIC micro controller as a master. In case any abnormal voltage stress across the UG cable, the correction can be done in input side by using step-down transformer. The output side can be controlled. So that the balanced output got in the load side of UG cables. The fault message notification has been sent using IoT.*

Keywords- PIC Microcontroller, Relay, Hall sensor, Potential Transformer, Internet of Things, Step up Transformer.

I. INTRODUCTION

Today the world is facing a great challenge due to deregulation and growing demand of electrical power. Optimum power flow in proper environmental conditions and on commercial terms has increased the responsibilities of the power utilities. So its utilities work to provide most effective, environment-friendly, reliable and optimal power to consumer. Electric power can be transported from generating stations to load areas either by overhead lines system or by underground cables. The growing demand of electric power has led utilities to analyze both overhead and underground power distribution system considering their reliability, liability, maintenance and installation cost. Many countries like United States, European Union, and Australia are considering revising protocol for new power distribution installations and/or converting existing infrastructure to underground mode. Overhead lines have been considered generally most reliable for transmission and distribution of power technically and economically for many years. But modern technology has made possible to fabricate and utilize the highly reliable high voltage cables with overhead lines to improve the overall power network performance. Deregulation of the electricity supply markets and growing environmental awareness are creating exciting new markets for power transmission solutions based on underground cable technology.

Underground cable network now has become an important element in the power delivery chain from sub transmission to the doorstep of consumer. Importance of underground cable network and its efficient management in the modern day electric utility is of prime importance. Underground cable network has silent benefits of reliability and safety endowed with suitable technological developments. The underground cable has several advantages like less liable to damage through storms or lightning, low maintenance cost, less chances of faults, smaller voltage drop and better general appearance. However, their major drawback is that they have greater installation cost and introduce insulation problems at high voltages compared with the equivalent overhead system. For this reason, underground cables are employed where it is impracticable to use overhead lines. Such locations may be thickly populated areas where municipal authorities prohibit overhead lines for reasons of safety, or around plants and substations or where maintenance conditions do not permit the us of overhead construction.

II. SYSTEM ANALYSIS

IoT based underground cable fault detection using PIC controller is a system that enables detection of underground cable faults using PIC microcontrollers. The system consists of a main controller, a communication interface, and an underground cable fault detection sensor. The main controller is a PIC (Programmable Interrupt Controller) microcontroller that continuously monitors the condition of the underground cable. The communication interface allows the PIC controller to communicate with the sensor, the other components of the system, and the end user. The sensor is used to detect any faults in the underground cable, and the data is then sent to the PIC controller.

The PIC controller then processes the data and sends it to the communication interface, which relays it to the user. The user receives the data and can use it to detect the fault in the underground cable. The PIC controller can also be programmed to alert the user when the fault is detected. This system can be used to detect any kind of fault in the underground cable, such as shorts, opens, or breaks.

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FUTURE FORECATING USING SUPERVISED MACHINE LEARNING MODELS COVID 19

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ABSTRACT :The global proliferation of COVID-19 has placed mankind in danger. Because of the disease's high infectivity and transmissibility, the resources of some of the world's most powerful economies are being taxed. The capacity of machine learning algorithms can anticipate the number of forthcoming patients impacted by COVID-19, which is now regarded as a possible threat to humanity. In this work, four conventional forecasting models, least absolute shrinkage and selection operator (LR), were utilized to anticipate the COVID-19 hazardous elements. Each model makes three sorts of predictions: the number of newly infected cases, the number of fatalities, and the number of recoveries. However, in the cannot predict an exact outcome for the patients.To address the problem, the suggested technique employing LR predicts the number of COVID-19 cases in the following 30 days as well as the influence of preventative measures such as social isolation and lockout on the spread of COVID-19.

1. INTRODUCTION

1.1 COVID-19

COVID-19, the global pandemic, has exposed human society's vulnerability to severe infectious illnesses as well as the challenge of treating this problem in a globally integrated complex system. COVID-19 impacted almost 100 nations in a few of weeks. As a result, the entire human species should not only work together to defeat the pandemic, but also make reasonable plans to return to work and production based on the real circumstances in each location, as well as conduct geographical risk assessments. Many attempts have been made to develop an appropriate and rapid method of detecting infected people at an early stage. Guan et colleagues discovered bilateral pulmonary parenchymal ground-glass and consolidative pulmonary opacities, occasionally with a rounded shape and a peripheral lung distribution, after performing chest CT scans on 21 COVID19 infected individuals in China. As a result, COVID-19 diagnosis may be portrayed as an image segmentation issue to extract the disease's major characteristics. Coronavirus Disease 2019 (COVID-19), caused by a new coronavirus, is rapidly spreading over the world. As of April 9, 2020, it had infected over 1,436,000 persons in over 200 nations and territories.Forecasting is the practice of creating future predictions based on past and present data, most typically using trend analysis.

1.2 FUTURE FORECASTING

Forecasting is the practice of creating future predictions based on past and present data, most typically using trend analysis. A common example would be the estimate of some variable of interest at some future date. Prediction

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EFFICIENT IOT SERVICE DEPLOYMENT VIA DECENTRALIZED EDGE-TO-CLOUD LOAD BALANCING

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ABSTRACT

Virtual Machines (VMs) in cloud systems are scheduled for hosts based on how quickly they use resources, like hosts with the most RAM, without taking into account how they will be used over time. Likewise, by and large, the booking and situation processes are computational costly and influence execution of conveyed VMs.An algorithm for scheduling virtual machines (VMs) in the cloud that employs the PSO technique and takes into account the resource consumption of VMs that are already running over time is presented in this work.

INTRODUCTION

CLOUD COMPUTING

The next generation of computational paradigm is cloud computing. By utilizing the idea of virtualization, Cloud Computing is rapidly consolidating itself as the future of distributed on-demand computing. It is emerging as a crucial backbone for a variety of internet businesses. However, one of today's most successful business models is the Internet-enabled business, or e-business. Computing is being transformed into a model of services that are commoditized and delivered in a manner similar to traditional utilities like water in order to meet the requirements of internet-enabled businesses. Services can be accessed by users in accordance with their needs, regardless of where they are hosted or how they are delivered. A few processing ideal models have vowed to convey this utility figuring.

One such dependable computing paradigm is cloud computing. There are two parts to cloud computing architecture: the front end and the back end. These two closures are associated by Web or Intranet. Client devices like mobile phones, thin clients, and fat clients make up the front end. For clients to access the cloud computing system, an interface and applications are required. The various servers and data storage systems make up the back end. Another server is known as the "Central Server." A focal server is utilized for directing the cloud framework. In addition, it keeps an eye on all traffic and responds immediately to customer requests.

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Fruit Freshness Detection Using Raspberry Pi With GSM

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Abstract- *It will be developed a fruit freshness detection system using Raspberry Pi and a camera module. The system uses machine learning algorithms to analyze images of fruits and determine their freshness based on attributes such as color, texture, and aroma. By eliminating human errors in the detection process, the system provides an objective assessment of fruit freshness, enabling farmers and food distributors to deliver high-quality fruits to consumers, reducing waste, and increasing customer satisfaction. The low-cost and portable nature of the system make it ideal for deployment in small-scale farms and markets, as well as large-scale industrial production lines. Overall, the fruit freshness detection system using Raspberry Pi offers a reliable and efficient solution for the food industry to ensure the quality and value of fruits.*

Keywords- PIC Microcontroller, Relay, Hall sensor, Potential Transformer, Internet of Things, Step up Transformer.

I. INTRODUCTION

Fruit freshness detection is a significant aspect of the food industry, which determines the quality and value of fruits. Traditionally, human inspection is used to detect fruit freshness, which is time-consuming and prone to errors. This has led to the development of automated fruit freshness detection systems using technology like Raspberry Pi.

Raspberry Pi is a popular single-board computer that can be used to build low-cost and compact solutions. Its small size and low power consumption make it ideal for developing fruit freshness detection systems that can be integrated into existing production lines. The system can detect various attributes of fruits like color, texture, and aroma to determine freshness.

It will be develop a fruit freshness detection system using Raspberry Pi and camera module. The camera module will capture images of the fruit, and the system will analyze the images to determine their freshness. The detection algorithm will use machine learning techniques such as image processing and pattern recognition to determine the freshness of the fruit.

The system will provide an objective assessment of the freshness of fruits, eliminating human errors in the process. It will enable farmers and food distributors to deliver high-quality fruits to consumers, increasing customer satisfaction, and reducing waste. The low-cost and portable nature of the system make it suitable for deployment in small-scale farms and markets, as well as large-scale industrial production lines.

II. SYSTEM ANALYSIS

System analysis of the fruit freshness detection using the Raspberry Pi can be divided into two aspectshardware and software.

Hardware AspectThe hardware compooents used in the fruit freshness detection system are as follows:

1. Raspberry Pi: The Raspberry Pi is a small, single-board computer that is used as the central processing unit of the freshness detection system. It is responsible for running the software and controlling the sensors.
2. Camera: A camera is integrated with the Raspberry Pi to capture images of the fruit. These images are then analyzed to measure the freshness of the fruit.
3. LED Light: An LED light is used to provide uniform illumination for the fruit under investigation. The LED light is controlled by the Raspberry Pi.
4. Temperature and humidity sensor: A temperature and humidity sensor is used to measure the environmental conditions of the fruit.
5. Capacitive Sensor: A Capacitive sensor is used to measure the freshness of the fruit by its ability to depolarize.
6. Power Supply: An external power supply is used to provide power to the Raspberry Pi and other sensors.

Software AspectThe software components used in the fruit freshness detection system are as followsThe captured images of the fruit are analyzed to

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DETECTION AND CLASSIFICATION RICE PLANT LEAF DISEASES USING R-CNN TEC HNIQUE

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ABSTRACT: The project "RICE LEAF DISEASE DETCTION AND CLASSIFICATION", is developed by using Python as front end. Rice leaf diseases are major problem in economic and production losses in the agricultural industry worldwide. In this project, an image processing approach is proposed for identifying rice leaf diseases based on convolutional neural network. According to the R-CNN algorithm, rice leaf image details are collected from the existing packages at the front end and processed but project. It takes a few moments to process So, this proposed system can be used to identify rice leaf diseases quickly and automatically. The proposed approach follows the steps such as collecting input image, Image Preprocessing, Identifying affected regions, highlight those affected regions, Verifying training set, processing the result. In few types of rice leaf diseases. This approach tested and found to lie or affected. The algorithm is used for detecting the disease of the rice leaf. Images are provided for training. Before the image processing, images are converted to colour models, and the most suitable colour models for this approach. Local Binary Pattern is used for feature extraction and Support erosion method is used in creating the model. According to this approach, rice leaf diseases can be identified with the average accuracy of 79% and it's can be identified with average accuracy 66%.

INTRODUCTION: The classical approach for detection and identification of rice leaf diseases is based on the naked eye observation by the experts. In some developing countries, consulting experts are expensive and time consuming due to the distant locations of their availability. Automatic detection of rice leaf diseases is essential to automatically detect the symptoms of diseases as early as they appear on the growing rice leaves. Rice leaf diseases can cause major losses in yield and quality appeared in harvesting control factors are considered for the forth coming years to avoid losses. For example, some common diseases of rice leaves are rice rot and rice blotch. Rice rot infections produce slightly sunken, circular brown or black spots that may be covered by a red halo. Rice blotch is a fungal disease and appears on the surface of the rice leaf as dark, irregular or lobed edges. Visual inspection of rice is already automated in the industry by machine vision with respect to size and color. However, detection of defects is still problematic due to natural variability of skin color in different types of rice leaves, high variance of defect types and presence of diseases. The studies of rice leaves can be determined by apparent patterns of specific rice leaf and it is critical to monitor health and detect disease within a rice leaf. Through proper management action such as pesticides, fungicides and chemical applications one can promote control of diseases which interns improve quality. Deep learning also called neural networks, is a subset of machine learning that uses a model of computing that's very much inspired by the structure of the brain. There are various approaches available such as spectroscopic and imaging technology, applied to achieve better plant disease control and management. The increased in amount of commercialization agricultural farms are always on the lookout to reduce man power in whatever way possible without affecting the productivity. A particular aspect to look upon is to use automatic harvesters which would significantly economize the entire process. Rice leaf detection system has its major application in robotic harvesting. However, the technology can be custom made to be suitable for other applications such as disease detection, maturity detection, tree yield monitoring and other similar operations. Varieties of rice leaves are being exported all over the world with the development in cold storage facilitiesand transportation. It becomes the necessity of maintaining the highest-level export quality which is mainly carried out by visual checking by experts. This is expensive and time consuming due to distant location of farms. Precision Agriculture helps the farmers to provide with sufficient and economical information and control technology due to the development and disclosure in various fields. The objectives are agricultural input systemization, profit hike and environmental damage reduction. So, in this work, a solution for the detection and classification of rice leaf diseases is proposed and experimentally tested. This system takes input as imageof rice leaf and identifies it as infected or not infected. The technique which helps the farmers to identify disease properly by using R-CNN. Rice leaf industry is one of the major drivers to grow economy of country. There is possibility of erroneous sorting and packaging of rice leaves due to manualinspection and lack of knowledge of quality evaluation. The farmers are on pressure for demand of rapid supply due to shortage of skilled workers and rising of labor costs. In such a scenario, automation can reduce the costs by promoting production efficiency. In Agricultural image processing significant research have done for identification of rice leaves and detection & quantification of Most of the previous works are based on C-Mean, K-Mean and KNN for identification and quality analysis of rice leaves. In this project an automatic system is proposed, which is less time consuming and cost effective for farmer to identify

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IMPLEMENTATION OF OVERLOAD PREVENTION SYSTEM IN FLY ASH BRICK MACHINE.

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Abstract

Fly ash, lime, gypsum and sand are all combined to make Fly ash brick. They have the benefit of being lightweight, more durable than conventional bricks, and capable of being made from waste materials, such as fly ash. Its use in manufacturing of bricks will lead to the control of pollution and proper disposal. New type of fly ash brick moulding machine is an automatic machine which in turn produces the high-density bricks using coal ash. It aids in environmental protection and save energy. In this developing world of technologies everything is controlled automatically and human work is almost zero in some sectors. A controller circuit has been designed in order to make the control of conveyor belt motors automated which will work on the basis of level of material in the tank/hopper of raw materials. An infrared Proximity sensor is used to detect the level of a mixture tank which in turn produces the output to the controller and the motor has to start and stop according to it. This design will control the starting and standstill conditions of the motor according to the level of the tank. It helps in increasing the production rate and reduces the human work and wastage of raw materials due to overloading.

Keywords: Brick making machine, Electronic controller, Sensor.

1. Introduction

Fly ash brick (FAB) is a type of building material which is specifically known as masonry units which consists of Class C or Class F fly ash and water. A fly ash brick is characterised by using industrial waste to replace clay brick, and it does not need to be burned and steamed after moulding processing, it can be used after natural curing. It is compressed at 28 Mpa and it is placed in a 66oC steam bath for 24 hours for curing. The fly ash brick reduces the dead load on

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Design and Fabrication of Standup Assistant Wheelchair for Physically Challenged Person

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Abstract

Wheelchair users are more likely to experience a range of physical and mental health problems due to their extended sat posture and inactivity, including weariness, hip joint pain, pressure sores, etc. Other related issues include increased carer dependency, lower back pain among carers, and injury occurrences during transfer help. Many elderly individuals who are able to walk are compelled to use wheelchairs because they cannot stand up independently. There is a critical need for improved wheelchair designs to boost the independence of wheelchair users because there are fewer carers and more elderly and lower limb impaired people in society. To increase independence and quality of life, the present project aimed to create a breakthrough reconfigurable wheelchair with stand-and-sit features. Subjects in their senior years who are disabled in their lower limbs. Further work presents the detailed product design and development processes of a reconfigurable wheelchair.

Keywords: Pain, wheelchair, limb, sores, limbs, wheelchairs, posture, carers, users, injury.

1. Introduction

In general, wheelchairs are made to only support sitting transportation of disabled people. A standing wheelchair is a type of assistive equipment that allows its user to raise their chair from a seated to a standing position, similar to a standing frame. A variation of the typical wheel chair that allows users to stand and move around is the mechanically operated standing wheel chair, which was created to enhance the quality of life for people with impairments. It is convivial, easy to use, reliable, and reasonably priced because it is entirely mechanically operated. Ratchet, belt, chain, and gear systems are the foundation for the design of a standing wheelchair. It is inexpensive and simple to maintain this wheelchair. Participants made an average of 60 (622) moves per day. This research can help with the design of a system that encourages standing and sitting movements in the workplace.

2. Construction

Square tubes and channel are used to construct the wheelchair frame through metal cutting and metal joining, or welding. Four wheels are mounted to the frame, two at the front and the other two at the back utilizing axle shafts. Through the use of a chair drive system, the rear axle shaft is connected to the DC drive. The seating arrangement features two pivoting links, one of which is hinged to the base frame and the other to the vertical frame. On the other end, the free ends of both links are attached to one another.A lead screw that meshes with a separate drive mounted to the base frame is welded into the centre of the top link. The battery serves as the power supply for the drive, and a DPDT switch is utilized to control the drive's rotational direction.

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Fabrication of Smart Food Product Vending Machine using Arduino

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Abstract

In modern vending machines, heavy items cannot be stacked because the item falls from a higher level into a lower compartment. There are two problems in the current market, one is the Single axis movement which makes it difficult to hold delicately packed food items and the other one is the Collection Bin which at the bottom of the machine makes it difficult for elderly people to bend down and pick the product. The product vending machine which is now been developed eliminates the problem of the product falling from a higher level as this machine has both X and Y axis movements. The delivery bin moves near the item which is selected by the user and delivers it safely. In the near future cashless transaction methods can include Paytm, Debit card/Credit card transactions etc. The display used here is an LCD display and there can be improvements in the future by replacing the LCD display with a touch screen display. Android apps can also be used for the transaction. Voice recognition technology can also prove to be a big breakthrough in the field of vending machines. The machine is designed to provide a more efficient and convenient way of purchasing food items without the need for human intervention. The system utilizes various sensors, such as ultrasonic sensors and load cells, to detect the presence of products inside the machine and the number of products dispensed.

Keywords: Food products,battery,automatic food items, vending machine.

1. Introduction

The Arduino microcontroller is programmed to manage the entire vending machine operation, including product dispensing, coin validation, and change dispensing. The system utilizes various sensors, such as infrared sensors and ultrasonic sensors, to detect the products availability and the number of products available in the machine. The smart vending machine's main advantage is its ability to provide a quick and efficient way of buying a food product. It reduces the need for staff to manage the machine, making it a cost-effective solution for businesses that want to provide quick access to food products without incurring additional costs. Additionally, the vending machines intelligent capabilities ensure that it can track sales and inventory levels and generate reports, making it easier for businesses to manage their inventory and sales data.There is no cashier, they give the clients the free choice to purchase the products at any time of the day, and you can shop for your intended product on a 24-hour basis, throughout the year. An automatic medicine vending machine with self-contained on-site medicines dispensing mechanism and a storage facility for the plurality of medicines that can be dispensed based on the user requirement. Major components of the machine include stepper motors for dispensing the medication, large storage space to store the pills, an inventory monitoring system to keep track of the storage.

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FABRICATION AND ANALYSIS OF DOUBLE PIPE HEAT EXCHANGER WITH TWISTED TAPES

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ABSTRACT

Double pipe heat exchangers are widely used in various heat transfer applications starting from oil refineries to automobile radiators because of simplicity in design. The rate of heat transfer in a double pipe heat exchanger can be increased by using various heat transfer augmentation techniques out of which adding fins on the surface of inner tube is identified as a passive method with least value of pressure drop in comparison with other techniques. In the present work, the performance of double pipe heat exchanger is analyzed with different fin geometries, three dimensional model is made using solid works, flow characteristics of models are investigated using the CFD package ANSYS FLUENT 16 and the arrangement providing efficient heat transfer is identified with the help of CFD results.

Keywords: Inner tube, Automobile radiators, Heat transfer and Material

1. INTRODUCTION

1.1 HEAT EXCHANGER

A heat exchanger is a device which transfers heat from one medium to another, a Hydraulic Oil Cooler or example will remove heat from hot oil by using cold water or air. Alternatively, a Swimming Pool Heat Exchanger uses hot water from a boiler or solar heated water circuit to heat the pool water. Heat is transferred by conduction through the exchanger materials which separate the mediums being used. A shell and tube heat exchanger passes fluids through and over tubes, where as an air cooled heat exchanger passes cool air through a core of fins to cool a liquid. A heat exchanger is a device used to transfer heat between a solid object and a fluid, or between two or more fluids. The fluids may be separated by a solid wall to prevent mixing or they may be in direct contact. They are widely used in space heating, refrigeration, air conditioning, power stations, chemical plants, petrochemical plants, petroleum refineries, natural-gas processing, and sewage treatment. The classic example of a heat exchanger is found in an internal combustion engine in which a circulating fluid known as engine coolant flows through radiator coils and air flows past the coils, which cools the coolant and heats the incoming air. Another example is the heat sink, which is a passive heat exchanger that transfers the heat generated by an electronic or a mechanical device to a fluid medium, often air or a liquid coolant.

There are three primary classifications of heat exchangers according to their flow arrangement. In parallel-flow heat exchangers, the two fluids enter the exchanger at the same end, and travel in parallel to one another to the other side. In counter-flow heat exchangers the fluids enter the exchanger from opposite ends. The counter current design is the most efficient, in that it can transfer the most heat from the heat (transfer) medium per unit mass due to the fact that the average temperature difference along any unit length is higher. See counter current exchange. In a cross-flow heat exchanger, the fluids travel roughly perpendicular to one another through the exchanger. For efficiency, heat exchangers are designed to maximize the surface area of the wall between the two fluids, while minimizing resistance to fluid flow through the exchanger. The exchanger's performance can also be affected by the addition of fins or

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Design and Fabrication of 360 Degree Fire Protection System

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Abstract

Robots have become out to be an aspect wherein many human beings have shown their interest and gained reputation due to the development of many technologies. Consequently, it has been decided to design some thing that may make human existence less difficult and more cozy, and the interest of this assessment is to make a "far flung managed 360 degree fireplace protection device." The proposed "faraway controlled 360 diploma fire safety machine" is designed for extinguishing hearth in a small floorplan of a residence, workplace, or shopping mall of precise dimensions with the help of family water and a water pump. Controlling this robotic demands an operator who can easily manage it from a faraway area with out being concerned in firefighting. The far flung manage system for this undertaking is based on conventional RF technology, however with one of a kind techniques. The accuracy of the control system has been fine throughout this undertaking. The firegetting rid of performance and model movement pace were both near expectation.

Keywords: Design, fabrication, 360 degree fire protection system, Bluetooth, remote.

1. Introduction

In most of the countries fire accidents are occuring commonly such as Indian people has suffered and lossed many lives because of fire accidents.a fire threat is the third most serious threat to the business continuity and operations.so,to minimize losses and lives resulting form accidents fire extinguisher robots will play the major role. The location of the fire accidents for example: garment factories, gas, petrol pumps and chemical companies etc. This type of accidents results in loss of lives and pollutes the environment.The government and other regulatory has prescribed fire safety standards and measures.In this project we have made a prototype of remote controlled 360 degree fire protection system which can control the fire without a help of man.

2. Problem Statement

The security of home, laboratory, office, factory and building is important to human life.We develop security system that contains a remote 360 degree fire protection system using sensor, motor pump with movable wheels.In previous fire protection system models they designed only with manual lifting model, we have fabricated to moving with wheels attached to the motors.

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Smart Medical Vending Machine Technology

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Abstract

Medicines are a very important aspect for the overall well-being of a person. They are essential in maintaining health, preventing illness, managing chronic conditions and curing disease. But the existing social status have caused a lot of health inequalities. This project helps in providing medicines for common health issues as well as for first aid. It displays the medicines present so that the user can select the medicines according to their requirement. The major advantage of this vending machine is that it can be implemented in public places such as Malls, National Highways, Railway Stations, Bus Stand and many other places providing access any time 24/7. The proposed system will be beneficial in saving life in rural areas, remote areas where medical stores remain unavailable in cases of emergency. This venture comprises of a processor which controls the other sub frameworks such as RFID, GSM, pharmaceutical allocator, and stock control.

Keywords: Medicines, medical dispenser, automatic medicines, vending machine.

1. Introduction

Vending machines have been used to serve the wide clientele with the variety of products handling from green grocery to processed products; the typical example is the snack vending machine that can be used for buying and selling of different kinds of snacks. If the vending machine is fully automated, the transactions can be done by the customer without any manual in the intervention or time restrictions. Some Vending machines accept cash in the currency forms only while the others accept both the cash and the credit cards for the electronic transactions. If the vending machines have mobility, they can be moved to the new places and they will continue delivering the services as usual. There is no cashier, they give the clients the free choice to purchase the products at any time of the day, and you can shop for your intended product on a 24-hour basis, throughout the year. An automatic medicine vending machine with self-contained on-site medicines dispensing mechanism and a storage facility for the plurality of medicines that can be dispensed based on the user requirement. Major components of the machine include stepper motors for dispensing the medication, large storage space to store the pills, an inventory monitoring system to keep track of the storage. A relay is an electrically operated switch. Current flowing through the coil of the relay creates a magnetic field which attracts a lever and changes the switch contacts. The coil current can be on or off so relays have two switch positions and they are double throw (changeover) switches. Relays allow one circuit to switch a second circuit which can be completely separate from the first. For example, a low voltage battery circuit can use a relay to switch a 230V AC mains circuit.

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DESIGN AND FABRICATION OF MINISIZE BOREWELL RESCUE ROBOT

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ABSTRACT

In the past few years, there have been several accidents of children falling into abandoned bore wells in India. Abandoned bore wells that have turned into death pits for children. The problem is all over India. Rescue teams spend hours and sometimes days in futile attempts to save these little kids. A lot of money is also spent in these missions. In most cases they are unable to save the kids. Such events have happened umpteen times in the past, and every time either the government or the bureaucracy is blamed. The rescue process to save the child from bore well is a long and complicated process now. The rescue team tries to approach the victim from a parallel well that take about 20-60 hours to dig. This complicated process makes 70% of the rescue operations fail. The design of handling system is made in such a way that the baby/victim never gets hurt and this rescue system is sent through the same well where the victim is felt inside to bring back the victim safe through an autonomous control of drives. Our design constitutes a best Ergonomic Design and performs safest rescue operation.

Key words; Pneumatic cylinder, Gripper, Battery.

1. INTRODUCTION

Today's major problem faced by human is water scarcity, which leads to a large number of bore wells being sunk. These bore wells in turn have started to take many innocent lives. Bores which generate water and subsequently got depleted are left uncovered. Small children without noticing the hole dug for the bore well slip in and get trapped. There is no befitting technique to rescue victims of such accidents. When the make shift local arrangements do not work. Moreover, it involves a lot of energy and expensive resources which are not easily available everywhere and, in this process; we need big space around the trapped bore that we can dig a parallel bore. These ad-hoc approaches involve heavy risks including the possibility of injuries to the victim's body during the rescue operations. Also, the body may trap further in the debris and the crisis deepens even more means death. In most cases, we trust on some makeshift arrangements. This does not assure us of any long-term solution. In such methods some kinds of hooks are employed to hold the sufferers' clothes and body. This may cause wounds on the body of the subject. A single accident creates a big hue and cry spreading a sense of panic among the masses. It draws a lot of undue attention and criticism of the civil administration. Heavy expenses have also reportedly obtained in most cases. It is pertinent to mention that a proper technical solution for such emergency crisis is the needed. More so in times of technical advancements and continuous research, technician should take the responsibility to find an easy way out. After studying all the cases we found a serious issue to do, to make a machine which can go through the trapped bore well without any support and hold the trapped body in least minimum time. With this machine, there is no chance of damaging victim's body and other minor damages, and we called that machine as "Bore Well Child Rescue System".

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DESIGN FOR AUTOMATION OF SAND BLASTING

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ABSTRACT

Sandblasting, sometimes known as abrasive blasting, is the operation of forcibly propelling a stream of abrasive material against a surface under high pressure to smooth a rough surface, roughen a smooth surface, shape a surface, or remove surface contaminants. The sand media used in the process is of very small size and travels at a higher pressure, which when done manually causes health hazards and lower productivity than that of machine labour. As a result, an automated sandblasting machine will eliminate operator interference with the process and cycle time, resulting in cost savings for the industry. An automated sandblasting machine is developed that sandblasts the tools in the industry and improves the existing process.

Keywords: Automation, Sandblasting, Bead Blasting, 3D Modelling.

1. INTRODUCTION

A sandblasting machine uses glass beads to achieve a good surface finish on the cutting tools in our industry. This is achieved by propelling the glass particles at high velocities. The glass beads are first heated to a temperature of 170o C for smooth travel through the hopper and mixer. Then the hot glass bead is poured into the hopper, and then it enters the mixer, where it is mixed with compressed air. A mixture of compressed air and sand comes out of the mixer. Because the process's sand media is so small and moves through the air under such high pressure, working by hand poses health risks and is less productive than using a machine. As a result, an automated sandblasting machine will reduce cycle time and remove operator interference from the process, saving the industry money. An automated sandblasting device is created to sandblast industry tools and enhance the current procedure.

2. LITERATURE REVIEW

Sandblasting was used to smooth up the surfaces of SUS316L specimens using alumina grinding particles with average particle sizes of 14.0 or 3.0 m, respectively. Additionally, the 14.0 m particles and then the 3.0 m ones were used in a doubled sandblasting process (DSP). The 3.0 m particles were provided to increase the surface roughness and the surface area of the specimen in comparison to the case of the 14.0 m particles. Furthermore, in the case of the DSP, these values were raised even more. These samples were heated by electromagnetic induction while submerged in simulated bodily fluid (SBF) at a pH of 8.4 and 25 degrees Celsius. Cap formation was elicited on each specimen by this treatment. These materials demonstrated a significant capacity for HA formation. [1]

Surface factors like topography and roughness (Ra) have a significant impact on how MCrAlY coatings react to isothermal oxidation. This study investigated how sandblasting affected the oxidation behavior of MCrAlY coatings that were thermally sprayed using an HVOF. Oxidation tests were carried out for varying lengths of time at 1050 C in isothermal circumstances. The bond coat had a Ra of almost 12 lm. The content and morphology of the thermally grown scales were examined using a scanning electron microscope (SEM/EDX) and X-ray diffraction before and after oxidation. The findings demonstrated that the oxide scale that developed on the coatings as they were sprayed was primarily made of Al2O3, but the

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Design and Fabrication of Coolant Separator

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Abstract

In this project we have designed a coolant filtration system. It is used for lathe operation mass production time tool heat condition avoiding purpose we are using coolant. Again, this coolant can be purified and can be used for further use. For this purpose, we are using filters. Here we are using pump for it is suck the coolant from the tank which consists of lathe wastes and given to the purifier. This purifier purifies the used coolant. It filters that dust particle and given to another tank. And the tank is collected the pure coolant and it is taken to the machinery uses. Here the coolant is filtered by the two process one carbon filter another is sedimentation filter. The coolant is taken by the using of pump which is directed controlled by the control unit which operates the pump for timed usage.

Keywords: Coolant filtration, chip separation, design, fabrication.

1. Introduction

In this project we have designed a coolant filtration system. It is used for lathe operation mass production time tool heat condition avoiding purpose we are using coolant. Again, this coolant can be purified and can be used for further use. For this purpose, we are using filters. Here we are using pump for it is suck the coolant from the tank which consists of lathe waste and given to the purifier. This purifier purifies the used coolant. It filters that dust particle and given to another tank. And the tank is collected the pure coolant and it is taken to the machinery uses. Here the coolant is filtered by the two process one carbon filter another is sedimentation filter. The coolant is taken by the using of pump which is directed controlled by the control unit which operates the pump for timed usage.

2. Review of Literature

Alcides Oliveira et al., (2019) in this study, A multidimensional model of oil-mist coalescence filtering via fibrous media has been presented, extending the capabilities of earlier models to the general scenario when 'channel-type' flow occurs in numerous directions, driven not only by the air flow but also from gravity. It was demonstrated how the 1D approximation was insufficient to model the oil transport processes inside the porous medium for an experimental setup for which gravity-induced flow is a relevant mechanism and for which the multidimensional model was able to replicate the results [1]. Andressa et al., (2019) this paper discussed about when even trace concentrations of toxins or contaminants are present, the effects of an oil spill can be severe (Joye and MacDonald, 2010; Diercks et al., 2010; Whitehead et al., 2011). Stronger tracer signals must be absorbed into considerably larger amounts of material in food webs to yield lesser signals (Coffin et al., 1997; Carmichael et al., 2012). In contrast to the findings for the estuarine waters examined here, it is possible that large food web effects exist in the deep sea close to the Deepwater Horizon disaster site because

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Design and Fabrication of Solar Wind Turbine

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Abstract

Our nation's rising energy needs result in a regular power outage in rural areas. This is a result of both factories' high-power usage and the limited supply of non-renewable energy sources. Therefore, it is well known that the adoption of a hybrid renewable energy system to produce electricity can provide a quick, dependable, and cost-effective solution for rural households. In remote locations, this solar-wind energy combination can significantly reduce our need for electricity. However, the wind speed varies day and night, affecting how much electricity the horizontal axis wind turbine produces. To overcome this, issue the vertical axis Wind Turbine with C Type blade has been introduced for producing power at low wind speed by integrating both C type blade Wind Turbine and solar photo-voltaic, the hybrid design has been built.

Keywords: Design, fabrication, solar wind turbine, hybrid renewable energy.

1. Introduction

Making an aero leaf wind turbine that uses Vertical Axis Wind Turbines (VAWT) to transform wind into usable electricity. According to Arab news, Saudi Arabia now has very high energy demands compared to the global norm; Saudis use three times as much electricity as the typical person worldwide. This significant demand should direct attention toward considering various sources of energy. Renewable energy sources like the sun, wind, and rivers are among the best energy sources that may use the idea of sustainability. The advantage of wind energy is that, unlike solar energy, which can only be used in sunlight, wind turbines may be used throughout the year, 24 hours a day. The efficient and environmentally friendly use of this renewable energy is another idea related to sustainability. This, in turn will eliminate the environment threat and improve Saudi Arabia communities' health and life style. Being the major energy consumers, streets, parks, schools, and other public buildings should occasionally be exposed to wind. The idea of this project is to convert this wind by using Vertical Axis Wind Turbines (VAWT) to a useful energy by using it as a power source that can serve these consumers.

1.1 Wind Turbine

A fixed-ratio gearbox connects the wind turbine's rotor to the generator shaft. This turbine must be operated essentially at constant speed at all times. While variable generator rotor resistance can also be employed, modern high-power wind turbines in the 2–10 MW range are mostly based on variable speed operation with blade pitch angle adjustment acquired

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INCORPORATION OF WAFFLE BY USING MUSHROOM POWDER

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ABSTRACT

Waffles are continuously baked in tunnel baking ovens on an industrial scale. The aim of this study was therefore to investigate the effect of different recipe ingredients on oyster mushroom waffles. Enrichment of oyster mushroom and wheat flour with vitamins, minerals, proteins and low fat may be achieved by the incorporation of the very high quality of calcium, potassium and magnesium. It gives a good odour to the waffle .Excess addition of mushroom powder will also affect the product .The main aim of incorporating the waffle by using mushroom powder is to reduce the fat in the waffle . Mushrooms have also been used as medicinal ingredients and also have good sources of vitamins. Oyster mushrooms contain low fat. It improves nutrient content and vitamins. The waffle contains low moisture content. Various ingredients are also used to improve the quality and taste.

KEYWORDS: Fat, egg albumin, oyster mushroom, wheat flour, sugar powder, baking soda, vanilla essence.

1 INTRODUCTION

The waffles are made from oyster mushroom, wheat flour, egg albumin, skimmed milk powder, vanilla, baking soda, salt, sugar, and water. The texture is like a biscuit and waffles are baked by a waffle maker. The following influences of some batter ingredients are investigated fat content, water, and some agents. Low fat in waffles can give a very soft texture of the waffle. Various ingredients and additives are used to improve the taste, texture, and also quality of the waffle. After the batter preparation. It should keep it rest for just 10 minutes. Preparation of waffles by using the combination of mushroom powder and wheat flour helps to improve the good quality and is also good for health. Oyster mushrooms have carbohydrate content. It contributes high vitamins, minerals, and protein. It is used to improve protein content and nutritional quality. Adding mushroom powder to bread, cakes, and biscuits increases the best sensory properties, the same as in waffles. But it reduces carbohydrates. More than 10 percent of mushroom powder particles are for fortification purposes a waffle. It has an efficient amount of pureness and it is broken down into uric acid in the human body. Adding vanilla is the most flavouring agent in a waffle. It has also been used for medicinal purposes for, a long time in history. It is an acceptable flavour. Wheat flour did not have any negative impact. it is good to add in the waffle. The sensory characteristics of skimmed milk powder can be described based on its appearance, aroma, and flavour. Oyster mushrooms have great potential, due to their high and good quality protein 24 -35% [Heshman A.Eissia 2007].

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Design And Development Of Cow Dung Cleaner

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ABSTRACT

Cleaning of cow sheds is essential to maintain the well being and health of dairy cows as contaminated barns can easily affect the cows. But cleaning manually using bare hands is a very time consuming and grueling task. Farm mechanizations helped rely less upon an extended labor force. Farmers are largely adapting to innovations. So in this paper we propose a mechanism that can be used for cleaning cow sheds effectively. The cow dung cleaner uses a compressor to activate pneumatic pistons. Under the pressure of compressed air the rod attached to the pneumatic piston moves which can lift the load (i.e.) cow dung slurry. The overall dimension of the cow dung cleaner was 900mm in length, 400mm in width and 600mm in height. This paper is mainly focused on different components used fabrication process and performance evaluation of the cow dung cleaner

Keywords – *Cow dung, cleaner, pneumatic pistons, lifting, cleaning, Fabrication*

INTRODUCTION

Maintaining a clean environment is indispensable in almost every area including houses, hotels, hospitals, dairy farms, and so on. Poor hygiene may cause diseases and allergies both to people and animals. In the dairy industry, cleaning cow dung is a necessary but time-consuming and exhausting task, which is required several times a day. Excessive waste in the barn can affect animal health and performance and also causes an unpleasant odor. So, maintaining a clean barn is essential. By visiting a few dairy farms, we observed the difficulty in keeping the barn clean where the farmers are hesitant to pick animal wastes by hand. There is a lack of technology to reduce human drudgery for cleaning cow dung in small scale dairy farms. As a result, we recommend that this mechanism can be used for the proper cleaning of cowsheds without directly touching the feces. This machine is actuated by electrical energy. In this cleaner, a double-acting pneumatic cylinder is used to push the blade ahead which picks the cow dung.

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TRADITIONAL RICE VARIETY: POONGAR RICE FLAT NOODLES

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Abstract: Noodles have become a popular meal choice due to their convenience and quick preparation time. The noodle industry is rapidly growing in both developed and developing countries due to the demand for quick and easy meals in today's fast-paced lifestyle. In recent years, there has been a growing interest in incorporating traditional and healthier ingredients in noodle recipes. To provide a healthy and energizing meal, Poongar rice, a traditional rice variety, has been identified as a potential ingredient due to its numerous health benefits. Our Poongar rice flat noodles have a unique structure and are easily digestible. We have incorporated cumin, garlic, pepper, and mint into the noodles as they contain health-protective properties, making them a great addition to one's diet. We aimed to develop Poongar Rice Flat Noodles with Cumin, Garlic, Pepper, and Mint using steaming and then drying method, to evaluate their physical and sensory characteristics by using standard laboratory methods. The overall acceptance for the noodles from sensory evaluation is provided to the nutritional analysis and the results of the parameters given are 10.2% Moisture, 11% Fat, 6.28 pH, 75.52% Carbohydrate, 0.875g Protein, 404.58 Kcal Energy, 3.56 mg Vitamin C, 1.28mg Iron and 3.58g dietary fiber.

Index Terms: *Diet, Drying, Flat Noodles, Healthier, Poongar Rice, Steaming*

I. Introduction

Noodles is a well-known and common food item all across the world. Noodles were invented in China thousands of years ago. People don't want to spend additional time and money on cooking in their busy daily lives. This resulted in the introduction of Instant Noodles, which have features such as nutritional value in little amount, tasty, safely packed, convenient to cook and consume, reasonable price for people and longer shelf life that make them popular. There are numerous ready-made dishes available nowadays. Nonetheless, noodles were the first. Everyone enjoys the noodles, from youngsters to the elderly. Noodles are commonly made up of rice flour, salt and water. Wheat noodles are especially popular in Asia. Wheat is mainly used because it is low in carbohydrates. On the other hand, rice noodles with a lot of carbohydrates can cause obesity. In this study, our noodles is prepared by using a different rice variety. This rice variety has recently gained attention due to its high nutritional value and potential health benefits. In this study, we aim to explore the use of Poongar rice in the production of flat noodles, and the addition of cumin, garlic, pepper, and mint to enhance its nutritional profile. The poongar rice which is also called as Women's Rice has such an enormous nutritional values in it. Poongar rice is mainly insisted by the ancestors and its likely origin is Tamil Nadu, India. Because of the presence of anthocyanin pigments, it has a reddish brown hue and a delicious nutty flavor. This can be grown well in flood and drought regions. Also its similar look to Mapillai Samba Rice, it is sometimes confused for it. This research is made on the purpose of bringing out the traditional rice and consumed, as it's not known to many. The rice is rich in Vitamin B12, iron, zinc, magnesium, molybdenum. Mainly Women are facing a lot of troubles in Blood related issues. As its rich in iron, it helps to improve and maintain the hemoglobin count. Poongar rice helps hormone levels to maintain and regulate if needed in the body. As some women's are facing PCOD (Polycystic Ovarian Disease) Poongar rice will cure it by consuming on daily basis. It also helps in management of diabetes, obesity and heart diseases. Compared to the other rice varieties, this rice consists of proanthocyanidins, which is very effective in controlling bad cholesterol in the body. Generally rice varieties contains fiber content, this rice is rich in reduction of constipation, bloating and gastric problems. As poongar rice is rich in antioxidant, it helps in management of non-communicable diseases like cardiovascular diseases, cancers, chronic respiratory disease, chronic kidney disease, liver disease, Alzheimer's disease, arthritis, depression, etc., Regular consumption of this rice before pregnancy does help to ensure a smooth delivery and boost endurance. Also it is helpful for lactating mothers for good milk secretion and energy for the child. We have used Wheat Flour for dough consistency. A rice powder will not be sticky as it will break. Wheat controls Obesity mainly for Women than men. It helps them for weight reduction and lead a healthy life. Generally our human body's metabolism should be functioning properly, or else it may cause several issues in metabolic syndromes. So mostly Doctors suggest to consume the wheat grains in the diet.

In this research of making noodles, only the noodles cannot be this much healthy so that we have also added Cumin, Garlic, Mint and Pepper Powders to increase the flavor, taste and healthier food. Cumin botanically called as Cuminum Cyminum cures best for inflammation and used in drug dependence. It has the properties of acting as an anticancer herb. It is best used for digestion purposes, helpful in curing diabetes, food borne illness and treats Diarrhoea. Most of the people consume hot water with cumin for weight loss, as it helps in fat reduction. Garlic botanically called as Allium Sativum is an active compound in reducing the blood pressure. Generally elderly people will consume garlic in large amounts in their daily diet. It is also proven that consuming garlic on the regular

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DEVELOPMENT OF ICE CREAM USING VEGAN MILK AND HERB

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Abstract: Ice cream is a delicious dairy product but, it has high fat content and calories. This research is aimed to develop an ice cream using chickpea milk and moringa powder for healthy alternative. Chickpea milk has thiamine, vitamin B6, protein, iron, potassium etc. Herbs play an important role in enhancing nutritional value of ice-cream. Inclusion of moringa powder in chickpea milk ice-cream enhance flavor and nutritional value of ice-cream. Sensory evaluation of vegan milk herbal ice-cream is conducted for T1, T2 and T3, which has 15%, 10% and 3% moringa powder in them. 9-point hedonic scale rating is employed for sensory evaluation. The parameters like appearance/color, taste/flavor, smell/odor, texture/mouthfeel is taken for sensory evaluation. The overall accepted ice-cream from sensory evaluation is subjected to physicochemical analysis for the parameters Moisture, Protein, Carbohydrate, Fat, Ash, Total solid and pH. 3% moringa powder inclusion ice-cream (T3) gives 48.73% moisture, 4.2% protein, 36.65% carbohydrate, 8.2% fat, 2% ash, 51.27% total solid and 6.40 pH. Increase in ash content slows down melting rate of ice cream. Ice cream with less moisture content accumulates graininess when kept in room condition.

Key words - Ice cream, vegan milk, herb, chickpea, moringa, low fat.

I. Introduction

Ice cream is a frozen dairy product enjoyed by all age groups. It is created by blending milk, cream, sugar, and other flavorings, then freezing the result to a solid state. Ice cream has developed into a popular delicacy consumed on its own or as a complement to other sweets over time, coming in a range of tastes and textures(Wansink *et al.*, 2003). Ice cream has a market worth of 2500 crores and a 12 to 15% annual growth rate in India(Manoharan, 2013). Diabetes and coronary illnesses are becoming more common in India, as they are worldwide, and as a result, people are paying more attention to what they eat. Ice cream must weight a minimum of 4.5 pounds and contain at least 1.6 pounds of food solids(Singh *et al.*, 2018). Ice cream is a tasty treat, but it's also rich in fat and sugar. When consuming ice cream as a part of a healthy diet, moderation is essential. For those who want to savor ice cream without the additional calories, there are also a ton of low-fat and low-sugar options available(Guinard, 1993) . In recent years, there has been a growing demand for plant-based and vegan options, including ice cream.

Vegan ice cream has a slight creamy texture and has similar taste to traditional ice cream. Many vegan ice creams are also made with natural sweeteners like maple syrup, agave, or coconut sugar. Some also contain added ingredients like fruit, nuts, or chocolate chips to add flavor and texture(Nurgel, 2021). Chickpeas (*Cicer arietinum*) are a good source of protein, fiber, and other nutrients, making this ice cream a healthier choice than many traditional ice cream options. Chickpeas are high in fiber, which can help improve digestion. While chickpea ice cream may not be as creamy as traditional dairy-based ice cream, it is a good option for those who are vegan, lactose intolerant, or looking for a lower-fat alternative to ice cream. Milk and chickpeas are both high in calcium. Although chickpeas contain more thiamin, niacin, Vitamin B6, and folate, milk contains more riboflavin and Vitamin B12. Chickpeas are high in iron, and potassium. Milk contains far fewer carbohydrates than chickpeas. There are several factors which limit the usage of ice cream they are sugar, fat, and fibre(Ahmadi, 2017). The sugar content in ice cream is estimated to be 12-16%. Higher fat content in ice cream sometimes increases the risk of heart disease, obesity, diabetes etc. Ice cream contains 16% of fat content. Sometimes the ice cream may lack fibre content which leads to constipation and weight gain (Gozan *et al.*, 2020).As a result, it is thought that creating ice cream with less sugar and medicinal herbs will satisfy consumer desire and close a market gap(Vilarinho, 2020). The creation of herbal ice cream offers these consumers a healthy dietary option. Numerous Indian herbs have been historically used as food ingredients in ayurveda and have antioxidant properties(Singh, 2019).

The economic impact of ice cream has been evident in generating job opportunities for about $1.8 billion in direct wages and facilitating direct jobs in the ice cream industry. The average American consumes 20 pounds of ice cream or 4 gallons of ice cream each year. In India, the market size for ice cream reached INR 194.1 billion in 2022 and is expected to reach over INR 508.4 billion by 2028(De Melo, 2020).

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REVIEW ON ENHANCEMENT OF PRESSING THE DOUGH FOR CHAPATHI PREPARATION

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ABSTRACT

The evolution of dough flattening techniques has been driven by technological advancements and changing needs in the food industry. From manual methods using hand tools to mechanical dough flattening machines, and further to electrically powered machines, the process has undergone significant improvements in consistency and efficiency. Manual machine can produce about 500-700 chapathis per hour and it efficiency of about 50-70%. Mechanical chapathi machine can produce from 500-2000 chapatis per hour with an efficiency of around 70-80%. Electrical chapathi machine is the most efficient, as it can produce up to 2000-3000 chapathis per hour, with an efficiency of around 80-90%. The introduction of fully automated machines and specialized dough flattening equipment has further enhanced productivity and precision. Recent advancements in digital technology have also led to the development of digital dough flattening machines with automated measurement and quality control features. Overall, the evolution of dough flattening techniques has resulted in higher efficiency, consistency, and quality in dough processing for various food applications.

KEYWORDS: Dough press, pressing machine, automatic, sensors, timer, motor.

1. INTRODUCTION

For a very long time, agriculture has been and will continue to be the foundation of the Indian economy. Every procedure is becoming automated in the modern world, and individuals are becoming used to adapt clever methods to do their task. It is clear how the machinery and tools used to make chapathi have developed throughout time. Chapathi a baked food made from whole wheat flour, is the main meal of the majority of the people in various parts of the Indian subcontinent. Wheat is the primary raw material used to produce bread, biscuits, pasta, and other items. Chapathi is considered as one of the staple food of India. Flattening dough is the basic step of making chapathi. There are various ways to make flatten dough like rolling, sheeting, pressing. The thickness of thin chapathi is typically between 1-2 mm(0.04-0.08 inches), and it is rolled out to a very thin consistency. Medium

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AN ANALYSIS OF ZERO ENERGY COOL CHAMBERS TO EVALUATE LIFE OF FRUITS AND VEGETABLES

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Abstract: In India, agriculture accounts for roughly 31% of the country's gross domestic product and employs about two thirds of the people. Vegetable farming in India has enormous potential, but post-harvest losses of vegetables have a severe impact on the country's agricultural economy. High temperatures can damage the vegetables. To avoid wasting fresh veggies, improved storage methods must be adopted. The zero energy cool chamber (ZECC) is a low-cost, environmentally friendly solution. The goal of the current study was to evaluate the quality and shelf-life of vegetables (apple and tomato) under various storage settings, including ZECC,freeze and room. Under various storage circumstances, researchers investigated the physiological loss of water (PLW) and vitamin C in vegetables. They were kept in three different storage environments, including a ZECC, a room, and a freezer. The findings revealed that the room storage had the highest PLW (%) on the fifth day of storage, while the ZECC condition had the lowest. For all types of preservation, the vitamin C significantly boosted on the 5th day of preservation contrasted to the first day. In both ZECC and freeze circumstances, vitamin C levels decreased on the 7th day of storage contrasted to the fifth day. In comparison to ZECC conditions, the PLW was greater in the freeze storage state. After taking into account both quality and PLW, the researchers came to the conclusion that vegetables preserved in ZECC can be kept until the 5th day of storage. According to this study, ZECC can serve as a structure for storing fruits and vegetables.

Keywords: zero energy cool chamber, fruits, vegetables, storage, room condition

1. INTRODUCTION

The Solanaceae family includes many fruits including the tomato, which is one of the most produced veggies in the world. Numerous elements, including environmental,postharvest genetic, and preharvest elements, can influence the quality of tomato fruit. Their growth in decay, losing weight, wilting,softening, and off-flavors is favoured when they are stored at room temperature. The ZECC is a novel, environmentally friendly storage technology that doesn't use electricity. The concepts of a passive evaporative cooling method are used to maintain the ZECC's low interior temperature as well as elevated relative humidity. This is due to a procedure that uses energy to modify the chemical composition of liquid water molecules in the brick wall cooler built of bricks with a combination of zeolite and sand, which causes them to turn into gas when exposed to outside air.

Conduction and convection, accordingly, transfer heat from the hotter air and brick walls to the cooler moistened zeolite and sand combination. The temperature outside dropped as this conversion took place. The inner temperature of the ZECC was lowered below that of the dry bulb by this cooling temperature's evaporativ

cooling effect. This is the outcome of the interaction between the temperature below ground, the moist interior wall, and irrigation. As a result, the ZECC's interior air temperature drops.

The process of ripening of fruits and their final quality are significantly influenced by relative humidity (RH) and temperature in the storage . ZECC is a low-cost, environmentally friendly solution. Since it doesn't require electricity to function, it also conserves energy. Because it is built with materials that are readily available locally, construction of this structure in rural areas is simple. The purpose of the trial was to determine the effectiveness of both the locally grown veggies in the adjacent villages as well as the cool chamber under field settings. Numerous vegetables, including okra, tomato, amaranth, chilli, brinjal, and onion leaf, were investigated, and important results were found.

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FOOD REVIEW ANALYSIS USING THE SENTIMENT ANALYSIS AND NEURAL NETWORK

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Abstract. A consumer's complaints present food or reporting agency with an opportunity to identify and rectify specific problems with their current product or service. The foods that are receiving customer complaints filed against them will analyze the complaint data to provide results on where the most complaints are being filed, what products/ services produce the most useful complaints and other data. This project assists foods in identifying the location and types of errors for resolution, leading to increased customer satisfaction to drive revenue and profitability. This project finds a correlation between complaints, companies and consumers to refine company applications to better accommodate consumer needs using k-means clustering. In addition, using SVM classification, the complaints sentiment values are analyzed and classified into positive or negative reviews. The project is designed using Python. The objectives of this study is: a) To give the estimated sentiment prediction of the subject based on the text reviews/complaints sent by the customers. b) To carry out Sentiment analysis so that the review is judged as either positive or negative. c) To find Percentage of positive/negative reviews. d) To give exact sentiment numerical values for various words and so classification such as positive or negative should be accurate. e) To apply neural network such that it helps to classify the given food review details into one of the predefined reviews.

Keywords: Sentiment Analysis, SVM Classification, Machine Learning, Consumer Reviews.

I. INTRODUCTION

As we're apprehensive that in moment's ultramodern period people are more into business, so entering a complaint from a consumer happens nearly every day. A consumer's complaints present food or reporting agency with an occasion to identify and amend specific problems with their current product or service. Service complaints operation is a critical part of business operation.

A good complaint- operation strategy will affect in stylish client relationship outgrowth with minimum mortal- resource investment and so hope to find a correlation between complaints, companies, and consumers to upgrade company operations to more accommodate consumer requirements. Decreasingly companies are feting the value of a client complaint in that it's feedback on their experience, and an occasion to not only resolve a problem for that particular client but maybe also for a much larger number of guests and that leads to ineluctable quantities of data that has to be anatomized and specific functions are used to total the analysis results.

Clustering is regarded as a pivotal unsupervised literacy problem that tries to search for analogous structures among an unlabeled data set. These analogous structure are data sets, generally appertained to as clusters. the information within every cluster is similar (or close) to factors within its cluster, and is different to (or fresh from) corridor that belong to indispensable clusters.

The mining ways' thing is to descry the natural grouping of a data set. In hierarchical clustering, a treelike cluster structure (dendrogram) is created through recursive partitioning (divisive styles) or combining (agglomerative) of being clusters, whereas in k- means clustering divides a cluster of k points with reference to a centroid, which helps if we're apprehensive of the data points that are probable and affair applicable. We hope to find a correlation between complaints, companies and consumers to upgrade company operations to more accommodate consumer requirements using k- means clustering.

The number of studies has been conducted regarding the services to guests and their mindfulness. As similar, we've reviewed some of them. Kamakodi (2007) concluded that ultramodern day generation is told by the

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IOT TECHNOLOGY BASED NEW GENERATION SECURED ATM USING BIOMETRIC AND OTP

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Abstract: **Automated Teller Machines are extensively used currently by people. But It's hard to carry the ATM card all over, people may forget to have their ATM card or forget their PIN numbers. The ATM card may get damaged and users can have a situation where they can't get access to their money. In this proposition, Here, The Fingerprint and OTP preferred to high priority, as the combination of these two proved to be the best among the identification and verification ways. Since this project is card less and uses fingerprint and OTP for verification and transaction, there's no need for the user to carry their atm card. The primary step is to validate presently handed fingerprint with the fingerprint which is registered in the Bank's database at the time of account opening. If the two fingerprints get matched, also a message will be delivered directly to the user's mobile number which is the random 5 number pin number called as One Time Password (OTP). This OTP can be used only onetime; therefore, this avoids most problems associated with the present system. For every transaction, new OTP will be sent to account holder's mobile number, therefore there won't be fixed PIN number for every transaction. therefore, PIN number will vary during each transaction assuring security.**

Keywords: **IOT, Biometric, Secured ATM.**

I. INTRODUCTION

Security has always been viewed upon as an outflow or afterthought by software designers. But in the case of banking and money transactions, the security should hold upmost precedence. Increase in daily attacks on ATM and banking security the designers getting on right track and putting security their important aspect in developing systems. The binary factor authentication is an approach to authentication which requires the donation of two authentication factors a knowledge factor, a possession factor. After present, each factor must be validated by the other party for authentication to happen. In present days the ATM holds only one thing to secure the money saved in the bank if we aren't considering the physical attacks. In our system we're going beyond this position of security to enhance security of the ATM. We introduce the conception of one-time password (OTP) in ATM banking. This system will give the alternate position of security using different factors to produce OTP. This will send over customer's mobile number stored in records. In secure ATM, user will have to register mobile and its IMEI number in bank system. When user puts swipes card into machine, user get request to Enter PIN (which is current way of ATM banking). In the proposed system user will use the fingerprint to get access and get OTP on mobile. The user uses his fingerprint and enters OTP to the system, he she will be having access to the machine differently no transaction can be made. In addition to the OTP for security the user will be having another option for security i.e. Biometric. Through biometric the problems can be resolved. So to enable this option the user have to register his/her biometric information at the time of opening the account or have to update the current information. At the ATM a scanner will be attached and that scanner will scan the fingerprint of the user which is compared with the database of the user.

II. EXISTING METHOD

In present days the ATM holds only one thing to secure the money saved in the bank and if user are not considering the physical attacks.

1. User enters the card to machine.
2. Card Reader reads the information on the magnetic strip on the card and sends the information to the bank server. If the card information is valid according to the bank, the ATM will ask for PIN.
3. User will enter PIN to the ATM machine.
4. If PIN entered by User is correct according to server, User will be allowed further to access for transactions.
5. This is process will only be applicable for one time, i.e. if user want to withdraw more money than user have to repeat the process again.

Advantages of using traditional system

- One can avoid a long waiting lines, filling the withdraw/ deposit forms in bank, and save time by using ATM
- as a go to option to withdraw cash, cash deposit, and check account balance.
- It's a 24X7, 365 days convenience (Though it's a non-working hour for banks, ATM serves all the time).
- It can be used anywhere in the globe.

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Paralysis Patient Montoring & Health Caring System by Using IoT

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Abstract- *Many individuals with memory/cognitive issues and physical disabilities are required to take a complex daily schedule of medications. Diabetic Mellitus (DM) can greatly reduce the patient's quality of life if left untreated. Traditional insulin infusion techniques' involving a syringe and needle is impractical and unpleasant. Insulin pumps are a great alternative to achieve ease of use and personal comfort. An existing low cost insulin pump is further modified to have additional features to improve user experience. The pump is highly precise delivering accurate quantities of insulin irrespective of external conditions. The invention of insulin pump was a relief for diabetic patients, as they could dispense insulin dosages self-reliantly. The design aspects and architecture of the insulin pump is presented here and using temperature sensor human body temperature is sensed continuously. But it is very expensive for a low earned people to check their health conditions frequently in a hospital. Thus, our goal is to design a device based automatic insulin injection.*

I. INTRODUCTION

1.1 OBJECTIVE OF PROJECT

Diabetes is a chronic metabolic disorder resulting from defects of insulin secretion or action. Insulin secretion is of two types. Type 1 diabetes (T1D) is characterized by a lack of insulin secretion by the pancreas and can be treated by exogenous administration of insulin, while Type 2 diabetes (T2D), whose onset is often facilitated by unacceptable daily habits, e.g., physical dormancy and unhygienic diet, is characterized by an inefficiency in the action of insulin. The concentration of Blood Glucose (BG) approach to exceed the safe range, resulting in hyperglycaemic events that for long term, can lead to solemn damage such as retinopathy and cardiovascular disease or in hypoglycaemic events due to exogamic insulin administration that can be risky in the short term or they can cause coma or even death.

According to the last report provided by the World Health Organization, the number of people with diabetes has risen from 108 million in 1980 to 432 million in 2017, which designates that about 8.5% of adults aged 18 years and older had diabetes, with the prospective of exceeding 500 million cases in 2030. Of note is that 10% of diabetic cases are T1D, a pathology treated through exogenous insulin administrations which requires conscientious management because of the jeopardy of inducing inimical hypoglycaemic events. Diabetes requires 24/7 management, which mainly consists of diet, physical exercise and drug/insulin therapy.

Virtually all of these actions, especially the dosing of drug/insulin. Diabetic a condition in which human body loses its faculty to control the Blood Glucose level to its adequate amount. Glucose is the main source of energy to our body. Carbohydrates, proteins, fats that our body receives through pabulum intake is digested and converted into glucose. This glucose is utilized by body cells for energy and exorbitant glucose should be converted into fat which will be stored in cells. The hormone that avails for conversion of extortionate energy into fat is called insulin, engender by Beta cells of the Pancreas.

Hyper-glycaemia can be controlled by incrementing the amount of insulin injected.

However, this can lower blood glucose too far so Low blood glucose is called hypo-glycaemia, and this is the inhibiting factor in endeavours to control hyper-glycaemia. These problems are overcome in the proposed system. Drug release is the process in which drug convert into suitable product form which is subjected to absorption, distribution, metabolism and excretion (ADME).

1.2 BACKGROUND STUDY

Study 1: The first study is a randomized, double-blind, crossover trial comparing single-dose administration of Gla300 vs. Gla-100 (clinical trials no. NCT01195454) [11]. Briefly, 24 European T1D subjects (17 males, age = 43±10 years; BMI = 25.6±2.0 kg/m2) received single subcutaneous doses (at 9:00 am) of Gla-300, at 0.4, 0.6 and 0.9 U/kg, and Gla-100, at 0.4 U/kg, and underwent a 36-h glycemicclamp after each dosing. By protocol, in the 5-h prior to experiment and during the clamp, glucose infusion was adjusted to achieve the pre-clamp target level (100 mg/dL ± 20%). A

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Implementation of Smart Military Jacket

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Abstract- *The implementation of a smart military jacket is proposed in this project. The jacket is designed to enhance the situational awareness and safety of military personnel in the field. The jacket is equipped with various sensors and communication devices to enable real-time tracking of the wearer's location, vital signs, and environmental conditions.The jacket also has the capability to communicate with command centers, allowing for improved coordination and decision-making. The jacket is designed with durability and comfort in mind, and is made with advanced materials to provide protection from the elements and hostile environments.*

I. INTRODUCTION

Military personnel face a wide range of challenges in the field, including unpredictable weather conditions, hostile environments, and potential threats from various sources. To enhance their safety and effectiveness, there is a need for advanced technologies that can provide real-time situational awareness and communication capabilities. In this project, we propose the implementation of a smart military jacket that integrates various sensors and communication devices to address these challenges.

The smart military jacket is designed to provide real-time tracking of the wearer's location, vital signs, and environmental conditions. This information is critical for monitoring the health and safety of military personnel, as well as for coordinating their movements and operations.In addition to its sensing capabilities, the smart military jacket has communication devices that enable seamless communication with other personnel and command centers. This allows for improved coordination and decision-making and can significantly enhance the effectiveness of military operations. The jacket is designed with durability and comfort in mind, using advanced materials that provide protection from the elements and hostile environments.

II. LITERATURE SURVEY

Gregory Paul and Edward Gim, David Westerfeld "Battery powered heating and cooling jacket" IEEE Long Island Systems, Applications and Technology Conference(LISAT),2014

One of the most advanced heated motorcycle jackets in the market is Garbing Jacket. It is used in winter riding season. This jacket will keep you warmer, safer and comfortable. In a winter riding season, Jacket will keep body to be safe and protects for health issues. Jacket is mainly used by the bike riders because it is suitable for any climatic condition

Goldsmid, H.J. "Timeliness in the development of thermoelectric cooling" IEEE Xplore, N.P.18Aug.1998.Web.13 Dec.2013.

The development of materials that would yield worth while thermoelectric refrigeration depended on a knowledge of the physics of semiconductors, a deeper understanding of heat conduction by the lattice and new metallurgical techniques.

Jean-Charles-Athanase (Britannica) "Peltier plate operation, construction and usage"http://en.wikipedia.org/wiki/ Thermoeletric_cooling.

The junction of two dissimilar metals an electric current will produce heat or cold, depending on the direction of current flow.

"Analysis of Peltier Characteristic and Cold Side Treatment for Thermoelectric Generator Module at Brick Kiln Furnace" by Missyamsu Algusri ; Dadang Redantan at 2018 2nd International Conference on Electrical Engineering and Informatics (ICon EEI)

The release of heat on the cold side greatly affects the output of electricity produced by peltier so that the treatment on the cold side is closely related to the output of electricity generated. Selection of peltier type based on price/ characteristics and treatment to the cold sideare crucial factors for thermoelectric module design at brick kiln furnace application

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Battery Pack Modeling By Battery Management System of An Hybrid Electric-Vehicle Using ANFIS

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Abstract- *Battery management systems (BMS) is used in electric vehicle to monitor and control the charging and discharging of rechargeable batteries which makes the operation more economical. Battery management system keeps the battery safe, reliable and increases the senility without entering into damaging state.*

In order to maintain the state of the battery, voltage, current, ambient temperature different monitoring techniques are used. For monitoring purpose different analog/digital sensors with microcontrollers are used.

This paper addresses state of charge, state of health, and state of life and also maximum capacity of a battery. By reviewing all these methodologies future challenges and possible solutions can be obtained.

This paper discuss about battery modeling as consideration for battery management system to protect the battery and improve the lifetime to maximum. BMS is a critical system of Hybrid electric vehicle to keep the EV on the best quality. This system prevent the battery from over-charging, over-discharge, and over-heat so the battery will not be damaged.

For this purpose, many monitoring techniques are used to monitor the battery state of charge, temperature and current. In the current paper, the monitoring system for battery powered Hybrid Electric Vehicles (HEV) has been implemented and tested.

I. INTRODUCTION

Hybrid Electric vehicles (EV) are playing a key role because of its zero-emission of harmful gases and use of efficient energy. Electric vehicles are equipped by a large number of battery cells which require a effective battery management system (BMS) while they are providing necessary power. The battery installed in a electric vehicle should not only provide long lasting energy but also provide high power. Lead-acid, Lithium-ion, -metal hydride are the most commonly used traction batteries, of all these traction batteries lithium-ion is most commonly used because of its advantages and its performance. The battery capacity range for a electric vehicle is about 30 to 100 KWH or more. Battery management system (BMS) makes decisions based on the battery charging and discharging rates, state of charge estimation, state of health estimation, cell voltage, temperature, current etc.

II. EXISTING SYSTEM

Due to electrical vehicle charging as the charging power is locally generated in a'green' manner through solar panels. For improved efficiency, there is direct interfacing of EV on DC instead of AC interfacing. EV is inherently DC by nature. EV charging can be varied with time therefore dynamic charging of EV is possible. DC charging provides Vehicle-to-Grid (v2g) protocol. A charging station is accessible to multiple electrical vehicles and has an additional current mechanism to disconnect the power when EV is not charging. Standard socket outlets are used to connect EV to the power grid. The safety regulations, earthing system and a circuit breaker are important to protect against an earth leakage protection and overload. Battery capacity and charging power affects the charging time.

III. PROPOSED SYSTEM

In the Existing Project, the charging rate and discharging rate of batteries are calculated by using coulomb counting .

BMS is also equipped with temperature sensor to determine if the battery has reach over heating state.

So the battery can be monitoring and protected from over charging (or) over discharge and also over heating condition.

Fuzzy logic is a compact representation of Human knowledge, its used to consider an air temperature measuring sensor.

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Smart Wireless Charging System For Electrical Vehicle

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Abstract- *Wireless Power Transfer (WPT) is an innovative technology in which power is transferred without physical contact. As technical knowledge is proceeding, most of the wired technology is also converting into wireless technology through different techniques. Electric Vehicles and plug-in hybrids may be fresh and feasible but it is not enough if it is forgetting to plug in the power source the night before. Electric Vehicles will automatically charge when it will park in the special parking space where the transmitter circuit has already been developed, when an electric vehicle parks on that place, charging will start automatically. A preceding review of a few methods for wireless charging discovered that Inductively Coupled Power Transfer System (ICPT) is an advantageous method for wireless charging of EVs (Electric Vehicles).*

This paper presents a IPT (Inductively Coupled Power Transfer) system which is appropriate for Vehicle systems. For EV charging a WPT is a stable dynamic and effective system. Wireless power techniques fall into two categories, non-radiative and radiative. This project follows the non-radiative field using magnetic inductive coupling between coils of wire. After the usage of charging the DC Power is inverted and then the excess power is given to the Grid automatically. In this project mutual inductance technique is used between two coils. This paper will also enhance the feasibility, reliability and efficiency of the system.

Keywords- Inductively Coupled Power Transfer System, Vehicle to Grid, Wireless Power Transfer, Zero voltage resonant transition, Adaptive neural fuzzy inference system

I. INTRODUCTION

Nowadays, there is no life without electricity. From the beginning of mankind, there always has been the necessity of power, which brought us to the inventions of fire, steam engines and most importantly, electricity. The power grid electric supplies are used for residential and commercial applications. In general, the resident and commercial consumers need alternating supply only because the generated power is alternating supply only, hence it may be preferable for further applications. At the same time the generated power is fully utilized by the resident and commercial consumers then for the industrial consumers the generated power is transmitted through overhead transmission lines with respect to step up and step-down operation of the transformer.

Over all the electric supply played a vital role in our daily life means without considering the electric supply nothing will improve or satisfied. Hence, it's important to keep the electrical supply in our life.

Till now the electric supplies are transmitted only through the electrical conductors, if its bulk power either UG cable or Overhead line is used for power transferring, then in the low power like residential or commercial powers are transmitted through the electrical wire. Hence in the power transmission electrical conductor or electrical wire is used to obtain the voltage or current.

The above system or wire based electrical power transmission may useful and it also have some advantages but it's also creating the several issues like wire burn / conductor burn, shortcircuited, plug in/out etc. That's why the researchers had a look on the issues and they are trying to provide the better solution for the case.

Among the various literature and research the wireless power transmission may suggest to replacing the wiring systems and introduced the smoother control / transmission techniques.

II. SYSTEM ANALYSIS

Wireless Power Transfer (WPT) innovation is developing in ubiquity as of late because of its non-physical association between the source and the heap, and it has been generally utilized in differing situations, for example, toothbrushes, PDAs, electrical vehicles, and self-governing submerged vehicles (AUVs). Vitality is a central point limiting the long-haul ceaseless activity of the AUV in the sea. Abstaining from conveying such a large number of batteries, WPT innovation can be utilized to charge the AUV in the

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Footstep Power Generation Using Piezoelectric Sensor

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Abstract- *The growth of the cosmos is represented by energy consumption. To meet the current demand, the modern world needs a significant amount of electrical energy. However, due to the massive demand of energy, conventional energy resources are steadily declining. Therefore, other energy sources are needed. However, they also need to be clean, eco-friendly, and sustainable in order to close the gap between the supply and demand of electricity. Addressing the energy problem is the main goal. It entails the generation of power through walking. Utilizing the force that a person's weight and energy exert on the ground while they walk is the idea. The goal of the power generating floor is to use piezo sensors to convert the mechanical stress placed on the floor into electrical power. Piezoelectric components are used in this method.*

Keywords- footstep power generation, piezoelectric sensor, kinetic energy, power system.

I. INTRODUCTION

Energy harvesting, also known as energy capture or energy storage, is the process by which energy is obtained from outside sources and used to directly power equipment or is captured or stored for later use. Energy sources are being used much more frequently thanks to the development of technology. The newest and most inventive development in the field of energy harvesting is piezoelectric energy harvesting. The property of some materials known as piezoelectricity, most notably crystals and specific ceramics, to produce an electrical potential in response to applied mechanical stress. This could manifest as the separation of electrical charge from the crystal lattice.

The Greek verb "piezien" (which meaning to press or squeeze) is the root of the term "piezo," which signifies piezoelectric. The Curie brothers discovered quartz in 1880 and discovered that it altered its dimension when exposed to an electric field and produced an electric charge when pressure was applied. Since then, hundreds of ceramic and plastic materials have been discovered to possess piezoelectric characteristics. One of the main issues is capturing the energy from such piezo-based resources and making it accessible to the end users. The best piezoelectric materials are chosen for each application outof the more than 200 available for use in energy harvesting. Although lead zirconate titanate, popularly known as PZT, was the first piezoelectric ceramic discovered, barium titanate was the first to be discovered as a piezoelectric ceramic.

II. LITERATURE SURVEY

1) ***Foot Step Power Generation Using Piezoelectric Sensor(Anis Maisarah Mohd Asry ,Farahiyah Mustafa , Sy Yi Sim, Maizul Ishak , Aznizam Mohamad,2019).***

The present research uses a piezoelectric sensor to show how human locomotion generates electricity. Mechanical energy is transformed into electrical energy via the transducer.when the footstep applies pressure on the piezoelectric transducer.

2) ***Design of footstep power generator using piezoelectric sensors (Akshat Kamboj, Altamash Haque, Ayush Kumar, V. K. Sharma, Arun Kumar , 2017).***

The physical foot interface is laid on a chain sprocket arrangement and spring that is connected to piezoelectric sensors in the system described in this study. The sensors provide AC voltage, which is converted to DC supply by DC generators. The DC outputs are then stored in two batteries, one of which is six volts in capacity, which are coupled to an inverter that transforms 12V to 220V AC. The operating of a load will use the AC output power.

3) ***Power Generation for Auto Street Light Using PZT (Mrinmoy Dey Tawhida Akand and Sadeka Sultana, 2015).***

This study outlines the usage of piezoelectric plates, which create reasonable voltage when a vehicle applies pressure on them. Utilizing bridge rectifiers, the AC signal is corrected. A 12V battery is charged by the charging circuit, and this DC voltage is then converted to AC voltage by the inverter circuit. A dark sensor circuit detects the time of day and activates an inverter to turn on the street lights. This paper ensures the use of a step-up transformer to increase the voltage from 15 V AC, which a flip-flop converts to 12 V DC, to 250 V AC.

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IOT Based Air Filter

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Abstract- *As we probably are aware, air contamination is perhaps of the most serious ecological issue in the 21st hundred years.*

It increments quickly everyday by many explanation. There are many reasons because of which air contamination causes in the world. The primary explanation of the air contamination is individuals, there are numerous synthetic things because of which air contamination causes, for example, vehicles, fireplace, thermal energy station, deforestation and so on yet in addition there are some regular reason because of which air contamination causes, for example, volcanic ejection, expanding temperature, rapidly spreading fire and so on.

In air contamination, there are a few unsafe gases like CO2, NO2, SO2, dioxins and so forth which influence the body portions of the human being in various manner and furthermore there are particulate matter in the air which influence people.

According to WHO statics, a few unexpected passing cases are accounted for because of air contamination consistently around the world. In this manner, we have made a gadget named as "IOT based Air purifier with Contamination checking framework". It distinguishes the destructive gases and residue particles which are available in air and furthermore tells about the temperature and dampness for that we are utilizing DHT11 temperature and moistness sensor. After location, it sends the information to the LCD and ThingSpeak cloud server utilizing Wi-Fi module (Esp8266-01). Thingspeak cloud server is an open-source cloud stage on which information can be put away and recovered through HTTP over the web. In the event that the information is low, it just sends the information to the LCD and ThingSpeak however in the event that the information is high, it sends the information to the LCD and ThingSpeak cloud server as well as it begins the fan what begin purging the air through HEPA channel.

This gadget permits the observing of air quality, moreover refine it and show the constant outcomes on the cloud server.

I. INTRODUCTION

Nowadays, recent technologies were able to provide a glimpse of hope in overcoming the challenges caused by rapid urbanization. A new strategy is introduced to solve the problems caused by the population growth and rapid urbanization. This strategy is to transform cities into what is called smart cities. A smart city is an environment that uses communication and information technologies intensively, in order to make cities more efficient. Leading smart cities have integrated efficiency into buildings and infrastructure using technological advancements.

Increasing livability and productivity. The concept of smart cities must have the capability to provide stable connectivity to everydevice that will produce information. Traditional cities suffer from high traffic, crowded roads, inefficient use of lighting systems, loss of water resources, pollution, etc. Hence, the focus on smart cities has evolved to be a focus on a better life and the quality of life. This aim has introduced the concept of sustainability. Smart cities can still find itself wasting resources, using devices that require high power consumption and not be able to fully cope with the natural environment.

The main vision of a smart sustainable city is to maintain the balance between the technological advance, saving resources, low power consumption and coping with the environment without neglecting any of these factors. One of the most challenging issues in cities is the pollution especially air pollution. Air pollution is hard to prevent in crowded cities. It has a direct effect on the health of humans, animals and plants. Third world countries are an example of cities suffering from air pollution for decades due to heavy traffics, industries.

II. RELATED WORK

Monitoring environmental conditions in homes have been inspected in [4]. A framework is proposed by author to monitor temperature, humidity and light intensity, which is based on a combination of pervasive distributed sensing units, information system for data aggregation, and reasoning and context awareness. The reliability of the sensing information is

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Reactive Power Compensation Using Induction Motor Driven By Four Switch Converter

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Abstract- *During the past two decades, the rise in electrical energy demand has presented higher necessity from the power industry. More power plants, substations, and transmission lines need to be built. However, the most commonly used devices in present power grid are the mechanically controlled circuit breakers. The long switching periods and discrete operation make them complex to handle the frequently changed loads smoothly and damp out the transient oscillations quickly. It increases the complexity of the system, Therefore, investment is necessary for the studies into the security and stability of the power grid, as well as the improved control schemes of the transmission system. Different methods such as reactive power compensation and phase shifting have been applied to increase the stability and the security of the power systems. Induction motors (IM) used for various industrial applications operate with lagging power factor. This paper proposes a single-stage three-phase power factor correction (PFC) for four-switch converter (FSC) fed induction motor (IM) drives. The PFC scheme uses a converter with only one switch, and consequently, it needs only one control signal. This attains low computation burden, simple control algorithm, and minimum cost. A new PFC control technique is proposed to guarantee sinusoidal supply currents with high power factor (PF) and low total harmonic distortion (THD). Moreover, the PFC technique regulates the DC bus voltage. The efficacy of the converter is verified by extensive tests in various operating conditions.*

Keywords- Reactive power compensate, Power system.

I. INTRODUCTION

The use of induction motor (IM) drives in the industry has increased in practical applications. Inverters are considered an important part in the IM drive system. Conventional IM drives have three-phase converters with a capacitor filter to transform a DC rectified voltage to an AC voltage with variable magnitude and frequency. The inverters require 3-phase uncontrolled diode bridge rectifiers. Capacitors were utilized to smooth the DC output rectified voltage.AC/DC rectifier circuits produce unregulated current signal with non-sinusoidal shape. Different complex issues related to the resultant harmonics and losses were created. These issues reflect on the AC source and reduce the power source quality.The most undesired issues are injecting current harmonics in the grid, overheating the instruments,voltage distortion at the point of common coupling, reduced power factor (PF), and minimized efficiency. International standards indicate the limits of different harmonics of the current and voltage waves.The current should be reconstructed to be a sine wave, what improve the PF and minimize the losses. So new power factor correction (PFC) topologies for AC-DC converters were necessary to mitigate the power source quality issues. These topologies use numerous switches and complex control circuits and have increased costs.Different PFC schemes for DC-DC converters are employed. The main common scheme is the boost converter; however,it has a shortcoming. The value of output voltage exceeds he peak supply voltage. Therefore, the output cannot be simply isolated from the input. This scheme presents isolated output-input with limited inrush current at starting. Also, it has the capability of step-up/down output voltage. Nowadays, the tendency is to develop compact and cheap IM drives. Traditional six-switch inverters (SSI) were commonly employed for variable-speed drives (VSDs) Therefore, great exertions were done to replace SSI with four switch inverter (FSI) for uninterruptible power supply and VSDs . Several features are realized with replacing traditional SSI with FSI in terms of reliability, low computation burden and low price.

II. RELATED WORKS

In this project the main goal is the power supply unit are Transformer, Rectifier, Filter and Regulator. The 230V AC supply is converted into 9V AC supply through the transformer. The output of the transformer has the same frequency as in the input AC power. This AC power is converted into DC power through diodes. Here the bridge diode is used to convert AC supply to the DC power supply. This converted DC power supply has the ripple content and for normal operation of the circuit, the ripple content of the DC power supply should be as low as possible. Because the ripple content of the power supply will reduce the life of the circuit. So, to reduce the ripple content of the DC power supply, the large value of capacitance filter is used.

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Control Of Permanent Magnet Chain Driven Drive System of An Electric Four Wheeler

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Abstract- *The electrical drive system is crucial to the drive performance and safety of electric vehicles (EVs). In contrast to the traditional two-wheel driven EVs, the chain drive motor four-wheel- drive system can steer the vehicle by controlling the torque and speed of each wheel independently, yielding a very simple distributed drivetrain with high efficiency and reliability.*

This paper presents a system-level design Optimization method for a permanent magnet chain drive motor drive system for a campus patrol EV based on a practical driving cycle.

An outer rotor permanent magnet synchronous chain drive motor (PMCDM) and an improved model predicate current control are proposed for the drive system. Due to the lack of reducers, the direct-drive PMCDM needs to face more complex working conditions and design constraints. In the implementation, the motor design requirements are obtained through the collection of practical EV driving cycles in the campus. Based on these requirements, two models are proposed as the preliminary designs for the PMCDM.

I. INTRODUCTION

As the environmental issues are on the rise in the automotive industry, the market share of the new energy vehicles, which include hybrid electric vehicles (HEVs) and pure electric vehicles (EVs) that are powered by electric motors as the traction component is getting larger and larger. Modern EVs require high-performance drive motors with high torque density and efficiency.

Many kinds of motors have been studied and developed for this purpose, such as permanent magnet chain drive motors (PMCDMs), switched reluctance motors and induction motors [1-5]. The majority of these EVs, however, are four-wheel drive on either the front or rear axle by a single motor. The dynamic performance of such a two-wheel drivetrain is sub-optimal due to the limited traction, especially when it is riding on roads with snow and/or ice, or off-road on soft grounds or rocks.

The four-wheel-drive drivetrain using four hub/in-wheel motors can overcome this drawback. Since the torque and speed of each wheel can be controlled independently. Different from centralized drive motors, the requirement of light weight is stricter for chain drive motors since the mass of the chain drive motor will affect the unspring mass, which has a significant impact on the ride comfort of the EVs.

Due to the characteristics of low speed stability, high torque density, and low torque ripple, the PMCDM is a good candidate for the EV chain drive motor

II. EXISTING SYSTEM

This project has presented of EVs which are driven by the Permanent magnet Chain Driven drive motor The performance of the EVs' variation of torque and power consuming system has been realized by our control scheme which has been implemented both in the simulation and in the experiments. By combining fuzzy control and PIC control methods which are both sophisticated methods can distribute the mechanical torque force and electrical force dynamically.

III. PROPOSED SYSTEM

The Smart Hybrid Electric Vehicle has two modes, Fuel mode and Electric mode. This bike initially starts in Fuel mode. • One is by solar panel and another one is by 220v AC supply. In electric mode the charging of battery is done in two ways. 1) During day time while running or in rest position, the solar panel on the back of the bike charger the battery. 2) During night time, supply can be provided to the battery.

PROPOSED BLOCK DIAGRAM

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Designing of Automated Seed Sowing And Water Pump Switching Robot For Bt Cotton

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Abstract- *To make the seed sowing process with the help of robot automated with minimal control of human,. The robot's action is controlled by motor driver and seed sowing is achieved using a seed motor. Many sensors like moisture sensor, humidity sensor, LM 35 & NPK sensors are installed inside the root for detection of moisture, temperature and NPK content in the soil. When there is any change in the moisture level(fixed rate) then a signal is sent to the water pump and which gets switched on. Using Bluetooth module we can send instructions to the PIC controller where the program for operation of robot is coded. The sensors readings are updated in the IoT(think speak cloud).*

Keywords- Seed Motor, IoT, Sensor network

I. INTRODUCTION

Seed sowing is the important process in agriculture where we a giving a high cost for labour charges. NPK content and moisture in the farmland plays an important role in the metabolism of the crop. In central states of India we are cultivating the kharif crop cotton plant.In cotto crop cultivation there is a big deal for cultivators, because of Bacillus thuringiensis bacteria. Bacillus thuringiensis bacteria cause damage to the cotton balls by eating them completely. Scientists developed cotton plants resistive to that bacteria. In the case of Bt Cotton, we have to sow the seeds in (1 or 2) numbers. So, it is a risky task for labours to achieve it. Here, in this project we are introducing the automated sed sowing process automated by the help of seed motor.

II. RELATED WORK

Seed Motor

Seed Motor is installed in the robot by which the seeds are sowed in the farmland. Seeds are stored in the seed bank. Where in a fixed number the seed picker will pick the seed and send to the seed motor. Seed motor will sow the seeds in the soil. Distance counter is used to sow the seeds in the desired interval of space. Manual sowing process takes a lot of time and labour charge is high. As an alternative method we can adapt the automated sowing process. The operations done by the robot are stored and updated in the thingspeak cloud. These methods are useful in high wetlands. This is a kharif crop, the crop is cultivated in the month of July where the monsoon starts. So soil gets highly wet in short time. During this monsoon season it is an easy task for the seed motor to sow the seeds. And robot can easily perform the task in the wet soil.

Sensor Network

Sensors play the vital role in this project for sensingof the moisture , temperature, humidity and nutrition content in the soil.When there is any decrement in the moisture level(fixed rate) then the water pump gets stared automatically . A sensor is a tool that detects and responds to a few forms of enter from the bodily environment. Sensors can monitor various aspects of the farmland, such as its moisture, humidity, temperature, nutrition content or any number of other environmental phenomena. Here we are using moisture sensor, humidity sensor, NPK sensor and LM35 sensors.

Where the sensor node is connected to the PIC microcontroller and to the IoT, the sensor readings are updated to the thinkspeak cloud. sensor networks (WSN) are gaining the floor in all sectors of life; from houses to factories, from visitors manage to environmental and habitat monitoring. Monitoring appears to be the important thing word. Wireless structures can take manage actions, too and on this manner, they compete e.g. with present system automation structures or with traditional domestic automation.

Internet Of Things (IoT)

The IoT can be any device with any shape of built-in-sensors with the ability to gather and transfer records over a network without manual intervention. The embedded era withinside the object allows them to engage with internal states and the out of doors environment, which in turn allows in choices making process. In a nutshell, IoT is a concept that connects all the devices to the internet and permit them to speak with each exclusive over the internet. IoT is a huge

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Manhole Detection And Monitoring System Using GSM Module And PIC Microcontroller

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Abstract- *Manhole monitoring systems are a technology used for management and maintenance of sewer systems. The system utilizes sensors installed inside manholes to collect data on various environmental and operational conditions such as temperature, humidity, gas levels, and water levels. This data is transmitted to a central monitoring system for analysis and detection of potential problems such as leaks, blockages, gas build-up, and corrosion. By preventing these issues, manhole monitoring systems improve the efficiency and safety of sewer systems, while also providing data collection for research and planning purposes. Future developments in technology such as IoT integration, predictive maintenance, and remote monitoring are expected to further enhance the capabilities of manhole monitoring system*

Keywords- Inductively Coupled Power Transfer System, Vehicle to Grid, Wireless Power Transfer, Zero voltage resonant transition, Adaptive neural fuzzy inference system.

I. INTRODUCTION

Manhole Detection and Monitoring System using GSM Module and PIC Microcontroller is an innovative system designed to reduce the frequency of manhole accidents and to monitor the environmental conditions of the manhole. Manhole accidents are a major concern for many cities and towns, with many people falling into them due to lack of visibility and poor maintenance. In addition, the gases and chemicals present in the atmosphere of the manhole can be hazardous for humans and can cause injury or death. This system provides an effective solution to these problems by automatically detecting the presence of a manhole, alerting the local authority of its presence, and monitoring the environmental conditions of the manhole.

The system consists of two components - a GSM module and a PIC microcontroller. The GSM module is responsible for sending and receiving data over the GSM network. It also has the capability to detect the presence of a manhole as well as any changes in its environmental conditions. The PIC micro-controller is used to control the system and to store the data received from the GSM module.

The system is designed to work in three stages. Firstly, the GSM module is used to detect the presence of a manhole. Once a manhole is detected, the system sends a signal to the PIC microcontroller, which then triggers the alarm system. The alarm system alerts the local authority of the manhole's presence, allowing them to take appropriate action. Secondly, the GSM module monitors the environmental conditions of the manhole and sends the data to the PIC microcontroller. This data is then stored and analysed to ensure the safety of the environment within the manhole. Finally, the PIC microcontroller is used to control the system and to ensure that all data is stored correctly.

The Manhole Detection and Monitoring System using GSM Module and PIC Microcontroller is an innovative system that can help reduce the frequency of manhole accidents as well as to monitor the environmental conditions of the manhole. Its use of a GSM module and a PIC microcontroller makes it an efficient and cost-effective solution, while its ability to detect the presence of a manhole and to monitor its environmental conditions makes it an invaluable tool for local authorities. With its advanced features and user-friendly design, the Manhole Detection and Monitoring System using GSM Module and PIC Micro-controller is an essential tool for any city or town that wishes to reduce the frequency of manhole accidents and to protect its citizens from the potentially hazardous gases and chemicals present in the atmosphere of the manhole.

II. SYSTEM ANALYSIS

Manhole Monitoring System was initially proposed byS. Himanshu1 J. Bharani Kumar 2, K. Shashank3, Dr.T. Rama Swamy4 1, 2, 3UG scholar, 4Professor, ECE department, SNIST, Hyderabad.

This framework detects sewage vent blockages and water levels. It also monitors the continuous water flow rate. Temperature, mugginess, and gas leaks can all be detected with sensors. To address the issue of open drainage, most cities have implemented an underground drainage system in order to maintain the city clean, safe, and healthy. This is an

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Home Security & Protection System Using ESP32-Cam And PIC Microcontrollers

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Abstract- *In recent times, there are much security and protection system required for industrial and commercial applications. The technology also developing from day to day life. So these security and protection schemes can be done for home with these technologies. This system involves securing the house by door locking system using one time password and face recognition system with fire protection, Liquefied petroleum gas leakage protection.*

In order to unlock the door, the one time password should be entered correctly which sent to the owner of the house and also the face should be matched with the registered images.The fire protection system can be carried out using the temperature sensor, if the temperature value raised above the specific level, the water pump will be turned ON to extinguish the fire. The Liquefied petroleum gas leakage protection is used to identify the gas leakage in the house using the gas sensor and it will turn on the exhaust fan. Those values of gas and temperature will be recorded and can be viewed through any mobile or laptop through IoT. It shows the real time value of gas and temperature as graph using IoT and can be downloaded as csv file also with respective date and time of the LPG gas leakage and temperature value.

Keywords- Face Recognition system, One Time Password (OTP) based door locking System, Fire Protection Circuit, LPG Leakage Protection System

I. INTRODUCTION

Our daily life revolves around the concept of automation and the things that are automated are said to be of benefit because they reduce the intervention of human beings. Our idea revolves around designing and implementing a home security and protection system which can be deployed in house so that only authorized personnel can gain access to it. Our smart door lock system requires the face should be matched with the registered images.After successfully recognising the face, the one time password (OTP) will be sent to the owner's mobile. That OTP should be entered correctly to unlock the door.

Gas leakage is a serious problem and nowadays it is observed in many places like residences, industries, house etc. It is noticed that due to gas leakage, dangerous accidents occur. Liquid petroleum gas (LPG) is highly inflammable and can burn even at some distance from the source of leakage. The Liquefied petroleum gas leakage protection is used to identify the gas leakage in the house using the gas sensor and it will turn on the exhaust fan using the relay circuit thereby the gas will be get out from the house.

Fire is a serious danger to life and property in worldwide. It is usually caused by combustion of materials which releases heat in large amount. Fire accident is common feature in factories, house, markets etc. due to inadequate fire protection. So we try to design automate fire detection with water sprinkler system because the event is very dangerous in our life. The fire protection system can be carried out using the temperature sensor, if the temperature value raised above the specific level, the water pump will be turned ON to extinguish the fire through the relay circuit with the help of PIC controller. Also an alert message will be sent to inform the owner.

Those values of leaked LPG gas and temperature caused by fire will be continuously monitored through IoT.

II. SYSTEM ANALYSIS

Face recognition and OTP can provide increased security compared to traditional security systems. Face recognition can ensure that only authorized individuals are granted access to your home, while OTP can ensure that the person entering the OTP is the actual owner of the device and not someone else trying to gain access.A face recognition and OTP-based security system can help prevent burglary by making it more difficult for unauthorized individuals to gain access to your home. Burglars may be deterred by the added security measures and choose to target a less secure property instead.A fire sensor can detect smoke or heat and alert the occupants of the home of a potential fire, giving them time to evacuate and call for emergency services.A water pump can be connected to a fire sensor and activated automatically when

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Multiple Battery Fast Charging Using Multisource Inputs For E-Vehicle

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Abstract- *Multiple-input multiple-output (MIMO) wireless communication technology has observed remarkable growth, moving from a research concept to widespread implementation in just over 10 years. But MIMO finds its roots in antenna diversity, whose history starts back in the 1920s. The multiple input multiple output (MIMO) technique provides the higher bit rate and the better reliability in wireless systems. These advantages are achieved by designing appropriate apace-time codes that provide diversity improvement, spatial multiplexing gain, or a trade-off between diversity order and spatial multiplexing. Wireless communication using multiple-input multiple-output (MIMO) systems enables increased spectral efficiency for a given total transmit power. Increased capacity is achieved by introducing additional spatial channels that are exploited by using space-time coding. In this article, we survey the environmental factors that affect MIMO capacity and battery charging levels.The factors include channel complexity, external interference, and channel estimation error. The examples of space-time codes, including spacetime low-density parity-check codes and space-time turbo codes, and we investigate receiver approaches, including multichannel multiuser detection (MCMUD). The 'multichannel' term indicates that the receiver incorporates multiple antennas by using space-time-frequency adaptive processing. This project provides a brief summary of the history of battery fast charging and MIMO systems, emphasizing some of the key associated developments in it.*

I. INTRODUCTION

Energy is that the basic would like for development and therefore the demand of energy is a lot of because of the speedy increase in world population, technology and alternative political and financial condition. Currently a day's voltage is generated by the standard energy resources like coal, diesel, and nuclear etc. and these are depleting day by day. So, there's an imperative ought to put on to non-conventional energy resources. PV and wind are simply offered altogether condition may be sensible different supply. With the increase within the demand of renewable energy resources the necessity of concentration of those systems ought to be essential. This successively has given rise to the hybrid energy system. Combination of three or a lot of energy system is termed hybrid energy system. Here, three sources are used namely solar panel, EB power and wind energy. So as to regulate the hybrid system AI may be used. Artificial Intelligence is that an inter-networking of physical devices embedded with physical science, software, sensors and network property that change objects to gather and exchange information. It is employed to monitor the ability provide i.e., wind energy and solar power of a house through secure web site once the grid provide is off. This is effective to regulate the shift between these sources of energy

II. EXISTING SYSTEM

The management techniques in EMS are often divided into two major categories: classical and sensible techniques. The classical management techniques that embrace proportional-integral (PI) controllers supported the system model. For that reason, the performance of such management techniques is extremely sensitive to parameter variations.On the opposite hand, sensible management techniques like fuzzy logic, artificial neural networks, and neuro-fuzzy are freelance from the mathematical model of the system. This brings respectable advantages to the system as well as quick dynamic response and strength against parameter variations. one among the sensible management techniques is adaptational neuro-fuzzy inference system (ANFIS) that's quicker in convergence when put next to the opposite neuro-fuzzy models. This paper proposes a unique sensible EMS for DGs in AC microgrid. to manage the output power of the DGs, MPC primarily based management technique is employed. moreover, the ANFIS primarily based EMS is developed to manage the on the market energy among DGs in AC microgrid. This paper is organized as follows. The thought-about microgrid design is delineated .The developed ANFIS primarily based EMS is careful in Section. The administered hardware-in-the-loop (HIL) experiments are bestowed.

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Implementation of Iot Based PV Monitoring And Measure Current And Voltage Using Smart Mobility System

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Abstract- *This paper presents an implementation of an Internet of Things (IoT) based PV monitoring system, which is designed to measure voltage and current, and provide feedback to an MSP 430 microcontroller. The monitoring system is powered by a solar panel, DC to DC converter, relay and battery, inverter and grid, and includes a voltage sensor, LCD, and IoT.*

The collected data is sent to the MSP 430 microcontroller for processing. The monitoring system is also equipped with a smart mobility system, which enables users to instantly receive feedback about the system and adjust settings accordingly.

The proposed system can be used to monitor and control the voltage and current of the PV system and provide feedback to the user. The system is designed to be cost effective, reliable, and a great tool for PV system monitoring.

Keywords- solar panel, DC to DC boost converter, Relay, Battery, temperature sensor, inverter, grid, MSP 430, LCD,

I. INTRODUCTION

The implementation of Internet of Things (IoT) based Photovoltaic Monitoring, measuring voltage and current and Smart Mobility System using solar panel, feedback to MSP430 microcontroller, DC to DC, relay and battery, inverter, grid, feedback to MSP430 controller, voltage sensor, LCD and IoT is a revolutionary technology that has changed the way we think and interact with energy sources. This technology has enabled us to monitor and measure the voltage and current of a Photovoltaic (PV) system, and then use that information to control the operation of the system.

Furthermore, the use of IoT based technology enables the user to remotely monitor and control the system from anywhere in the world

The system is composed of several components, including the solar panel, MSP430 microcontroller, DC to DC, relay and battery, inverter, grid, feedback to MSP430 controller, voltage sensor, LCD and IoT. The solar panel is the primary source of energy for the system, and it converts the sun's energy into electricity.

The MSP430 microcontroller is used to control the system and to communicate with the other components. The DC to DC is used to convert the electricity from the solar panel into a usable form, while the relay and battery provide backup power when the sun is not available. The inverter is used to convert the electricity from the solar panel into AC power, while the grid provides a steady supply of electricity when the sun is available. The feedback to MSP430 controller is used to monitor and measure the voltage and current of the system, while the voltage sensor is used to detect changes in the voltage and current of the system. Lastly, the LCD and IoT are used to display the information from the system, and to monitor it from a remote location.

Overall, the implementation of IoT based Photovoltaic Monitoring, measuring voltage and current and Smart Mobility System using solar panel, feedback to MSP430 microcontroller, DC to DC, relay and battery, inverter, grid, feedback to MSP430 controller, voltage sensor, LCD and IoT is a revolutionary technology that has changed the way we think and interact with energy sources. It allows us to monitor and measure the voltage and current of a PV system, and then use that information to control the operation of the system. Furthermore, the use of IoT based technology enables the user to remotely monitor and control the system from anywhere in the world. This technology has the potential to revolutionize the way we use energy, and is a great step forward in the development of renewable energy sources.

II. SYSTEM ANALYSIS

The system analysis for the implementation of an IoT based PV monitoring and measuring voltage and current then

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Automated Electric Vehicle Based On Wireless Communication

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Abstract- *To automate the electrical vehicle by sensing the environment with minimal or no control of human. The car's action was controlled by multiple sensors installed in the car. Instead of OBDII CAN network, a wireless communication protocol (IOT) used to send reports. Many sensors like ultrasonic sensors, vibration sensors, speed sensor, voltage sensor are used inside the car for detection, to maintain and spontaneous action which will lead to safe driving.The improvement of hardware gadgets has furnished the technical basis for the belief of AVs. If the whole street device may be extraordinarily automated, there will be tremendous blessings in phrases of comfort and security. The record then outlines the approach of autopilot constructed on current hardware infrastructure. Several experiments have been carried out on the IAG studies centre to evaluate the feasibility of the use of electric powered alerts to pressure the car's moves and to recognize a couple of sensors mounted withinside the car. Lastly, it discusses how those initial works will be prolonged for similarly implementations.*

Keywords- Automatic vehicle, IoT, Sensor network

I. INTRODUCTION

Road transportation is one of the main sources of environmental pollution. Electrification seems like the ideal solution for reducing CO2 emissions, while keeping all the advantages of modern means of transportation. The shift to electric powered cars desires to be observed via way of means of an appropriate telecommunications network, that is liable for the dependable transmission of huge volumes of information related to the intake of electricity. The application of Internet of Things (IoT) has been emerging as a new platform in wireless technologies primarily in the field of designing electric vehicles. To overcome all issues in existing vehicles and for protecting the environment, electric vehicles should be introduced by integrating an intellectual device called sensor all over the body of electric vehicle with less cost. Therefore, this article confers the need for and importance of introducing electric vehicles with IoT based technology which monitors the battery life of electric vehicles. Since the electric vehicles are implemented with internet, an online monitoring system which is called Things Speak has been used for checking all the vehicles in a continuous manner. By this application, the status of the vehicle like speed level of the vehicle and vibration of the car are viewed which are passed through the cloud by IOT technology.

II. RELATED WORK

1. Automatic Vehicle

Manual motors have become antique fashioned; but they're nevertheless broadly utilized by many drivers. For clean using, automated transmission automobiles are being produced withinside the marketplace on a excessive scale. Initially those have been high priced and fed on greater fuel, because of this those automobiles have been now no longer call for as guide automobiles. However, automated vehicles have now come to be extra economical. The automated automobile is straightforward to deal with and manage in comparison to the guide automobile. Most of the younger human beings are going towards computerized vehicle due to the fact it's miles consumer friendly. The persevering with evolution of car era objectives to supply even more protection blessings than in advance technologies. One day, automatic riding systems, which a few talk to as automatic vehicles, can be capable of deal with the complete mission of riding whilst we don't need to or can't do it ourselves. Cars and vans that power us rather than us using them, might also additionally provide transformative protection possibilities at their maturity. At this time, even the best stage of riding automation to be had to purchasers calls for the overall engagement and undivided interest of drivers. There is large funding into secure testing, improvement and validation of computerized riding systems. These car era improvements additionally have the ability to enhance equity, air pollution, accessibility and visitors congestion.

2. Sensor Network

Sensors play the vital role in the field of automated vehicle for the detection of objects near the vehicle for smooth

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DETECTION AND CLASSIFICATION OF FRUIT DISEASES USING IMAGE PROCESSING

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Abstract. Fruit diseases are important in agriculture worldwide. In this project, a neural network based on image processing is proposed to detect passion fruit disease. According to the CNN algorithm, the fruit image details are extracted from the first row used in this project by the existing package. However, it may take some time. Thus, the proposed system can be used for rapid and automatic identification of fruit diseases.

The proposed approach consists of the following main steps, including input image acquisition, image processing, affected area detection, affected area labeling, training set validation, and output display. Several types of fruit diseases such as bitter rot, puffball and powdery mildew are used for this approach. This approach was tested based on the type of fruit disease and the new and affected stages. This algorithm is used to determine the type of fruit disease. Images are provided as sharp decay images, soft color images, and dust decay images. Before processing the image, it is converted to a color model to find the most suitable color model for this approach. Local binary patterns are used to extract features and support erosion methods are used to generate models. According to this approach, fruit diseases can be identified with an average accuracy of 79% and stages with an average accuracy of 66%.

I. INTRODUCTION

The best way to detect and diagnose fruit diseases is based on expert analysis [1]. In some developing countries, consulting with experts is time-consuming and time-consuming. Automatic detection of fruit diseases is very important to know the early signs of fruit development [2]. Fruit diseases occur during harvest, causing poor quality and yield. It is important to understand the situation and understand what leaders must do in the coming years to avoid failure.

For example, some apple diseases are black rot and black rot. Apple rot causes small, sunken circular brown or black spots covered with a red halo [3]. Apple fruit blight is a fungal disease that causes black, irregular spots or cracks on the fruit. Apple's vision is unleashed by great business and visionary technology.

However, since the skin is different from different fruits, there are many different varieties and problems in the diagnosis due to the presence of the disease [4].

Fruit studies can identify different patterns in different fruits, so it is important to monitor fruit health and disease detection. pesticides, herbicides, insecticides [5]. With proper management, this can be facilitated and thus the quality of workers can be improved.

Deep learning, also known as neural networks, is a branch of machine learning that uses computational models derived primarily from models of the brain [6]. Currently working on Deep Learning, Google Search and Image Search; Lets you search images for keywords like "cover". Used to enable Smart Reply and Gmail.

It is in words and vision. I believe it will soon be used in machine translation. said Jeffrey Hinton, considered the master of neural networks deep learning models and various methods (see above) are effective for extracting complex information from input images. Grids cannot be used to reduce calculation time.

Image classification is best done with CNNs.

First, you need a set of images. In this case, we use beautiful pictures and medical products as our first experience[7]. The most common attributes for image files are image, image length, number of channels, and pixel pitch.

The classic way to find and check fruit is by a doctor. Consultants are expensive and time-consuming in some developing countries because of the distance. Automatic detection of fruit diseases, early detection of fruit development symptoms is very important [8]. Fruit diseases occur during harvest, causing poor quality and yield. Understanding the situation is important to understanding what managers need to do next year to avoid failure. Some diseases spread to other parts of the tree, infecting branches, leaves and twigs [9].

For example, some apple diseases are gum disease, apple rot and apple blight. Gray or brown, like apple skin. Apple rot causes small, sunken circular brown or black spots covered with a red halo. Apple fruit blight is a fungal disease that causes black, irregular spots or cracks on the fruit. Apple's vision is unleashed by great business and visionary technology.

However, the detection of defects is still challenging due to the different colors of different fruits, the different height of the type of defects and the presence of stalks/calyxes.

Fruit studies can identify different patterns in different fruits, so it is important to monitor fruit health and disease detection. Pesticides, insecticides, insecticides, etc. It can

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PRIVATE NETWORK FILE SHARING AND MESSAGING PLATFORM

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Abstract. Private Messenger is a secure communication tool that allows users to send messages, make voice and video calls, and share files within a closed network. Unlike traditional messaging services, the platform offers end-to-end encryption, ensuring that only authorized users have access to exchanged messages.

The platform is designed with a user-friendly interface that allows users to customize their privacy settings, including the ability to set up security groups for team collaboration. Messaging platform utilizes end-to-end encryption, secure authentication, and multi-factor authentication to ensure that messages and files are protected from prying eyes.

Additionally, the platform provides real-time notifications, archiving and search capabilities for easy m essage retrieval. This summary highlights the key features of a private webmail platform that make it an excellent choice for businesses, organizations, and individuals who prioritize privacy and security in their communications

I. INTRODUCTION

In recent years, concerns about privacy and data security have become increasingly prevalent in the digital world, especially when it comes to communication. Many users are wary of using traditional messaging apps that collect and analyze their data, which may include personal information and confidential messages.

To address this issue, private network messaging platforms have emerged as a secure and encrypted communication tool that provides a safe environment for users to exchange messages and files without the risk of data breaches or unauthorized access.

Private network messaging platforms utilize end-to-end encryption, secure authentication, and multi-factor authentication to ensure that messages and files are protected from prying eyes. They also offer features such as self-destructing messages, message recall, and anonymous messaging, which provide users with additional layers of security and privacy

The increasing demand for privacy and confidentiality in digital communication has led to the rise of private network messaging platforms, which aim to offer a seamless and user-friendly experience. This platform is designed to meet the needs of individuals and businesses that value privacy and security in their communication. In this context, this article aims to explore the concept of private network messaging platforms in detail and highlight the benefits of using such platforms over traditional messaging apps

Private network messaging platforms are secure and encrypted communication tools designed to provide a safe environment for users to exchange messages and files without the risk of data breaches or unauthorized access. With the increasing concern for privacy and confidentiality in digital communication, these platforms offer an alternative to traditional messaging apps that may not be secure or may collect and store user data.

A private network messaging platform uses end-to-end encryption to ensure that only the sender and intended recipient(s) can access the message. This means that even the platform provider cannot read or access the content of the message. In addition, these platforms may use secure authentication and multi-factor authentication to ensure that only authorized users can access the platform and its features

II. LITERATURE REVIEW

1.A Study on the Adoption of Private Network File Sharing and Messaging Platforms (2018)

This study examines the factors that influence the adoption of private network file sharing and messaging platforms in organizations. The study identifies factors such as perceived usefulness, ease of use, security, and compatibility as key determinants of adoption. The study concludes that organizations that prioritize security and privacy are more likely to adopt private network file sharing and messaging platforms..

2.A Comparative Analysis of Private Network File Sharing and Messaging Platforms (2019)

This study compares four different private network file sharing and messaging platforms, namely Slack, Microsoft Teams, Zoom, and Wire. The study evaluates these platforms based on their features, security, and usability. The study concludes that Wire is the best option for private network file

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FOOD RECOMMENDATION SYSTEM

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Abstract. This paper provides an overview of food recommendation systems, which are software programs that suggest food items to users based on their individual preferences, dietary restrictions, and other relevant factors. These systems use machine learning algorithms to analyse user data and provide personalized recommendations.

With the increasing demand for personalized services in the food industry, food recommendation systems are becoming more popular, as users have access to a wealth of data on digital platforms and mobile applications, including nutritional information, reviews, and ratings. The potential impact of food recommendation systems is significant, as they can help users discover new cuisines and restaurants that they might not have otherwise considered. Finally, the paper suggests future research directions in the field of food recommendation systems.

Food recommendation systems are an important area of research due to their potential to revolutionize the food industry by offering personalized services to consumers. These systems leverage the power of machine learning algorithms to analyse vast amounts of data and provide tailored recommendations that cater to individual needs and preferences.

I. INTRODUCTION

A food recommendation system is an online tool that offers customized food suggestions to users based on their dietary preferences, restrictions, and other relevant factors. As online food ordering and delivery services continue to grow in popularity, food recommendation systems have become increasingly important in guiding users towards informed food choices.

These systems rely on artificial intelligence techniques and machine learning algorithms to analyze user data and generate relevant recommendations. They consider factors such as food preferences, nutritional requirements, past orders, and reviews to provide personalized suggestions.

Food recommendation systems benefit not only consumers but also restaurants and food delivery services. By offering tailored recommendations, these systems can enhance customer satisfaction, increase loyalty, and boost sales. However, data quality and user privacy are key challenges that must be addressed.

Food recommendation systems are designed to provide users with a personalized experience that takes into account their individual preferences and requirements. They can help users discover new dining options, navigate complex menus, and make healthier choices. By analyzing data such as past orders and reviews, these systems can offer relevant suggestions that align with user preferences and dietary restrictions.

II. LITERATURE REVIEW

[1] "Food Recommendation Using Deep Learning: A Review" by Zahraa S. Mohammed et al. (2020) - This review paper provides an overview of recent developments in the field of food recommendation systems, with a focus on deep learning techniques. The authors discuss the challenges of food recommendation, such as data sparsity and the subjective nature of food preferences, and examine the effectiveness of various deep learning models for addressing these challenges.

[2] "A Hybrid Food Recommender System Using Collaborative Filtering and Content-Based Filtering" by Aditi Sharma et al. (2020) - This paper proposes a hybrid food recommendation system that combines collaborative filtering and content-based filtering techniques. The authors evaluate the effectiveness of the system using a dataset of food reviews and demonstrate that the hybrid approach outperforms both collaborative filtering and content-based filtering methods.

[3] "Personalized Food Recommendation Based on User Preference and Health Condition" by Yuwen Li et al. (2020) - This paper presents a personalized food recommendation system that takes into account both user preferences and health conditions. The authors use a dataset of food reviews and nutritional information to generate personalized recommendations based on the user's dietary requirements and food preferences.

[4] "A Survey of Food Recommender Systems: Challenges and Opportunities" by Ilaria Torre et al. (2018) - This survey paper provides an overview of the challenges and opportunities in the field of food recommendation systems. The authors discuss the various approaches and techniques used in food recommendation.

space model is then utilized by the recommendation system to generate personalized recommendations based on the user's preferences and history.

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BIG MART SALES PREDICTIVE ANALYSIS USING MACHINE LEARNING

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ABSTRACT: *This project aimed to improve the sales forecasting abilities of Big Mart, a popular retail chain, by creating a predictive analytics model using machine learning algorithms such as XG Boost, linear regression, and time series methods. By analysing historical sales data, the model enabled Big Mart to optimise inventory levels and reduce carrying costs, while also identifying opportunities to improve sales and profitability by adjusting pricing strategies. The use of an interactive dashboard provided decision-makers with real-time access to data on sales success metrics, facilitating data-driven choices that increased revenue. The study demonstrates how machine learning and data analytics can enhance the retail sector's growth and profitability, and its findings are expected to be of great value to retail industry decision-makers. Future research may explore additional algorithms and datasets to further improve the accuracy and effectiveness of sales forecasting.*

Keywords: *Revenue optimization, Linear Regression, XG Boost, Data Visualization.*

1. INTRODUCTION

Because of the intense competition in the retail sector, businesses must constantly develop and streamline their processes to stay lucrative. Sales forecasting, which can assist merchants in anticipating demand, optimising pricing strategies, and enhancing inventory management, is one important area of emphasis. Leading retail company Big Mart has recognised the need to enhance its capacity for sales forecasting to promote development and prosperity.

This project seeks to create a predictive analytics model that makes use of machine learning algorithms to anticipate sales based on past data in order to achieve this. Big Mart can optimise its inventory levels, lower transportation costs, and boost customer happiness by ensuring that goods are constantly accessible on store displays by correctly forecasting future sales.

In order to further increase sales and revenue, the initiative also seeks to address pricing errors by finding chances to modify rates in response to demand patterns. Additionally, the creation of a dynamic interface will give decision-makers instantaneous access to information about sales success measures, empowering them to take data-driven actions that will increase revenue. Big Mart could gain a lot from this endeavour overall, including better product control, improved pricing tactics, and higher levels of client happiness.

2. LITERATURE REVIEW

2.1 Machine Learning-Based E-Commerce Sales Forecasting

Zhu, Liu, and Shi examine the application of machine learning methods for predicting e-commerce purchases in a Case Study. The efficacy of various machine learning models, such as deep learning, gradient boosting, linear regression, and random forests, is compared in the authors' case study of an actual e-commerce platform. In terms of forecasting precision, they discover that the gradient boosting model works better than the other models and offers insights into the characteristics that are crucial for predicting sales.

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EXCEL PREPARER USING OPTICAL CHARACTER RECOGNITION TECHNIQUE

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Abstract. Optical individual popularity (OCR) is the procedure of extracting textual content from an photo. The main motive of an OCR is to make editable documents from current paper documents or photograph files. Significant number of algorithms is required to develop an OCR and basically it works in two phases such as character and word detection.

An OCR also works on sentence detection to maintain a report's shape. It's been determined that researchers positioned masses of efforts for developing a Bengali OCR but none of them is completely mistakes free. To take this difficulty in consideration, the state-of-the-art three.03 model of Tesseract OCR engine for windows operating gadget is used to broaden an OCR for Bengali language.

Furthermore, 18110 characters and 2617 words are used to make the OCR's library. in this research, 'Solaimanlipi' font and 2 hundred enter files are used to check the accuracy of OCR. It is discovered that for easy image documents, the accuracy of the software program is as high as ninety seven fifty six percentage. It's miles to be mentioned that accuracy is measured as the percentage of accurate characters and phrases.

I. INTRODUCTION

Optical man or woman recognition (OCR) is the system which enables a gadget to without human intervention identifies the scripts or alphabets written into the users' verbal conversation[1].Optical man or woman identity has grown to be person of the particularly flourishing applications of understanding in the subject of pattern detection and synthetic intelligence[2].In our survey we have a look at on the various OCR techniques. On this paper we solve and examine the hypothetical and numerical fashions of Optical man or woman identification.

The Optical man or woman identity or category (OCR) and Magnetic person recognition strategies are generally utilized for the popularity of styles or alphabets[3]. In preferred the alphabets are inside the sort of pixel pix and it may be both handwritten or stamped, of any collection, shape or direction and many others[4]. Rather in OCR the alphabets are stamped with magnetic ink and the reading system categorizes the alphabet on the idea of the different magnetic area this is formed via every alphabet. Each OCR and Optimized OCR find out utilization in banking and exclusive change home equipment.

Earlier exploration occurring Optical character detection or recognition in Handwritten textual content there may be no quandary lying at the script approach[5].Hand written correspondence is complicated to be acquainted via due to numerous human handwriting fashion, disparity in perspective, size and shape of calligraphy[6].An assortment of procedures of Optical person identification is discussed right here all along via their achievement.

The instances departed by allow distinguish us that OCR understanding has been constructed with the aid of masses of researchers over a long time frame, consisting unreservedly of spectacular like a worldwide human research network[7]. In such an imperceptible dialogue, humans have made efforts, with "antagonism and collaboration," to boost the studies effort. In this manner, international symposiums and inductions are being determined to stimulate the improvement in the area. For instance the worldwide induction on Frontiers in Handwriting detection and the global dialogue on article psychoanalysis and reputation willpower play an evidence mission within the intellectual and depend-of-reality arena.

II. LITERATURE REVIEW

Berenguer, A.,[8] Identity files automated studying and verification is an appealing technology for in recent times provider enterprise, considering that this project is still normally achieved manually, leading to waste cutting-edge monetary and time resources. In this paper the prototype ultra-modern a novel computerized reading system present day identity documents is offered. The gadget has been notion to extract statistics contemporary the main Italian identity documents from pictures modern day suitable best, like the ones typically required to on-line subscribers state-of-the-art diverse services. The report is first localized in the picture, and then categorized; eventually, textual content popularity is completed. A synthetic dataset has been used, each for neural networks schooling, and for overall performance assessment modern-day the gadget. The artificial dataset prevented privacy issues related to the

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OPTIMIZING SHARE SIZE IN EFFICIENT AND ROBUST SECRET SHARING SCHEME FOR BIG DATA

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ABSTRACT:

These days, Smooth Projective Hash Capabilities (SPHFs) assume a significant part in developing cryptographic apparatuses, for example, secure Secret phrase based Verified Key Trade (PAKE) convention in the standard model, careless exchange, and zero-information evidences. In particular, in this article, we center around developing PAKE convention; that is, a sort of key trade convention which needs just a low entropy secret phrase to deliver a cryptographically solid shared meeting key. Distributed computing in the ongoing scene faces many difficulties in the security side. So as a section in this work cloud clients can have the option to trade their documents (for example text design) securely. With information capacity and sharing administrations in the cloud, clients can undoubtedly change and offer information collectively.

Keywords: SPHF, PAKE, PDP

1.INTRODUCTION

Distributed storage is a help where information is somewhat kept up with, made due, and supported up. Distributed computing, another sort of Web based registering, gives advantageous, on-request network access. Provable Information Ownership (PDP) checks the information uprightness by testing arbitrary arrangements of blocks. Limit the size of offers expected to address the first restricted information without compromising the security and strength of the plan. Guarantee that the mystery sharing plan can deal with a lot of information, empowering the conveyance of privileged insights over disseminated frameworks. Improve the vigor of the mystery sharing plan by consolidating issue open minded highlights that can recuperate the first information even within the sight of blunders or assaults.

2.LITERATURE REVIEW

2.1 A VIEW OF CLOUD COMPUTING

In this work, M.Armbrust, A. Fox, R. Griffith, et.al has proposed Distributed computing, the long-held fantasy about processing as a utility, can possibly change a huge piece of the IT business, making programming considerably more alluring as a help and forming how IT equipment is planned and bought. Designers with imaginative thoughts for new Internet providers never again require the enormous capital costs in equipment to convey their administration or the human cost to work it. Distributed computing alludes to both the applications conveyed as administrations over the Web and the equipment and frameworks programming in the server farms that offer those types of assistance.

2.2 PROVABLE DATA POSSESSION AT UNTRUSTED STORES

In this work, G Ateniese, R. Consumes, et.al has proposed provable information ownership (PDP) that permits a client that has put away information at an untrusted server to confirm that the server has the first information without recovering it. The model creates probabilistic evidences of ownership by testing arbitrary arrangements of blocks from the server, which radically diminishes I/O costs. The client keeps a steady measure of metadata to confirm the verification. The test/reaction convention sends a little, steady measure of information, which limits network correspondence. Provable Information Ownership (PDP)

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Efficient Medical Data Transmission in Mobile Hospital Systems with Wireless Body Area Network

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Abstract: Wireless Body Area Networks (WBANs) are expected to play a major role in the field of patient-health monitoring shortly. One of the challenges is to establish secure communication architecture between sensors and users, whilst addressing the prevalent security and privacy concerns. In this paper, we propose communication architecture for BANs and design a scheme to secure the data communications between implanted /wearable sensors and the data sink/data consumers (doctors or nurses) by employing Cipher text-Policy Attribute-Based Encryption (CP-ABE) and signature to store the data in cipher text format at the data sink, hence ensuring data security. Our scheme achieves a role-based access control by employing an access control tree defined by the attributes of the data. We also design two protocols to securely retrieve the sensitive data from a BAN and instruct the sensors in a BAN. We analyze the proposed scheme and argue that it provides message authenticity and collusion resistance, and is efficient and feasible. We also evaluate its performance in terms of energy consumption and communication/computation overhead.

Keywords: *Wireless Body Area Networks, Encryption, data sink, secure data communication.*

1. INTRODUCTION

Wireless Body Area Networks (WBAN) comprise the body sensor nodes placed in the human body to gather and monitor patient data. Cryptographic procedures help in changing the original data into inconceivable information. Sensor hubs are extremely restricted in computational limits, memory, and power. The rapid advancement in the Internet of Things (IoT) has brought significant improvements in human life. IoT enables a connection between interrelated computing devices with the Internet that gathers information over the network without any person-to-person or person-to-computer interaction. It has broader applications, like wireless sensor networks, smart homes, smart transportation, intelligent healthcare systems, etc. Among these, the wireless body area network (WBAN) has become an essential application in the healthcare ecosystem. WBANs are useful in short-distance communication that consists of wearable sensor nodes responsible for monitoring the patient's health-related sensitive information such as heartbeat rate, body temperature, blood pressure, blood sugar, oxygen level, etc. This technology provides a high-quality convenient and reliable service using IoT devices.

2. LITERATURE REVIEW

2.1 Krithick J G, Nivedh T S, Siva Bharath S et al(2022) proposed to the IoT network facilitates healthcare data transmission for remote medical treatment, explored security risks related to unsecured

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VEHICLE BREAKDOWN ASSISTANCE MANAGEMENT SYSTEM

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Abstract- *Daily travel has become a common occurrence for everyone. We utilise many sorts of vehicles for transportation. A machine is not supposed to last forever, and due to regular use and testing under varied situations, it is bound to experience malfunctions of some form. Several malfunctions can be fixed on the spot by the user. When a vehicle breaks down on the road, many individuals have trouble finding help. These issues served as the impetus for the creation of this project, which would assist those in need when their vehicle breaks down on a road. The goal is to create a Django application that will enable users to access nearby resources and request assistance through the application.*

Keywords :*malfunctions, Django application, assistance*

I. INTRODUCTION

Everyone has enjoyed travelling, which is a wonderful experience. We therefore prepare ahead of time, although our cars may experience issues as a result of unforeseen circumstances. The programme will determine the closest mechanic workshop or garage based on the user's current location and list all other mechanic shops in ascending order of distance from the user. When a vehicle breaks down, a number of different things might go wrong and result in accidents, injuries, and even fatalities. Getting assistance from someone with extensive practical knowledge of vehicles can save your life in such circumstances. The Automobile Breakdown Service Station Finder provides precise details on nearby garages or workshops in a certain area, enabling users to minimise travel time. the length of time required to seek out the mechanics' garage after the incident. The mechanics in the neighbourhood have collaborated to our research, and in some instances, we have gathered their data. They offered details like their phone number, the shop's owner, its address, the kinds of services they offered, when the shop first opened, etc. If a person wants to access this online application for the initial time, they should register; otherwise, they can just log in. After finishing the registration procedure, the user will get an email as a confirmation with a link to authenticate their account. The Dashboard opens after signing in, and the user must update their location there. The user's location and any local retailers are highlighted. Dijkstra's Algorithm is used to access information about the adjacent mechanic shop based on the user's current site. In order to reach the destination, the user might proceed along the path.

II. LITERATURE REVIEW

The user must provide their location, and information about the neighbourhood is based on distance calculations made by Google Maps and shown as messages. EMI calculators are also available. Before requesting a service, it is verified that the user is not an automated system; if they are, their request is refused. In accordance with the user's needs, it is automatically inserted when they want it. According to the circumstances, the customer's needs alter.

[1] The method starts by letting the people enroll for the website using both the normal registration form and Gmail. After then, it is displayed on a Google map based on the user's current site. Moreover, the website offers Login and Registration, and data is stored in Google's Database server. Maps are used to observe the garages and determine if the mechanics are at work or not.

[2] The system begins with the client, where an issue emerges and the specifics of the involved car are logged for service and preserved. The local mechanic shop will also receive login credentials along with these details. The mechanic will receive a list of client service requests based on the shortest distance algorithm. The data will be

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FORECASTING RAINFALL WITH MACHINE LEARNING

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ABSTRACT:

Rainfall is one of the most destructive natural disasters and is extremely difficult to model. As a result, a numerical analysis model based on a hydraulic theory and a machine learning algorithm were combined to produce a classification-based real-time rainfall prediction for the ground truth model. Using a two-dimensional inundation model and the environmental protection agency's storm model, the rainfall dataset is built in advance for various rainfall scenarios. The rainfall depth data for each map grid are divided by year based on the average rainfall prediction based on ground truth. If the observed rainfall is entered, a model is built to predict the representative cumulative volume. Rainfall-accuracy based on the actual situation in the proposed ADA SVM, ADA NB, MLP, and J48 algorithm.

Keywords: *ADA SVM,ADA NB,MLP, AND J48 ALGORITHM*

1. INTRODUCTION

The recent regional effects of climate change are increasing the frequency and intensity of heavy rainfall, which frequently damages urban areas. In recent years, there has been a rapid rise in the frequency of heavy rainfall events with intensities exceeding 30 mm/h, compared to the 1980s. likelihood of damage from urban rain. As a result, there is a growing demand for real-time urban rainfall forecast and warning services that can help people make good decisions in response to rainfall ground truth prediction in urban areas. Event-driven, empirical black box, lumped and distributed, stochastic, deterministic, continuous, and hybrids are just a few of the specific techniques that these models can use to imitate the intricate mathematical expressions of physical processes and basin behavior. The construction of the relationship between the cumulative rainfall and the representative cumulative volume using a neuron-fuzzy model and the spatial expansion of the predicted representative cumulative volume using a regression equation form the foundation of the classification-based real-time rainfall

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AGRICULTURE CROP RECOMMENDATION BASED ON PRODUCTIVITY AND SEASON

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ABSTRACT: *Ranchers used to enlist informal, but due to climate conditions; they could now not do as such. Horticultural variables and boundaries are utilized to offer realities that might be utilized to study more prominent roughly Agri-realities. Horticultural issues like yield forecast, revolution, water necessity, compost prerequisite and wellbeing might be addressed. Because of the climate's fluctuating climatic elements, a green strategy to sell crop development and help ranchers of their assembling and control is required. As a beach front state, Tamil Nadu faces vulnerability in horticulture which diminishes its creation. Rural variables and boundaries make the information to get bits of knowledge about the Agri-realities.*

Development of IT world drives a few features in Horticulture Sciences to assist ranchers with great rural data. AI Strategies fosters a distinct model with the information and assists us with achieving expectations. Agrarian issues like yield forecast, revolution, water necessity, compost prerequisite and insurance can be settled. Because of the variable climatic elements of the climate, there is a need to have an effective method to work with the yield development and to help out the ranchers in their creation and the board. This might assist forthcoming agriculturalists with having a superior horticulture. Arrangement of suggestions can be given to a rancher to assist them in crop development with the assistance of information mining. To carry out such a methodology, crops are suggested in view of its climatic elements and amount. Information Examination clears a method for developing helpful extraction from horticultural data set. Crop Dataset has been dissected and suggestions of yields are done in view of efficiency and season.

Keywords: *Climatic conditions, forecasting, Horticulture, Crop prediction.*

1.INTRODUCTION

Farming sizably affects a nation's economy Agribusiness cultivating is weakening because of changes in natural elements. presently a-days. Agribusiness is immediately animated through factors which incorporate daylight, stickiness, soil type, precipitation, most and insignificant temperatures, environment, manures, pesticides, etc. Information on right yield reaping is required for agribusiness to flourish. Tamil Nadu being seventh biggest region in India has sixth biggest populace. It is the main maker of horticulture items. Horticulture is the principal control of Tamil Nadu individuals. Farming has a sound tone in this com putative world. Cauvery is the principal wellspring of water. Cauvery delta districts are called as rice bow l of Cap il Nadu. Rice is the significant yield filled in Tamil Nadu. Different yields like Paddy, Sugarcane, Cotton, Coconut and groundnut are developed. Bio-composts are created proficiently. Numerous regions Cultivating goes about as significant wellspring of occupation. Horticulture has a sensational effect in the economy o f a country. Because of the difference in regular variables, Horticulture cultivating is debasing now-a-days. Horticulture straightforwardly relies upon the ecological factors, for example, daylight, moistness, soil type, precipitation, Adage um and Minim um Temperature, environment, manures, pesticides and so on. Information on legitimate collecting of yields is deprived to sprout in Agribusiness. India has seasons ofW entomb which happens from December to M curve 2. Summer season from April to June 3. Rainstorm or blustery season enduring from July to September and 4.

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ONLINE COURSE IN-ACTIVE STUDENTS PREDICTION

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Abstract. Virtual Learning Environments (VLEs), Learning Management Systems (LMS), and Massive Open Online Courses (MOOCs) are just a few of the online learning platforms that make it possible for thousands or even millions of students to learn according to their interests and without being restricted by time or space. Online learning platforms have many advantages, but they also face a number of disadvantages, such as students' lack of interest, high dropout rates, low engagement, self-regulation, and being forced to set their own goals.

In this study, we propose a predictive model that looks at the issues that at-risk students face and then makes it easier for teachers to intervene quickly to get students more engaged in their studies and better performing. Various machine learning (ML) and deep learning (DL) algorithms are used to train and test the predictive model to determine how students learn based on their study variables. The accuracy, precision, support, and f-score are used to compare the performance of various ML algorithms.

In the end, the ML algorithm with the highest f-score metric, accuracy, precision, recall, and support is chosen to create the predictive model at various percentages of course length. Instructors can use the predictive model to identify students who are at risk early in the course, allowing for prompt intervention and avoiding student dropout. Our findings demonstrated the significance of time-dependent variables, students' assessment scores, engagement intensity, or click stream data, and online learning.

I. INTRODUCTION

Statistics are used in predictive modeling to predict outcomes. Predictive modeling can be applied to any kind of unknown event, regardless of when it occurred, despite the fact that the event one wishes to predict is typically in the future.

For instance, crimes are frequently detected and suspects are identified using predictive models after they have occurred. A lot of the time, the model is chosen based on detection theory to try to figure out the likelihood of an outcome given a certain amount of input data. For instance, if an email is given, how likely is it to be spam? Classifiers can be used by models to try to figure out how likely a set of data is to belong to another set. For instance, a model may be utilized to decide if an email is spam or "ham" (non-spam). Predictive modeling is more commonly referred to in academic or research and development contexts as either synonymous with or largely overlapping with the field of machine learning, depending on definitional boundaries. Predictive modeling is frequently referred to as predictive analytics when it is used for business purposes.

II. LITERATURE REVIEW

[1] Xyang et al., Mushtaq Hussain, has suggested. The student's performance prediction is an important research topic in this system because it can help teachers identify

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Design of 16 Stack Micro Strip Patch Antennas Using for Millimeter Wave Applications

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Abstract- **An antenna is made of dielectric material and fixed on a ground plane, which serves as the structure's support. Feed wires connecting through the patch are also used to excite the antenna. Telemedicine and biomedical applications both allow for the usage of microstrip patch antennas. There are 16 stacks of micro strip patch antennas in this variant. The 16-stack micro strip patch antenna can be installed (or patched) in an insulating substance. The patch can be put in a patchwork pattern on the upper side. Let's say that if there was a technical mistake made when measuring the wave, it could be fixed. Measurements are made of the antenna's VSWR, Gain, Directivity, S-Parameters, and Radiation Pattern. Wave splitting and loss are examined and corrected in the microwave frequency range. AnsysHFSS software programme is used for microwave applications such global positioning satellite (GPS) systems, radio frequency identification, mobile communication, and healthcare to construct 16 stack micro strip patch antennas at 48–60 GHz.**

Keyword: **Millimetre wave antenna, microstrip patch antenna, ANSYS HFSS 19.0 version tool.**

I.INTRODUCTION:

Microstrip patch antennas are currently used by many people. Due to its low profile, light weight, compact and price effective. At present wireless communication systems, with specified bandwidths are utilized for a worldwide system for mobile communication, digital communication. System, personal communication system, and universal mobile telecommunication system. Various designs are proposed Within the literature to enhance the band Width, gain of microstrip patch antenna which incorporates the use of Thicker substrates, different shape patch and probes, addition of substrate [1]–[16]. In our case we are presenting various useful band Width enhancing stacked configuration of patch antennas which are ready to provide broad gain.

II. LITERATURE SURVEY

Stacked Multiple Slot Microstrip Patch Antenna for Wireless Communication System

microstrip antennas, this part discusses the literature review on microstrip patch antennas. The research reveals that the several distinguishable benefits of microstrip patch antennas include their light weight, low cost, low profile, planar configuration, simple conformity, greater portability, suitability for arrays, ease of production, and simplicity of integration with external circuitry, among others.

Although the standard microstrip antenna has numerous benefits, it also has three main drawbacks: a narrow bandwidth, poor gain, and a relatively large size. These drawbacks frequently have a negative effect on the efficiency of the antennas.

EXISTING METHOD:

SINGLE STACKED MICROSTRIP ANTENNA

Antennas are based on transmission or reception of electromagnetic waves. Microstrip antennas have several advantages over conventional microwave antenna and therefore are used in a variety of practical.

A microstrip patch antenna (MPA) consists of a conducting (metallic patch on a thin, grounded dielectric substrate) patch of any non-planar or planar geometry on one side of a dielectric substrate and a ground plane on other side. It is a printed resonant antenna for narrow-band microwave wireless links requiring semi-hemispherical coverage. Due to its planar configuration and ease of integration with microstrip technology, the microstrip patch antenna has been widely utilized. The rectangular and circular patches are the basic and most commonly used microstrip antennas.

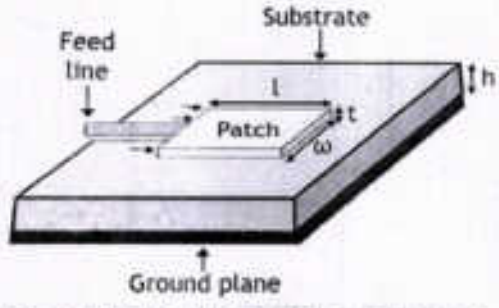

Figure 1 Single stack microstrip patch antenna

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DOUBLE RIDGE HORN ANTENNA DESIGN FOR MICROWAVE X-BAND APPLICATIONS

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Abstract- **The double ridge horn antenna is a versatile and efficient antenna that is well suitable for a wide range of microwave applications due to its high performance and reliability. The microwave applications are satellite communication, radar systems and microwave imaging. The antenna consists of a flared horn with two ridges along the inner walls, which creates a more complex electromagnetic field and enhances the radiation pattern. In this Design FR-4 Epoxy Substrate is used because of Good Electrical Properties such as low dielectric constant and low loss tangent. The Ansys HFSS software tool is used to design the double ridge horn antenna in the frequency range 4-8GHz and 8-12GHz to analyse the performance of the antenna comparisons are made with the different set of frequency range.**

I. INTRODUCTION:

DOUBLE RIDGE HORN ANTENNA:

In anechoic chambers, the Double Ridge Horn Antenna is most frequently used to evaluate an antenna from the S Band to the Ku Band, because of its consistent performance over a large frequency range. The ridge structure is added to the waveguide segment and the horn antenna, giving the waveguide the characteristics of a ridge waveguide. A coaxial feed joint, a waveguide portion, a horn section, and double ridge make up the double ridge horn antenna's structure. DRHA's design has been improved by adjusting the ridges to lessen edge diffraction. Higher operating frequency is where the DRHA is applied by Trendley in telecommunications, radar, and other sensing applications. The DRHA is primarily employed in weather sensing for critical military applications.

EXISTING METHOD

The electromagnetic waves are generally transmitted and received over the antennas. The Double Ridge Horn Antenna have several advantages and reliable performance in a wideband frequency range. The Double Ridge Horn Antenna consists of a waveguide feed, horn shaped antenna and ridges. The E-plane section is divided into two parts namely Feed part and the Horn part. The feed path contains the transition of coaxial waveguide, which consists of a coaxial line with impedance. The horn section consists of a rectangular waveguide with a gradually opened cross section and two exponentially tapering ridges.

Ridge waveguide is formed by introducing the ridge structure into the normal waveguide based on the initial antenna structure. A wedge-shaped structure is introduced into the feed structure, The H-plane sidewall is replaced with a metal grid. The structure of final antenna with radiation characteristics and good matching is obtained. After redesigning the transition between the coaxial and waveguide, there is no splitting or deterioration in the axis pattern in the entire frequency band (18-54 GHZ) AND THE Voltage Standing Wave Ratio (VSWR). A Double Ridge Horn Antenna is designed and the various parameters are measured. The advantages of this DRHA is it have minimal mechanical errors and widely used in millimetre wave applications

PROPOSED SOLUTION

The Double Ridge Horn Antenna is used in radar systems, telecommunication networks. The splitting of radiation is completely solved and

it provides an effective and feasible feature in the microwave frequency band. In lower frequency ranges, the radiation pattern of the both E and H planes were seen to be distorted, the radiation pattern distortion will be solved and the radiation is observed. The performance of this antenna in the range of half bandwidth is also measured for the better performance of the antenna. Then the physical parameters of the antenna such as VSWR, Gain, Radiation pattern and performance were measured. The physical geometry is used in the design, the physical size of the structures and the material qualities from which they produced are all the factors that limit the double ridge horn antenna performance. The double ridge design is used in this research for its bigger size, wider bandwidth than other antenna types. The essential parameters are calculated optimizing in a way that ensures low power consumption.

II. DOUBLE RIDGE HORN ANTENNA DESIGN:

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POLYHOUSE AUTOMATION AND ENVIRONMENT MONITORING SYSTEM USING ARDUINO PLATFORM

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Abstract : The proposed system uses a low-cost and more efficient programmable module to determine the climate behavior inside the greenhouse and the to control the parameters according to the growth needs to create Polyhouse controlled smart environmental zones for growing plants, aim for the design consists of a system that uses an Arduino UNO board to monitor and control soil moisture, temperature, and moisture content. The processes the data collected by the sensors and take necessary actions. The proposed system also allows users to control and receive notifications from the polydome environment using the IoT module.

Keywords: Polyhouse, Monitoring and control through internet

I. INTRODUCTION

A greenhouse is a structure, usually made of glass or clear plastic, in which crops are grown. The main purpose of the greenhouse is to provide a protected environment for the crops to grow while allowing natural light to pass through. Following this description, the Greenhouse Management System helps control critical parameters within the greenhouse. In India, greenhouse technology is also applied in many places. Plant species are grown in the greenhouse, including apples, strawberries, pears, persimmons, roses, and tomatoes. These plant varieties require cool temperatures and moderate humidity to grow perfectly. Due to India's high humidity and hot weather, it is very difficult to grow crops such as those mentioned above year after year. So, the greenhouse technology is definitely applicable to achieve these goals in India. Except for here, this technique is much more common in eastern countries where is associated with the change of seasons. To do this, you must apply technology to control the surrounding area. For example, lilac bushes commonly grown in European countries using greenhouse technology to increase yields increase profits. Greenhouse climate control to improve the development of certain crops and minimize production costs is becoming increasingly important to growers. Over the past few decades, greenhouse management systems have evolved significantly, where sensors are used to measure a variety of information about the environment. The existing control system has been upgraded mainly on a wired basis. For wired options, expansion options make the system relatively easy to install and increase the cost of maintaining the wiring. A large greenhouse also requires wires to complete the control system. A typical greenhouse control system mainly controlled environmental factors such as temperature and humidity inside the greenhouse. This is important data as it strongly influences the growth of plants. However, tracking the detailed growth status of crop requires more accurate and versatile data than simply temperature and humidity. Monitoring the crop itself is therefore just as important as monitoring the indoor environment.

II. LITERATURE SURVEY

"A Mobile Greenhouse Environment Monitoring System Based on the Internet of Things" was proposed in the year 2019. The proposed system uses the IoT Techniques to collect the various physical parameters inside the green house and update's the data to the user via the Node MCU Module. "Advances in greenhouse automation and controlled environment agriculture: A transition to plant factories and urban agriculture" was proposed in the year 2018.This system uses the principle of Controlled Environment Agriculture (CAE) to serve opportunities for the efficient control system for vertical farming, rooftop greenhouses and plant factories. "IOT Based environment change monitoring &controlling in greenhouse using WSN" was proposed back in the year 2018. This system uses the WSN system to Monitor the Greenhouse. "Real-time Soil Monitoring System for Agricultural Applications" was proposed in Maharashtra in 2016. The proposed system provides a real-time soil monitoring system using soil moisture inside the greenhouse. "A wireless system for measuring and monitoring temperature and humidity used in greenhouses" was proposed in 2019. The system uses more sensor nodes, repeat nodes, one master node, a PC terminal, MYSQL, web service

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Utilizing OCR to Retrieve Text from Identity Documents

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Abstract: *Nowadays, automatic information extraction can offer a big boost in efficiency, accuracy, and speed in all those business processes where data capture from documents plays an important role. Feeding enterprise information systems with data coming from documents often requires manual data entry that is a long, tedious, and error-prone job. Therefore, automating data entry can save a lot of time and speedup the execution of business processes allowing employees to focus on core and more valuable aspects of their daily activities. Organizations in all industries may require to process myriads of documents with a variety of formats and contents. Such documents are often digitized as images and then converted to text format. This work addresses the text recognition task for identity documents. In particular, identity documents are paramount in business processes related to customer subscription and on boarding where users frequently submit photos taken by smartphones or poor-quality scanned images that are blurred, unclear and with very complex framing angles can be bring off by this process. The text recognition method present in this work is based on transfer learning and Scene Text Recognition (STR) networks. In this project, user can explore how to extract text from a image. In addition, a method to convert multiple images into editable string format with in single click.*

Index Terms: *Introduction, Literature Survey, Existing & Proposed Method, Software & Design Flow, Feasibility Study, Modules, Algorithm, Problem Definition & System Testing, Experimental Result.*

I. INTRODUCTION

A. Introduction

Optical Character Recognition (OCR) is a process that allows a system to recognize the script or characters written in a customer's conversation without human intervention. Optical recognition of men and women has become one of the fastest growing intelligent applications of pattern detection and artificial intelligence. Explore the different OCR methods in our survey. In this article, we describe a hypothesis and numerical system for visual identification of males and females. Individual OCR (Optical Class Recognition) and MCR (Individual Magnetic Reputation) techniques are commonly used to identify patterns or scripts. In standard, the alphabet can be handwritten or stamped as an extension of the pixel pix, and can be of any series, shape, etc. Instead, in OCR, the alphabet is printed in magnetic ink and learners sort the alphabet. According to the unique magnetic field formed by each alphabet. OCR and Optimized OCR are available for banks and selected exchanges. Previous studies of optical sensing, or people's prestige, have shown that there are no obstacles to handwriting methods. Familiarity with handwriting is difficult due to the diversity of human handwriting and differences in angle, size, and shape of calligraphy. A set of strategies for visually identifying a male or female during performance is invoked here. The reputation of being an optical male or female is one of the most glamorous and shocking areas of modeling reputation, with many practical applications. The rejection case demonstrates that the understanding of OCR has been built by many researchers over a long period of time, forming an excellent global network of candid human studies. In these nuanced conversations, people redoubled their "confrontational and collaborative" research efforts. Therefore, global workshops and initiatives for local improvement are planned. For example, global induction on the limits of handwriting detection and global conversations about article psychoanalysis and popularity ratings serve as explanatory parts in the realm of knowledge and confidentiality.

B. Introduction to OCR

Optical Character Recognition (OCR) is also known as text recognition. OCR programs extract and reuse data from scanned documents, camera images, and ID cards. OCR software extracts characters from images, combines them into words, and then combines words into sentences so you can access and edit the original content. It also eliminates the need for manual data entry. OCR systems use a combination of hardware and software to convert physically printed documents into machine-readable text.

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Design and Fabrication of Fish Feeding Drone

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Abstract

Drones have revolutionized many industries. Drones have been used for military purposes for decades and are now integral to commercial enterprises, leading to disruption in industries such as construction and agriculture. Notably, they have become essential in achieving sustainable agriculture, and are tasked with crop spraying and mapping to reduce the overuse of pesticides and fertilizers. Therefore, from these uses of drones we prefer the drone for the application for feeding to the fish farm. The conventional methods of supplying feed to fish farm are ineffective. It is better to find new an automatic feeder using drone saving pellets from crushing and cohesion without hitting pellets during feeding at a predetermined interval of time and an accurate amount of food with a larger surface area covered by pellets. Developing-country fish farmers use manual feeding to be more cost-effective than with costly mechanized feeding, The dispensed feed operated by a motor located underneath the pellet hopper and the feed material was discharged into the fish farm through a gate in the bottom of the feeder. Furthermore, the feeder used very little electricity and saving time, cost, labor, energy, and pellets.

Keywords: Design, fabrication, fish feeding drone.

1. Introduction

Drones are eyes in the sky for fish feeding. Now the fish feeding is very interesting thought for preparing it. The use of drone is to reduce the human work, which saves energy and time and it is easy to operate. Developing fish country farmers use manual feeding to be more cost effective. We use the feed carrier under the drone for spreading the feed. And, the feed carrier contains open close type valve under drone feed carrier and it is operated by remote controller. In this process does not need more employs. And it is easily operated by a single man. BLDC motor is used to help the drone for flying and it is fixed to the wings for flying. We do not want to roam around the pond shore for feeding, we can stand at the place and can operate controller to feed around the pond. By this we can save energy and not much peoples are required for this process by this it is cost wise very help process. Further imagine that you are raising it, those gentle fish that are favorites of many ponds and aquariums.

2. Review of Literature

The extensive literature survey will help to understand the concept, the theorems and the different factors that influence the drone's performance. Before starting our work, we had viewed many research papers which indicates that for rescue-based drone installation is a crafty and a skillful task many factors associated with it such as power consumption time required, maintenance cost, number of units produced per drone etc.

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Fabrication of Portable Green Energy Mobile Laptop Charging Station

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Abstract

People usually run out of phone and laptop charging while travelling. At such times there is literally no way of charging your phone laptop in an outdoor environment. Well we hereby solve this problem with a green energy system using a dual power generator solar plus wind energy charging system for mobile phones and laptop. Windmill is an essential product in non-renewable energy sources. When we are going with a windmill, it should produce an optimum output, when we get optimum output it will be cheaper than the conventional sources. So here we have done an efficient wind mill controller which turns to maximum air velocity position. And another two setups where rain water power generation and solar power generation process. Nowadays power demand is more. So this project has developed to generate the electrical power in order to compensate the electric power demand. This project is designed with fan arrangement, solar panel, dynamo, and gear arrangement, turbine, funnel and control unit.

Keywords: Design, fabrication, portable green energy, charging station, mobile laptop.

1. Introduction

Wind result from air in motion. Air in motion arises from a pressure gradient. On a global basis one primary forcing function causing surface winds from the poles toward the equator is convective circulation. Solar radiation heats the air near the equator, and this low density heated air is buoyed up. At the surface it is displaced by cooler more dense higher pressure air flowing from the poles. In the upper atmosphere near the equator the air thus tend to flow back toward the poles and away from the equator. The net result is a global convective circulation with surface wins from north to south in the northern hemisphere. It is clear from the above over simplified model that the wind is basically caused by the solar energy irradiating the earth. This is why wind utilization is considered a part of solar technology.

It actuality the wind is much more complex. The above model ignores the earth's rotation which causes a coriolis force resulting in an easterly wind velocity component in the northern hemisphere. There is the further complication of boundary layer frictional effects between the moving air and the earth's rough surface. Mountains, trees, buildings, and similar obstructions impair stream line air flow. Turbulence results and the wind velocity in a horizontal direction markedly increase with altitude near the surface.

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Design and Fabrication of Frictionless Electricity Generator using Drive Shaft of Electric Vehicle

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Abstract

The problem of power generation is one of the key worldwide challenges that requires a high degree of scientific reasoning and a thorough understanding of energy sources. A vehicle's driveshaft can produce energy, which can be used to replenish batteries or power a hybrid engine. The driveshaft that generates electricity is composed of coils of copper wire that wrap around the magnetised driveshaft, which acts as the rotor of an electrical generator.The magnetic driveshaft rotates as a result of the power of the hybrid engine, producing an electrical field that is captured by copper wire coils and used to run the hybrid engine or recharge a super capacitor. Its circular motion produces an EMF and magnetic field in the coil in accordance with Faraday's law of electromagnetic induction.

Keywords: Drive shaft, engine, coils, hybrid, electricity, wire, generator, rotor, recharge.

1. Introduction

Electric and hybrid electric vehicles (EV/HEV) are practical choices for the preservation of fossil fuels and the reduction of emissions for a safe environment and sustainable transportation. So, we will increase the electrical vehicle's efficiency by converting the mechanical energy of the drive shaft into electrical energy, which will then be stored in a different battery and made readily available for usage as needed. Vehicles have been powered by a wide range of sources over the years. Before the internal combustion engine was invented, vehicles were powered by animals, the wind, and human labor. Since the invention of the internal combustion engine, fuels used in vehicles have included gasoline, diesel oil, natural gas, ethanol, and mixes of ethanol and gasoline. These fuels are expensive to use, difficult to acquire and transport, becoming more difficult to locate. In response to these problems with so-called "fossil fuels," automobiles are either wholly powered by electric motors or by hybrid engines that combine electric motors with gasoline or diesel engines. Electric engines are powered by batteries. However, the batteries' weight reduces the efficiency of the electric motor. The limited storage capacity of the batteries affects the range of an electric motor-driven vehicle.Also, there aren't many battery-recharging stations, which lessens the usefulness of electric cars. A driveshaft that produces energy has been created to overcome these problems. This typically consists of a copper wire coil that surrounds the magnetized driveshaft and a magnetic driveshaft that acts as the rotor of the electrical generator. Simply put, a generator is a device that converts mechanical energy into electrical energy. This is made possible by the electromagnetic principle. As this electrical energy is produced, the generator will induce an electric current to flow through an external circuit. In order to transform mechanical energy into electrical energy, generators typically include a rotor, a copper winding, and a series of magnets. The mechanical energy supplied to the generator is ultimately converted into electrical energy based on the electromagnetic induction concept. One of the important components of this study is the drive shaft, also

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DESIGN AND FABRICATION OF DUAL AXIS STEERING MECHANISM

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Abstract. Whether a car has front-wheel drive, rear-wheel drive, or all-wheel drive, the majority of current models use a two-wheel steering system to control their movement. However, four wheel steering vehicles are being employed more frequently as a result of increased safety awareness because they are also renowned for their outstanding performance and stability. They are wheels of conventional two-wheel steering vehicles do not assist with steering and simply follow the front wheels' route. In four-wheel steering, the wheels can be turned left or right depending on the situation. The direction of rotation for the rear wheels might be either parallel to the front or opposite. The four-wheel system is made to operate in three different ways. Specifically, rotations that are in-phase, out-of-phase, and zero.

Keywords—Design, fabrication, dual axis steering mechanism, review.

1. Introduction

These days, handling vehicles is increasingly challenging due to the growing amount of traffic on the roads. The current situation necessitates the investigation of novel vehicle handling systems, which in turn compels us to look for an alternative to the existing system or a modified steering system for improved handling. There isn't a driver out there who doesn't wish they could lessen their car's turning radius or slide the entire vehicle sideways without turning it when it enters a crowded or constrained space. Here, the Four Wheel Three Mode programme accomplishes the same by manipulating the rear wheels as well, per our needs.

Contrast it with four-wheel drive, in which a vehicle's four wheels are each given power. When necessary, this technology also enables the rear wheels to be turned in relation to the direction of the front wheels. As a result, the car is easier to control, especially when turning, parking, or entering a crowded or small space. This technology is mostly used in off-road vehicles including forklifts, construction and agricultural machinery, and mining equipment.

It is helpful in passenger vehicles as well, primarily SUVs. In-phase steering occurs when the front and rear wheels are both turning in the same direction, and this causes the car to drift somewhat sideways. On various sorts of vehicles, other configurations are occasionally found, such as rear-wheel steering or a tiller. Tanks and other tracked vehicles frequently use differential steering, in which the tracks are designed to move at different speeds or even in the opposite direction from one another to vary the direction of travel.

2.1 NEED FOR FOUR WHEEL STEERING

- To minimize the over steering & under steering Effects.
- To turn short corners effectively.
- To reduce turning radius.

2.2 BASIC GEOMETRY

Curves that a traditional car's rear wheels describe. The car's inner and outer rear wheels do not travel at the same pace as the vehicle as a whole. Making sure the wheels are pointed in the right directions is the basic goal of steering. Usually, a number of links, rods, pivots, and gears are used to accomplish this. Caster angle is one of the key ideas; each wheel is guided using a pivot point in front of the wheel, which causes the steering to naturally centre itself in the direction of motion.

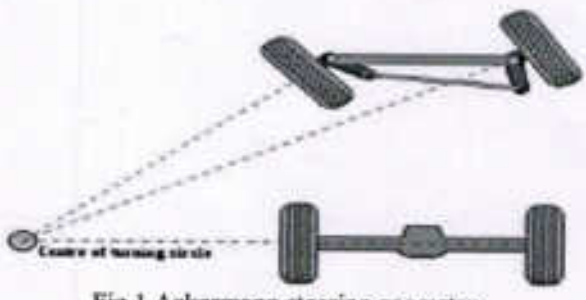

Fig 1 Ackermann steering geometry

To take into consideration the fact that the steering linkages between the steering box and the wheels typically comply to a version of Ackermann steering geometry that the degree of toe appropriate for driving straight lines is inappropriate for turns since the inner wheel actually travels a path with a smaller radius than the outer wheel during a turn. Together with the tyres, the wheels' angle with the vertical plane affects steering dynamics (see camber angle).

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A REVIEW ON PERFORMANCE AND OPERATION OF GRASS CUTTER

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Abstract: India plays a crucial role in agriculture and livestock. Forage is essential for the proper nutrition of livestock. Traditionally, forages were cut using manual tools such as khurpi. However, with the advancements in technology, mechanical instruments and machines are being used for grass cutting. The machines are operated with electricity, gasoline, diesel, and even batteries. Recently, solar-powered grass cutters emerged as an innovative solution to tackle the issue of energy consumption in agriculture. These machines operate similar to lawn mowers, with wheels facilitating easy movement for efficient grass cutting. With these technological advancements, grass cutting has become more convenient and effective, enabling farmers to manage their livestock more efficiently.

Keywords: **Grass cutter, Battery operated, Energy and Forage.**

I. INTRODUCTION

Livestock plays a significant role in agriculture, with India being the largest livestock owner in the world. The livestock sector accounts for a significant portion of India's GDP and provides livelihoods for millions of people. However, forage collection for cattle is still primarily done manually, which is time-consuming and requires significant human energy. While there are machines available for forage harvesting, they are often heavy and expensive, making them unsuitable for small-scale farmers. The goal is to produce a low-energy, low-cost battery-operated grass cutter that can be used by both small and large-scale farmers, reducing labor power and time spent on work.

To achieve this goal, a field-level survey will be conducted to gather the necessary information. The machine will be designed with locally available materials, considering factors such as strength, durability, light weight, and ease of assembly and disassembly. This grass cutting machine will reduce labor power and time spent on work, providing greater mobility and flexibility. It will also be affordable, making it accessible to small-scale farmers. When purchasing a grass cutting machine, it is crucial to have proper knowledge about the factors that should be considered to ensure that you make the right choice.

Overall, the development of a low-energy, low-cost grass cutting machine will have a significant impact on the agriculture sector in India, providing farmers with a much-needed tool to increase productivity and efficiency.

II. LITERATURE REVIEW

Khadke *et al.* (2018) Said that manually propelled lawn mower has a simple design with a driving wheel connected to a sizable pulley. A belt drive connects a smaller pulley to a larger pulley, with power being transferred to the cutting blades via a pair of bevel gears. The machine utilizes parts such as a sprocket, a lead screw, a wheel, and a control unit. It features a sickle-like mechanism with one fixed and one movable cutter on the sickle bar. When the motor is turned on, the shaft spins, turning the gear and cam assembly, ultimately causing the sickle bar to cut the grass or plants.

Sahu *et al.* (2018) said that farmers face challenges when cutting grass in their fields and explained that a grass cutter can potentially automate this process and comes in various power types such as solar, battery, or electric. The goal is to produce a grass-cutting machine that streamlines operations and reduces manual work. The device consists of motors, a stable frame, a blade, a switch, a battery, and connecting cables. Its creation aims to improve efficiency and reduce labor costs for farmers.

Rajmane *et al.* (2019) Developed a solar-powered lawn mower was to address the increasing fuel costs and environmental concerns. It operates similarly to traditional lawnmowers and includes a DC motor, rechargeable battery, solar panel, stainless steel blade, and control switch. The switch on the mower's board closes the circuit, allowing current to flow to the motor and power the blade

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Design of Solar Dryer for Turmeric

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ABSTRACT

In this study, a low cost and portable solar dryer for drying turmeric (*curcuma longa L.*) was designed. The main advantage of the current design is portability, which is beneficial for small scale farmers and consists of removable tray that facilitates handling of turmeric. The designed dryer consist of a solar panel, a fan and a tarpaulin sheet (160 GSM) which is used as transparent cover which transmits radiation. Unsliced turmeric fingers without pre-treatment where dried in a dryer. An average initial moisture content of 80% was dried to 10% under designed solar dryer. A final drying of turmeric was achieved within 8 hours while in open sun drying it takes 7-8 days. The drying efficiency of the designed dryer was estimated from experimental data ranged from 6.25% to 8.75%. The designed dryers have low capital costs, allowing small farmers to reap large profits.

Keywords: Drying Efficiency, Solar Dryer, Solar Panel, Tarpaulin Sheet, Turmeric

INTRODUCTION

Drying is an essential process in the operation of food storage plants, removing moisture and extending product shelf life [1]. Drying of product is an essential process to remove the initial moisture and allow the product to be stored without deterioration [2]. In most countries, nutritional problems stem from the inability to store surplus food, not from low yields. Energy needs during drying are met by renewable or non-renewable energy source. Sun drying is mainly used at agricultural level due to its low environmental impact and low cost drying food and agricultural product [3]. About 30% of the world's energy is consumed in agriculture, of which 3.62% is used for drying [4]. Solar dryers can be divided into active and passive. They can be further classified into direct, indirect and mixed mode solar dryers based on the dryer design. Among the natural convection type sun dryers, the mixed mode sun dryer has high heat transfer capacity and excellent drying speed [5]. Turmeric (*curcuma longa L.*) is native to India and Asia [6]. The tuberous root of turmeric has been used since ancient times as an aromatic stimulant, as a colouring agent, as a spicing agent and in several medicinal products [7]. India is a major consumer and exporter of turmeric. India produces nearly 78% of the turmeric produced worldwide. In 2018-2019 its production reached 9299.67 tons [8]. Turmeric is a key ingredient in Indian cuisine and its demand is expected to continue to grow as no replacement is seen any time soon [9]. Curcuma longa rhizomes are mainly used as a spice, commonly named turmeric, and as a yellow colorant (curcumin) for foodstuff [10]. The spice is used as an essential ingredient in many curry recipes and as an inexpensive alternative to saffron for colouring. In the European Union, curcumin is included in the natural colouring list (E100) and it has also been approved by the United States Food and Drug

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Development of Turmeric Sower and Harvester : A Review

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Abstract

Rancher needs more work and time for planting and reaping due to absence of information and abilities about present day machines. A fitting digging device, to be specific, a digging edge and a dirt partition and rhizome assortment component would make the reaper complete in all regards. On the off chance that a reasonable instrument could be produced for eliminating the dirt accompanying rhizome and gathering the rhizome, it very well may be more effective and useful to ranchers. With this view, the examination is embraced to foster a reasonable work vehicle worked turmeric reaper to recover and gather the turmeric rhizome and with planting hardware. In this paper, we are zeroing in on fostering a turmeric reaper to recover and gather the turmeric rhizome and with cultivating component. In the start of the machine improvement they utilizes carry out to make wrinkles and for planing. After that seed tubes are utilized for the planting. Then the machine is created with planting, plowing and showering. Further the machine was created with the seeds metering instrument for planting and for gathering the machine is finished with the parts like roller chain transport and digging edge.

Keywords: Sowing; Harvesting; Digging blade; Conveyor; Seed metering mechanism

Introduction

Turmeric (Curcuma longa L.) is one of the oldest cultivated crops which has been grown in India for several thousand years. Turmeric, the main spice powder in the Indian cuisine, is considered by many to be the most powerful herb on the planet at fighting and potentially reversing disease. Turmeric is an erect perennial crop, but it is grown as an annual crop. The leafy shoot rarely exceeds one meter in height. The primary tuber at the base of the aerial stem bears rhizome which is the economic portion called as bulb and fingers. Turmeric is traditionally well known for its culinary and medicinal properties. It is one of the multiuse products having many valuable properties and uses. It is extensively used in food, textile, medicine and cosmetic industries. Turmeric can be grown in the tropical and subtropical countries. It is grown throughout the world particularly in the tropical countries. Though it is grown in many countries, it is not commercially exploited in most of the countries. India is the largest producer, consumer and exporter of turmeric in the world. Turmeric was cultivated over an area of 1.94 lakh ha in India with a production of 10.51 lakh tonnes during 2016-17.

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PERFORMANCE AND EVALUATION OF POWER WEEDER – A REVIEW

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Abstract

India plays vital role in agriculture. The weed is a plant that is not valued where it is growing and is usually of vigorous growth. The increase in weed population paves way for high crop weed competition for light, space and nutrients etc cause reduction in yield. Thus proper weed management particles to be adopted. Farmers invest and perform his major role in controlling these weed at all the crop growth stages. This operation becomes more laborious and labour consuming. Thus the chemical method weed control becomes more popular among the farming community. This leads to high toxicity both to the environment and also to human beings. Mechanical weed control is considered as the highly efficient method in controlling weeds to a longer period and also helpful in intercultural operation simultaneously. Hence the weeder is developed to be used by farmers to replace manual labour, which is more time consuming, stressful, and costly. This weeder will reduce the cost of weeding operation and eliminate the environmental damage caused by herbicides in controlling weeds in farming and increases organically grown agricultural products as rise in the market needs. This is majorly performed through the power weeder. The use of weeder result in lesser labour force, minimum time consuming, easy to operate and high weeding efficiency. Hence the detailed review on power weeder is discussed in this paper.

Keywords: *weed control measure, herbicide, manual labor, power weeder.*

1. Introduction

Agriculture is an important sector of Indian economy as it contributes about 17 per cent to the total GDP and provides employment to over 60 per cent of the population. Weeds are the common problem faced by farmers. These are unwanted plants grown along with the main crops. The weeds absorb the nutritional content and water which are fed to the main crops. Most of the weeds compete more for their nourishment through rapid development and manifestation by quick root and shoot development than crop. This will affect the crop growth and its yield. In ancient times weeds were removed manually. Then the hand tools were introduced to remove weeds.

Weed control is the major obstacle for the growers in the organic farming. Lower plant productivity in organic farming mainly related to the poor weed control. It is widely known, in most cases, that losses caused by weeds exceeded the losses from any category of agricultural pests. Under water-stress condition, weeds can reduce crop yields more than 50 per cent through moisture competition alone. In the light of the environmental and toxicological problems created by herbicides, it has become necessary to develop the safety methods for controlling weeds. Soil Mulching, Biodegradable Mulch, Natural Herbicides, Hot Water and Agronomic Practices have been successfully adopted in many countries as safe methods for controlling weeds in the organic farming. In addition, there are some promising new and non-traditional measures such as Fresnel Lens, Electrical Weed Control, Lasers, etc which could be employed for controlling the weeds in organic farming.

Manual weeding method will consumes more human workforce and high time consumption. Hence herbicide was introduced in India at yearly 1980s. Most of small-scale farmers preferred the herbicide to remove the weeds because of less time consumption and low cost compared to labor expenses. 2, 4-D (2, 4-Dichloropnenoxy Acetic Acid) was a type of herbicide, which was used widely to reduce the weeds.

The recent trend toward restricting herbicide use due to its rising cost and concern over potential health of humans, domestic animals and environmental risks have intensified the search for alternate and integrated weed control strategies. As a result, newly-developed implements are now available to farmers. Mechanical weed control allows farmers to reduce or even eliminate herbicide use, and contribute to a more eco-friendly environment.

Power Weeder is a piece of agricultural equipment or the tool which is popularly being used to carry our farm-based activities mainly it is used to replenish the soil growth by enhancing its fertility. A power weeder is a supplementary tillage instrument used in agriculture. The weeds are buried under the soil by using mechanical weeder or power weeder. It would enhance the soil fertility. The power weeder plays an important role for farmers. The power weeder was in compact size but not suitable for rows crops. The weeder is to reduce drudgery and ensure a comfortable posture of the farmer or operator during weeding and increase production. Where the land area is tiny,

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Automatic Timetable Generation

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Abstract: ***Generating a timetable manually for educational institutions can be a tedious task for educators, as each grade has a predefined education scheme and faculty workload that needs to be taken into account. The challenge lies in preparing a timetable that does not overlap with the schedules of the faculty members and can efficiently utilize all available resources. To overcome these difficulties, our project proposes the use of algorithms such as Evolutionary Algorithm, Tabu Search, Simulated Annealing, and scatter search. The proposed system will take inputs such as grade-wise subjects, teachers, and workload, and generate a possible timetable for the working days of the week. The system will integrate these inputs to make optimal use of all resources while adhering to the predefined constraints. This will help overcome the constraints that appear in the manual timetable generation process, resulting in timetables for any number of courses and grades. The implementation of this proposed system will provide a dynamic solution with the best approach, making it easier for educationalists to manage and set timetables. It will eliminate the complexity of manually generating and managing timetables, providing an efficient and effective solution to this challenging task***

Keywords: Timetable generation, Evolutionary Algorithm, Optimization, Educational institutions.

I. INTRODUCTION

A timetable is a schedule that outlines the specific times at which certain events are planned to occur. When educationalists manually prepare a timetable, their main task is to ensure the availability and workload of faculty members for each subject. Additionally, they must generate a timetable that adheres to the predefined government scheme for each subject of a particular grade. It is crucial to schedule time slots for each subject smoothly, without any overlap with slots assigned to the same faculty member teaching different grades. To simplify the process of setting and managing timetables, our project proposes a machine learning-based system that takes inputs such as grade-wise subjects, faculty members, and faculty workload. The system will use these inputs to generate a possible timetable for the working days of the week, ensuring optimal use of all available resources. Our suggested solution aims to tackle the limitations inherent in the conventional method of generating timetables, alleviating the monotonous task of manually creating timetables. With the use of machine learning algorithms, this proposed system will eliminate the complexity of manually generating and managing timetables, providing an efficient and effective solution to this challenging task. It will help educationalists prepare timetables in a smooth and streamlined manner, improving the overall efficiency of the educational institution.

II. LITERATURE SURVEY

A literature survey is an essential report that evaluates the information found in literature related to a proposed work. During research, a literature review plays a crucial role as it covers all previous studies on the subject, setting the foundation for the current research. It is a critical part of any report because it provides direction and helps set a goal for analysis. [1] One such proposed work is "Time Table Scheduling using Genetic Artificial Immune Network," which highlights the importance of scheduling in real-life situations such as personnel scheduling, production scheduling, and educational schedule scheduling. [2] Educational schedule scheduling can be particularly challenging due to the various constraints that must be met to achieve a feasible solution. [6] Although Genetic Algorithms (GAs) have been used with mixed success, this work proposes a solution using N Queen algorithm-based approach to solve the heavily constrained Education timetable problem. [3] A review of the scheduling system at our institute revealed the need for a feasible lecture/tutorial timetable for a department, which has been a continuous challenge in educational establishments. [5] The N Queen algorithm-based approach proved to be a useful solution; however, certain issues still need to be addressed. [7] By reviewing existing literature and proposing innovative solutions to existing problems, this work contributes to the advancement of knowledge in the field of educational scheduling. The proposed approach has the potential to simplify and optimize the scheduling process, making it more efficient for educational institutions. [8]

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Drugged Eye Detection Using Image Processing

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Abstract: ***Drugs are a major problem in economic and many losses in worldwide. In this project, an image processing approach is proposed for identifying drugged eye based on convolutional neural network. According to the CNN algorithm, eye image details are taken by the existing packages from the front end used in this project. However, it can take a few moments. So, this proposed system can be used to identify drugged eyes quickly and automatically. The eye images dataset are taken from Kaggle. These images are taken as a training set for this drugged eye detection. This proposed approach is composed of the following main steps that getting input image, Image Preprocessing, identifying reddish places, highlight those affected places, Verifying training set, showing result. Few types of eyes like drugged socially may missed to identify. This approach was tested according to drugged eye type and its' stages, such as drug consumed and not consumed. The algorithm was used for detecting the white area of eye present in given input image. Images were provided for training, such as drugged eye images and normal eye images. Before the image processing, images were converted to color models, because of find out the most suitable color model for this approach. Local Binary Pattern was used for feature extraction and Support erosion method was used for creating the model. According to this approach, drugged eyes can be identified in the average accuracy of 95%.***

I. INTRODUCTION

The classical approach for detection and identification of drugged eyes is based on the naked eye observation by the experts. In some developing countries, consulting experts are expensive and time consuming due to the distant locations of their availability. Automatic detection of drugged eye is essential to automatically detect the symptoms of drug consumers.

Drugs can cause major losses in many industrial fields. To know what control factors to take next year to avoid losses, it is crucial to recognize what is being observed. However, detection of defects is still problematic due to natural variability of white area of eye in different types of eye, high variance of defect types, and presence of red area.

The studies of eye can be determined by apparent patterns of specific types and it is critical to monitor reddish area within an eye. Deep learning, also called neural networks, is a subset of machine learning that uses a model of computing that's very much inspired by the structure of the eye.

Deep learning is already working in Google search and in image search; it allows you to image-search a term like 'hug.' It's used to getting you Smart Replies to your Gmail. It's in speech and vision. It will soon be used in machine translation, I believe." said Geoffrey Hinton, considered the Godfather of neural networks. Deep Learning models, with their multi-level structures, as shown above, are very helpful in extracting complicated information from input images.

Convolutional neural networks are also able to drastically reduce computation time by taking advantage of GPU for computation which many networks fail to utilize. Image classification using CNN is most effective. First and foremost, we need a set of images. In this case, we take images of eyes, as our initial training data set. The most common image data input parameters are the number of images, image dimensions, number of channels, and number of levels per pixel. The objectives of the study are:

1) To give eye image input as well as with drug consuming can be given for finding the name of disease.
2) To initiate the given input image for image processing.
3) To convert the RGB image into binary format to make sure it is drugged.
4) To highlight the reddish area of eye.
5) To apply the training image set to find the drug consumed eye.
6) To provide accurate result about the given input image.

II. RELATED WORKS

In this paper [1] the authors stated that over the past two decades, biometric recognition has been exploded into a plethora of different applications around globe. This proliferation was attributed to high levels of authentication accuracy and user convenience which biometric recognition systems afford end-users.

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Chatbot Automation for Student Educational Purpose

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Abstract: *Chat bots are gradually becoming more sophisticated as they are now adapting to new AI features with ease. We can also expect them for recognizing user intent efficiently, decode mood of end users instantly, and then drive flow of conversations in tune with end user's emotions. Also, sentiment analysis is one of such features that make bots even powerful in terms of understanding emotions in end user messages. In fact, 65% of businesses believe that the chat bots could help them providing more customized support experiences for their users. We can always leverage chat bot sentiment analysis feature for easily knowing if users are having a good experience with chat bots.*

This is how AI - powered bots help us engage users better and improve experience with our brand. Sentiment analysis is a sub field in machine-learning (ML) and natural-language-processing (NLP) that help chat bots determine emotions from the textual data. It's one of the important chat bot features that are used to analyze end user data using mining opinions, thoughts, or sentiments. In this study project, a chat bot is developed as the academic assistant for institutions. Here the entire details regarding course, department, fees structure, hostel and placement are obtained from the chat bot assistance for the query given by the users. Chat bots are increasingly finding the way into e -commerce and services, as their implementation opens up promising opportunities for improving user service. This paper examines chat bots in this scenario, and elaborating on the functional aspects that are rapidly leading for significant improvement in service quality.

First, based on the literature review of recent publications in this area, overview of the key features as well as functionalities underlining relevance of chat bots for user educational service is provided. Then, a further contribution is being made in introducing 2 categories of chat bots' objectives which are based on their functional dedication, i.e. i) "improvement in the service performance" and ii) "fulfillment of the end user's expectations". The considered chat bots' user-related functions are entertainment, interaction, trendiness, problem-solving, and customization.

The chat bot categories are discussed in detail further. Their positive influences on service quality, constituting chat bots' functional goal, and also the potential of chat bots in user services are then pointed out. Nowadays, Internet has become an essential tool in every aspect of the daily lives.

I. INTRODUCTION

In order to contribute to existing research in this area, the aim of this paper is to examine chat bots in the user service contexts'; pointing out to what extent they have an influence in service quality. In the second section the chat bots' relevance for e-business context is defined based on their key characteristics. Then, five chat bots' marketing efforts identified by [2] Chung et al. which is interpreted as chat bots user-related functions, are presented in the 3rd section. These are divided by authors of present work into two presented categories which are based on their qualities: a) "improvement in the service performance" and b) "fulfillment in end user's expectations", denoting the chat bot's objective categories.

So, as a consequence, this resulted in significant impact on the way end users do their business aspects today, expanding increasingly what is today called as electronic commerce, or commonly e-commerce. With an annual growth rate of 21 to 25% in online sales, e-commerce economy is sparking off literally. The reason is very simple: In the consumer eyes [1], trading services or products via the Internet is synonymous with efficiency, speed and a wide range of the offers, inevitably translates into convenience in end users daily lives.

This is increasingly close confrontation with digital world that had led to a shift in their needs/expectations, and must not go unheeded. So, i.e. in order to sort out these new market requirements, companies are becoming more forced to apply their strategies to conditions of Internet, and offer a broader service to their users through extension of primary services through digital ones [1-3]. This is exactly where artificial intelligence implementations come in. Machine learning, natural language processing and e-service agents along with robotics, also commonly referred to as chat bots, are termed as the best known applications in artificial intelligence till date (cf. e.g. [2, 4-5]).

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Human Symptoms Based on Diseases Predictor

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Abstract: ***Many situations occur in day to day life which affects a human being. Many problems are happening in fast manner and new diseases are rapidly being created. The main objective of this project is to apply classification algorithm to predict model for occurrence of various diseases. This project work is aimed in identifying the best classification algorithm to identify the disease probability of patients. The identification of the possibility of diseases in patients is a tedious task for doctors and researchers because it requires experience and more medical tests need to be taken. The main objective of this project is to find the best classification algorithm suitable to provide accuracy improvement during classification of normal and abnormal persons. The project contains Naïve Bayes, Support vector machine and decision tree classification with their accuracy score calculation. The applied NBS, SVM, DT classification help to predict the disease with higher accuracy in the new data set. Python 3.9 is used as the coding language.***

Keywords: Machine Learning, Decision Tree, Support Vector Machine, Naïve Bayes Classification.

I. INTRODUCTION

Big data has its significance in each and every field in world including health care industries. It alters the way to handle doctors and patients doctors with care. From huge number of sample data, we could expect more accurate results, insights for health care industries. Like many other industries, health care industry is also a framework which contains heterogeneous multi sectors which are complex to deal with high accuracy, in which the patients demand better care with reduced cost.

Day by day, emerging technologies are being included to healthcare industry, where big data analytics have a vital role to give effective business insights to hospitals and patients. In technical world, data analysis also plays an important role in every field in the world where the data volume is so limited. But today, the world is now in big data era. Existing statistics announces that the data analytics is very important in future for health care industries and it will become very crucial in operational, clinical and banking/financial sectors. The collected data is potentially be used by Government and public organizations create or enhance procedures, policies and trainings. Over all, project will have the potential to heighten awareness for the requirements to give the best treatments in any healthcare environment. Most of the patients are uneducated and those are not familiar with precise treatments. Majority of patients/people approach private health care centers which are not able to save details of patients and their diseases. So there is a requirement for organizing health camps that educate and sensitize the communities. This study explains about diagnosis and numerous types of health hazards.

II. LITERATURE SURVEY

Nowadays, more amounts of structured, unstructured, and semi-structured data are generated by numerous institutions around the globe and, these heterogeneous data are referred to as big data. Health industry sectors have been confronted by urge to maintain the big data being produced by various sources, which are known for producing huge volumes of heterogeneous data.

More number of big-data analytics tools and techniques are developed to handle massive amounts of data for healthcare sectors. In this paper, authors discussed impact of big data in health care, and different tools available in the Hadoop ecosystem to handle it.

They also explored conceptual architecture of bigdata analytics in health care that includes data gathering history of various branches, genome database, and EHR (electronic health records), text/imagery as well as clinical DSS (decisions support system).

Every day, data is generated by a range of numerous applications, and geographical research activities for purposes of disaster evaluation, , prediction of weather, weather forecasting, crime detection, and also the heath industry, to name a few. In today scenarios, big data is associated with core technologies and numerous enterprises that include Google, Facebook, and IBM, that extract valuable information from huge volumes of data collected [3–5]. An era of open information for healthcare is now on the road. Big data is generated rapidly in all fields which include healthcare, with respect to patient compliances, care and various regulatory requirement.

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DEVELOPMENT OF EMPLOYEE PERFORMANCE MANAGEMENT SYSTEM USING WEB BASED TECHNOLOGY

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Abstract - A software program called the Vessel Shop Management System is intended to make vessel repair and upkeep companies' activities more efficient. This system consists of a number of components, including those for managing employee information, attendance, salaries, customer complaints, and maintenance teams. Employers can keep and handle employee data, such as their contact information and job history, with the aid of the Employee Information Management module. The Employee Attendance Management tool helps with handling time-off requests, such as medical leave, holiday leave, and personal days, and keeping track of employee attendance. The Employee Salary Management section creates payslips and handles employee wages, taxes, and perks.

Businesses can handle client complaints, watch the resolution process, and raise customer happiness thanks to the client Complaint Section module. The maintenance team's schedules are managed, work orders are assigned, repair requests are tracked, and the maintenance team management module observes apparatus performance. The Vessel Shop Management System integrates these components to give companies a centralized platform for managing staff data, attendance, pay, client complaints, and repair teams. The system aids organizations in streamlining their processes, reducing administrative burdens, and enhancing general effectiveness, which boosts revenue and improvesclient happiness.

Keywords: vessel shop, customer complaint, administration, customer satisfaction

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MARKETING MASONARIES AND STOCK HANDLING

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Abstract: ***The project involves the development of a website that will be both an e-commerce portal and an administrative site for inventory management for a construction company. This portal includes the sale and purchase of building materials. It contains two login modules, a user module and an admin module. In the user module, users can log in to the website and purchase the materials they need. When a user purchases a product, an invoice is automatically issued. In the admin module, the admin manages user information and items purchased by the user. The inventory of each material is efficiently managed by the admin in inventory management.***

Keywords: *sales, purchase, automatic bill and stock maintenance.*

I.INTRODUCTION

The main purpose of this project is to manage the purchase, payout and maintenance of building materials inventory. A new approach helps increase sales through website invoicing. Administrators log in to the website and add seller and buyer information. The item category and item details are added. Invoices are issued with inventory information at the time of purchase and sale. Additionally, when a product is out of stock below the reorder level at the time of sales entry, an email notification is sent to the admin ID. Likewise, when a new item is added, details are emailed to all customers. In addition, the unpaid amount is sent to the customer's email when entering the receipt. The admin will able to view the reports of products such as categories, items, customer lists, sales invoices, and inventory levels. Search options and reporting options are available for all types of transactions.

II.LITERATURE SURVEY

[1] **"Inventory management system in building construction, IRJET, 2021".** The concept of an inventory management system is one of the analytical aspects of management that establishes control over the procurement, storage, and tracking of materials, labour, equipment, and units production involved in a construction project. Proper management of this component can increase the productivity and profitability of a project. One of the main problems holding up construction projects is poor management systems. Inventory management systems in the construction industry involve acquiring, identifying,

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Efficient Classification of Brain Tumors Images Using Neural Network Technique

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Abstract

Using biopsy, brain tumor classification is performed, which is not normally conducted before definitive brain surgery. Technology improvement and machine learning help radiologists with the diagnostics of tumors without invasive measures. Convolutional neural network (CNN) is the machine-learning algorithm that achieved substantial results in image classification and segmentation. Some of the most notable primary brain tumors are meningiomas, gliomas, and pituitary tumors. Gliomas is a general term for a tumor that arises from brain tissues other than nerve cells and blood vessels. But, meningiomas arise from membranes that cover the brain and surround the central nervous system, whereas pituitary tumors are the lumps that sit inside the skull. The most notable important difference between these three types is that meningiomas are generally benign, and gliomas are commonly malignant. This project develops a new CNN architecture to classify brain tumor types. With i) good generalization capability and ii) good execution speed, the newly developed CNN architecture is being used as an effective decision-support tool for radiologists in diagnostics. Python is used for the development of the project.

Keywords: Deep Learning, Neural Network, Brain Tumor, MRI Images.

I. INTRODUCTION

Cancer is the second leading cause of death worldwide, according to the World Health Organization (WHO) [1]. Early detection of it can prevent death, but this is not possible all time. Unlike cancer, the tumor also could be benign, malignant, or pre-carcinoma. Benign tumors vary from malign in that, benign normally don't spread to other organs and tissues and are surgically removed [2]. Some brain tumors are meningiomas, gliomas, and pituitary tumors. Gliomas are a general term for tumors that arise from brain tissues other than nerve cells and blood vessels. But, meningiomas arise from the membranes that cover the brain and surround the central nervous system, but pituitary tumors are the lumps that sit inside the skull [3 –6]. The primary difference between these three types is that meningiomas are benign, and gliomas are commonly malignant. Pituitary tumors, even if benign, cause other medical damage, not similar to meningiomas, which are slow-growing tumors [5, 6]. Because of the information mentioned above, precise differentiation between the three types of tumors denotes a very important step of the clinical diagnostic process and later the patient's effective assessment.

The most common method to differentially diagnose tumor type is the magnetic resonance imaging (MRI) method. But it is prone to human subjectivity, and a large amount of data is difficult to observe for humans. Also, old brain-tumor detection mostly depends upon the experience of radiologists [7]. The diagnostics of a tumor can not be complete before establishing if it is benign or malignant. To examine if the tissue is benign or malignant, a performance of biopsy is usually required. Unlike tumors elsewhere in the body, a biopsy of a brain tumor is not usually obtained before the definitive brain surgery [8]. To get precise diagnostics, and eliminate surgery and subjectivity, it is a must to consider an effective diagnostics tool to segment and classify tumors from MRI images [7].

The development of new technologies, especially AI and ML, has had a significant impact on the medical field, thus providing an important support technology for many medical branches, which includes imaging. Various machine-learning methods to segment and classify images are applied in MRI image processing for providing radiologists with a second opinion. Since 2012, the Perelman School of Medicine at the University of Pennsylvania, Center for Biomedical Image Computing and Analytics (CBICA) is running an online competition, Multimodal Brain Tumor Segmentation Challenge (BRATS) [9]. Image databases utilized in BRATS are made available publicly after the competition is finished. Various classification algorithms designed using these databases are found in many papers [10–14]. Still, these databases are usually small, on average about 284 images.

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Significant Features and Identification of Heart Disease Prediction by using Data Mining Techniques

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Abstract: ***In day to day life, there are various factors that affect the mortal heart. Numerous problems are being at a rapid-fire pace and novel heart conditions are fleetly identified. In this stressful of world, Heart, being an essential organ in the body pumps blood through the body for blood rotation essential and its health is to be conserved for a healthy living. The main provocation of doing this design is to provide a heart complaint prediction model for the prediction of circumstances of heart complaints. Further, this exploration study is aimed towards relating the algorithms to relate the possibility of heart complaint in a case. The identification of possibility of heart complaints in a person is complicated process for medical interpreters because it takes times of experience and violent medical tests need to be conducted. In this study, two data mining algorithms such as KNN and SVM classification are addressed and used to develop the prediction system in order to dissect as well as prognosticate the possibility of heart complaint. The main idea of the significant exploration work is to identify algorithms suitable to provide maximum accuracy when classification of normal/abnormal person is carried out. Therefore prevention of loss of lives at an earlier stage is now possible. It is sure that the above algorithms perform better when compared to other algorithms for heart complaint prediction. The design is designed using Python 3.7.***

Keywords: ***Data mining, Prediction model Classification algorithms, Feature selection, Heart disease prediction***

I. INTRODUCTION

There may also be several inheritable factors through which a heart complaint type is passed down from generations. According to World Health Organization, every time more than twelve million deaths are being worldwide due to colorful types of heart conditions which is also known by cardiovascular complaint. The term heart complaint includes various conditions that are different and specifically affect heart and highways of d:a mortal being. Indeed youthful aged people around their 20-30 times of lifetime are getting affected by heart conditions. The increase in possibility of heart complaint among youthful may be due to bad eating habits, restless nature, lack of sleep, depression and multitudinous other factors similar as rotundity, family history, poor diet, high blood pressure, idle geste, high blood cholesterol, family history, smoking and hypertension. The opinion of heart conditions is an important and is the most complicated task in medical field. All the mentioned factors are taken into notable consideration when assaying as well as understanding the cases by croaker through homemade check-ups at regular intervals of time. The heart complaint symptoms greatly depend upon which of discomfort felt by an existent. Some symptoms are not generally linked by the common people. Still, common symptoms include chest pain, breathlessness, and heart pulsations. The chest pain common to numerous types of heart complaint is known as angina, or angina pectoris, and occurs when a part of heart doesn't admit sufficient oxygen. Angina is started by stressful events/physical exertion and typically lasts under ten twinkles.

Heart attacks also do as a result of various types of heart complaint. The sign of the heart attack is analogous to angina except that they do during rest and tend to be much more severe. The symptoms of the heart attack can occasionally act indigestion.

Heartburn and a stomach pang do, as well as a heavy feeling in the chest. Other symptoms of heart attack include pain travels through the body, for illustration from casket to the arms, neck, back, tummy, or jaw, flightiness and dizzy sensations, nausea and vomiting and gushing sweating,. Heart failure is an outgrowth of heart complaint, and breathlessness do when the heart becomes too weak to blood circulation.

Some heart conditions do with no symptoms at each, especially in aged grown-ups and individualities with diabetes. The term' natural heart complaint'covers a range of conditions, but the general symptoms include sweating, high situations of fatigue, fast twinkle and breathing, breathlessness, casket pain. Still, these symptoms might not develop until a person is aged than 13 times.

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A SURVEY ON ANALYSIS AND PREDICTION OF DATA USING DATA SCIENCE

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ABSTRACT

Intelligent technology development is gaining traction in the sphere of education. The increasing rise of educational data suggests that standard processing methods may be limited and distorted. As a result, rebuilding data mining research technologies in the education industry has become necessary. Becoming more visible To avoid erroneous assessment findings and to anticipate students' future performance, this research analyses and predicts students' academic achievement using applicable clustering, discriminating, and convolution neural network theories. To begin, this work suggests that the clustering-number determination be optimized by employing a statistic that has never been employed in the K-means approach. The clustering impact of the K-means method is next assessed using discriminate analysis. The Convolutional neural network is presented for training and testing with labeled data. The produced model can be used to forecast future performance. Finally, the efficacy of the constructed model is tested using two metrics in two cross validation procedures in order to validate the prediction findings. The experimental findings show that the statistic not only addresses the objective and quantitative problem of determining the clustering number in the K-means method, but also enhances the predictability of the outcomes.

KEYWORDS: Academic Performance, Clustering Analysis, Convolutional Neural Network (CNN), Discriminate Analysis, Educational Data Mining

INTRODUCTION

1.1 ACADEMIC PERFORMANCE

Academic prediction on student performance in classroom instruction is commonly employed using educational data mining approaches. However, the majority of previous studies was investigated and compared student coursework performance to test passing grades. We conducted study in this paper to determine the significance and influence of student background, student social activities, and student coursework accomplishment in predicting student academic performance. In secondary school, supervised educational data mining techniques such as Nave Bayesian, Multilayer Perception, Decision Tree J48, and Random Forest were employed to predict math achievement. On the final grade, the prediction was done on a 2-level classification and a 5-level classification. According to the experimental results, student background and student social activities were significant predictors of student performance on 2-level categorization. The model may be used to predict student performance early on, which can aid in increasing student performance on the topic.

1.2 CLUSTERING ANALYSIS

Clustering is the classification of a collection of diverse data objects as related things. A data cluster is represented by one group. In the cluster analysis, data sets are split into separate groups based on their resemblance. A label is applied to each collection of data once it has been classified into several groups. It aids in responding to changes by categorizing them. So, if we define clustering in data mining, we can say that the process of clustering in data mining consists of grouping a set of abstract objects into groups of related items. Cluster analysis is the process of separating and storing them in these categories. Cluster Analysis in Data Mining refers to the discovery of groups of things that are

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A SURVEY ON MEDICAL AND DISEASES PREDICTION USING MACHINE LEARNING

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ABSTRACT

Machine learning is a subfield of AI and computer science that seeks to mimic human learning by enhancing its accuracy via exposure to more data and more complex algorithms. To improve software's predictive abilities, it doesn't need to be expressly coded to use machine learning (ML). Predictions from machine learning algorithms are based on past data. Machine learning has the ability to shake up the healthcare sector by providing novel approaches to managing healthcare data, reshaping patient treatment, and reducing back-end administrative tasks. Medical professionals and hospital administrators may benefit financially from the use of machine learning to deliver data-driven clinical decision support (CDS). Better health outcomes can be achieved with the help of machine learning thanks to increased patient participation in the treatment process. When applied to the IoMT, ML can collect more precise patient data and automate message alerts that prompt patients to take action at just the right time.

KEYWORDS: Machine learning,Medical, Disease, Clinical Decision(CD), Internet of Medical Things

1.INTRODUCTION

Machine learning is the study of algorithms that can automatically adapt to new situations by analysing past examples (ML). It is being regarded as an element of AI. Machine learning algorithms create a model using training data in order to produce predictions or choices without being explicitly trained to do so. Because more data may be used to construct a more robust model, which in turn yields more accurate predictions of the output, the amount of data has a direct bearing on the reliability of the projected result.

1.1 Machine Learning Features

- ✓ ML employs data to find distinct patterns in a given dataset.
- ✓ It can learn from prior data and advance itself automatically.
- ✓ It is a technology that is powered by data.
- ✓ Machine learning is related to data mining in that it deals with massive amounts of data.

1.2 DIAGNOSIS OF DISEASES

ML will be used in healthcare because of the benefits it provides in the diagnosis and treatment of illnesses. Quickening the decision-making process and decreasing the number of false positives during a medical diagnostic are two benefits that may be achieved with the help of machine learning algorithms. Included are explanations of the Support Vector Machine, K-nearest neighbours, Naive Bayes, and Decision Tree ML algorithms. The likes of cancer, diabetes, epilepsy, and heart attacks are all diagnosed with the use of these algorithms. An F1 score, recall, accuracy, and precision metric derived from a machine learning technique are utilised to provide a diagnosis.

2. LITERATURE SURVEY

According to the research of VishuMadaanand Anjali Goyal [1], the human body's constitution (prakriti) determines what is in tune with human nature and what will throw it out of whack, leading to sickness. The model is trained using commonplace techniques in machine learning for

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A SURVEY ON EFFICIENT AUDITING SCHEME FOR SECURE DATA STORAGE IN FOG-TO-CLOUD COMPUTING

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ABSTRACT

With the rise of the Internet of Things, fog-to-cloud computing has emerged as a new cutting-edge approach (IoT). Except for the cloud service provider, fog-to-cloud computing necessitates the participation of additional entities, such as mobile sinks and fog nodes (CSP). As a result, fog-to-cloud storage integrity audits will differ from standard cloud storage auditing. Tian et al. has completed the first stage in developing a public auditing system for fog-to-cloud computing. However, because they employ complex public key cryptography techniques like bilinear mapping and proof of knowledge, their system becomes inefficient. We offer a more broad and efficient auditing system based on MAC and HMAC, two prominent private key cryptography algorithms in this study. By implementing MAC and HMAC, we give a real instantiation of our auditing system. Finally, theoretical analysis and actual findings show that our suggested system has lower communication and computing costs.

Keywords: Media Access Control, Homomorphic MAC, Cloud Storage, Fog-to-cloud computing.

1. INTRODUCTION

Fog computing, initially presented by Bonomi et al. in 2012, has since become a popular approach for several industrial domains based on Internet-of-Things (IoT) devices. As a middleware between IoT devices and clouds, fog computing nodes have their own basic computing, storage, and resources to meet the needs for data pre-processing and transfer. As a result, the fog-to-cloud computing paradigm appears as a promising alternative for data storage in several resource-constrained large-scale industrial applications. However, fog-to-cloud computing must deal with some of the same issues that plague regular cloud computing. One of the most well-known problems is how to protect the integrity of data kept by a cloud service provider (CSP). The cause is as follows. Certain CSPs may attempt to disguise the fact that some critical data from IoT devices or fog nodes has been lost or damaged as a result of internal or external assaults. As a result, much as in traditional cloud computing, creating effective auditing tools for safe data storage in fog-to-cloud computing is critical. Although various auditing methods for traditional cloud storage have been published in recent years, including several private and public auditing schemes, all of them are not immediately relevant to fog-to-cloud computing for two key reasons.

1.1 MAC (Media Access Control)

A media access control address (MAC address) is a network-wide identification for an Ethernet or network adaptor. It identifies various network interfaces and is used for a variety of network technologies, most notably most IEEE 802 networks, including Ethernet. MAC addresses appear in the OSI model's Media Access Control Protocol sub-layer. The vendor/manufacturer of each network interface card (NIC) created normally assigns MAC addresses. They are used in almost all network types, however unlike IP addresses, MAC addresses are fixed and cannot be modified. IEEE guidelines are used to generate a MAC address. Each MAC address is a 12-digit hexadecimal notation stored inside the NIC firmware, consisting of a six-digit manufacturer's organisation unique identification followed by a six-digit serialised or random unique identity. Contention is based on a first-come, first-served basis. The most common contention-based MAC protocol used in Ethernet networks is carrier sense multiple access/collision detection (CSMA/CD). When a device needs to

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A SURVEY ON TOWARD EFFECTIVE RESPONSE TO NATURAL DISASTERS: A DATA SCIENCE APPROACH

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ABSTRACT

Natural catastrophes have the potential to destroy large portions of infrastructure and kill thousands of people. Both the populace and the government find it challenging to deal with these situations. Particular attention must be given to the following two difficult problems: find a workable solution first evacuating people, then rebuilding homes and other infrastructure. Then, a successful recovery plan that prioritises the reconstruction of damaged areas and the evacuation of people can be a game-changer for overcoming those horrible circumstances. In this light, we introduce DiReCT, a method based on I a dynamic optimization model created to quickly develop an evacuation plan of an earthquake-stricken area, and ii) a double deep Q network-based decision support system capable of effectively guiding the rebuilding of the affected areas. The latter operates by taking into account the needs of the many stakeholders (such as citizens' social benefits and political priorities) as well as the resources available. The foundation for both of the aforementioned solutions is a specialized geographic data extraction Method called "GisToGraph," which was created expressly for this use. We used extensive GIS data, information on the vulnerability of urban land structures, and the historical city centre of L'Aquila (Italy) to test the applicability of the entire strategy.

KEYWORDS: Data Science,Decision-Support System, Deep Reinforcement Learning, Evacuation Plan,Flow Model, Geographic Information, Network

1. INTRODUCTION

1.1 DATA SCIENCE

Data science is the study of data with the goal of gaining important business insights. It is a multidisciplinary method for analyzing massive volumes of data that integrates ideas and techniques from the domains of mathematics, statistics, artificial intelligence, and computer engineering. Data scientists can ask and receive answers to questions like what occurred, why it occurred, what will occur, and what can be done with the outcomes thanks to this study. Because it integrates tools, techniques, and technologies to derive meaning from data, data science is significant. A profusion of gadgets that can automatically gather and store data has flooded modern enterprises with data. In the areas of e-commerce, healthcare, banking, and every other facet of human existence, online systems and payment portals collect more data.

1.2DECISION-SUPPORT SYSTEM

An interactive information system called decision support system (DSS) analyses enormous amounts of data to help guide business decisions. By evaluating the relevance of uncertainties and the tradeoffs involved in making one choice over another, a DSS assists management, operations, and planning levels of an organization in making better decisions.To assist users in making decisions, a DSS uses a variety of raw data, papers, personal knowledge, and/or business models. Relational data sources, cubes, data warehouses, electronic health records (EHRs), income estimates, sales projections, and other sources may all be utilized by a DSS.Business intelligence (BI) and DSS are frequently confused. Some professionals view BI as DSS's successor.

1.3DEEP REINFORCEMENT LEARNING

Reinforcement learning has gained a lot of popularity in recent years as a result of its success in solving difficult sequential decision-making problems. To solve difficult sequential decision-making

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A SURVEY ON CANCER SUBTYPING BASED ON DEEP LEARNING USING PAN-CANCER AND MULTIOMIC DATA

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ABSTRACT
Tumor subclasses with clinical implications are identified by breast cancer gene expression patterns. In this study, ROBERT TIBSHIRANI et al. make a suggestion. Based on changes in gene expression, the tumours were divided into three groups: basal epithelial-like, ERBB2-overexpressing, and normal breast-like. Two separate gene sets, one representing a collection of 456 cDNA clones originally chosen to reflect intrinsic tumour features and the other being a gene set that was highly correlated with patient prognosis, were clustered to reveal that both groupings were quite robust. The basal-like subtype had a dismal prognosis, and the two oestrogen receptor-positive groups had significantly different outcomes, according to survival studies on a sub cohort of patients. In this study, three fibroadenomas and 78 breast carcinomas were examined. This collection comprises of 40 tumours that have already been studied and characterised. A total of 85 tissue samples from 84 individuals were examined.

Keywords: Deep learning, genomics, multi-omics, semi supervised learning, variational autoencoder

1. INTRODUCTION

Molecular stratification has shown to be a useful tool for predicting the clinical outcome of BRCA patients and assisting doctors in therapeutic decision-making throughout time. BRCA is known to be a diverse and fatal malignant illness. The so-called intrinsic BRCA molecular subtypes Luminal A, Luminal B, Her2-enriched, Basal, and Normal-like, which were first identified in the early 2000s using unsupervised hierarchical clustering on BRCA microarray gene expression patterns, have steadily grown in importance as prognostic indicators in clinical practise. In recent years, a number of multi-gene prognostic molecular tests have been created, and they are now an essential part of the therapy of BRCA patients. Despite the fact that The Cancer Genome Atlas consortium has emphasised the significance of various omic data in breast cancer taxonomy, these tests concentrate on only a few genes' expression levels and none of them have been previously implicated in breast cancer.Some of them make use of the huge "omic" data that high-throughput technologies have enabled. High-throughput technologies like RNA sequencing (RNA-seq) have made it simple to collect a wide range of omic data at ever-increasing rates, accuracy, and lower costs, including whole-genome gene expressions, microscopic analysis, and other molecular data for the same BRCA sample. This allows researchers to investigate variations and similarities across multiple omic layers and improve BRCA stratification.

1.1 DEEP LEARNING

Deep learning is a type of machine learning and artificial intelligence (AI) that replicates how humans learn certain sorts of information. Deep learning is an important part of data science, which also includes statistics and predictive modelling.. Consider a child whose first word is dog to better comprehend deep learning. The youngster learns what a dog is and is not by pointing to things and saying the word dog.

1.2 GENOMICS

It differs from 'classical genetics' in that it considers the whole complement of hereditary information in an organism rather than simply one gene or one gene product at a time. Next-generation sequencing

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A SURVEY ON IDENTIFICATION AND DIAGNOSIS OF DISEASES USING MACHINE LEARNING

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ABSTRACT

The field of artificial intelligence to which machine learning belongs. We use machine learning methods like K-nearest neighbor(KNN), and Linear regression algorithm to detect and diagnose illnesses in this work. The dataset is trained using supervised learning, Reinforcement learning methods in order to construct a logical mathematical model. In the context of learning models, the datasets are employed for purposes such as data analysis and illness diagnosis. The purpose of the Disease Prediction using Machine Learning (ML) system is to make predictions about diseases based on the symptoms reported by patients or other users. The user inputs their symptoms, and the machine returns the likelihood that they have a certain ailment. In machine learning, disease prognosis relies on disease prediction.

KEYWORDS: Machine learning, Disease, Reinforcement learning, Supervised learning

1.INTRODUCTION

ML is a subfield of AI that enables computers to "self-learn" from data sets and gradually improve in performance without being explicitly programmed. Patterns in data can be spotted and used by machine learning algorithms to inform their own forecasting. A machine learning system may learn from past data, create predictive models, and then apply those models to fresh data to anticipate an outcome. The larger the dataset, the better the model that can be constructed, and therefore the more accurate the predictions of the output.

1.1 CLASSIFICATION OF MACHINE LEARNING

Semisupervised learning

Regression, and prediction are just some of the techniques that benefit from this form of learning. When the expense of labels prevents a completely labelled training procedure, semisupervised learning might be a helpful alternative.

Reinforcement learning

The algorithm learns via trial and error what kinds of behaviour are most likely to result in positive outcomes by employing reinforcement learning. There are three main parts to this sort of learning: the agent, the environment, and the actions taken by the agent. The goal is to have the agent make decisions that maximise expected benefit over some time horizon. If the agent follows a sound policy, he or she will complete the task considerably more quickly. When using reinforcement learning, the objective is to figure out what course of action works best.

1.2 DIAGNOSIS OF DISEASES

Machine learning's potential in areas like illness diagnosis and management ensures it will play an increasingly important role in the healthcare industry. When used to illness diagnosis, machine learning techniques allow for faster decision making with fewer false positives. Several popular machine learning techniques are covered. The likes of cancer, diabetes, epilepsy, heart attacks, and other significant ailments are diagnosed with the use of these algorithms. The condition is diagnosed using the theoretical and mathematical framework of machine learning algorithm's accuracy, precision, recall, and F1 score statistics.

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MACHINE LEARNING AT THE EDGE: A DATA-DRIVEN ARCHITECTURE WITH APPLICATIONS TO 5G CELLULAR NETWORKS

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ABSTRACT
To meet the ultra-low latency demands of future applications, the fifth generation of cellular networks (5G) will rely on edge cloud installations. In this research, we show that similar deployments may also be deployed in mobile networks to allow sophisticated data-driven and Machine Learning (ML) applications. We propose an edge- controller-based cellular network design and assess its performance using real-world data from hundreds of base stations of a large US operator. In this context, we will discuss how to dynamically cluster and associate base stations and controllers based on users' worldwide movement patterns. The controllers will then be used to run ML algorithms to forecast the number of users in each base station, as well as a use case in which these predictions are utilized by a higher-layer application to direct vehicular traffic based on network Key Performance Indicators (KPIs). We demonstrate that prediction accuracy increases when based on machine learning algorithms that depend on the controllers' view and, as a result, on the spatial correlation provided by user mobility, compared to when the prediction is based only on the local data of each individual base station.
Keywords: 5g, machine learning, edge controller, mobility, big data

Introduction

The fifth generation (5G) of cellular networks is being developed to meet the significant increase in capacity demand, number of connections, and expanding use cases of a connected society in 2020 and beyond.

1.1 5G

5th-generation wireless is the most recent version of cellular technology, designed to significantly improve the speed and responsiveness of wireless networks. Data carried through wireless broadband connections may now move at multigigabit rates, with some estimates putting peak speeds as high as 20 gigabits per second (Gbps). These speeds outperform wire line network rates and provide latency of less than 5 milliseconds (ms) or less, which is beneficial for applications requiring real-time input. Because of increased accessible bandwidth and enhanced antenna technology, 5G will enable a significant rise in the volume of data delivered across wireless systems. To meet the growing reliance on mobile and internet-enabled devices, 5G networks and services will be deployed in stages over the next several years. As the technology matures, 5G is likely to spawn a slew of new applications, uses, and business cases. It also works on Wireless networks are made up of cell sites that are separated into sectors that carry data through radio waves. Long-Term Evolution (LTE) wireless technology of the fourth generation (4G) serves as the foundation for 5G. In contrast to 4G, which requires huge, high-power cell towers to broadcast signals over larger distances, 5G wireless signals are carried by a large number of tiny cell stations positioned in areas such as light poles or building rooftops. Multiple small cells are required because the millimeter wave (mmWave) spectrum—the band of spectrum between 30
and 300 gigahertz (GHz) that 5G relies on to generate high speeds can only travel short distances and is susceptible to interference from weather and physical obstacles such as buildings or trees. Previous versions of wireless technology employed lower-frequency spectrum bands. To address the issues of distance and interference with mmWave, the wireless industry is investigating the use of a lower-frequency spectrum for 5G networks, allowing network operators to roll out their new networks using

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A SURVEY ON MOBILITY-AWARE AND DELAY-SENSITIVE SERVICE PROVISIONING IN MOBILE EDGE-CLOUD NETWORKS

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ABSTRACT
Mobile edge computing (MEC) has emerged as a viable technique for pushing the cloud frontier to the network edge, enabling network services to be provisioned in close proximity to mobile consumers. Serving customers at the edge of the cloud can minimize service latency, lower operational costs, and increase network resource availability. Along with MEC, network function virtualization (NFV) is a viable strategy for implementing various network service functions as software in cloudlets (servers or clusters of servers). Giving mobile consumers virtualized network services can improve their service experience, simplify network service deployment, and make network resource management easier. However, mobile users roam arbitrarily inside networks, and different users often request various services with varying resource needs and latency requirements. As a result, it is a significant issue to provide dependable and smooth virtualized network services for mobile users in a MEC network while satisfying their specific latency needs, subject to network resource limits. This research focuses on the supply of virtualized network function services for mobile users in MEC while taking user mobility and service latency requirements into mind. We begin by posing two novel optimization issues for user service request admissions, with the goals of maximizing accumulative network utility and accumulative network throughput over a certain time horizon. Then, for the utility maximization issue, we design a constant approximation approach. We also create an online method for the problem of accumulative throughput maximization. Finally, we use experimental simulations to assess the performance of the suggested methods. The results of the experiments show that the proposed algorithms are promising.

Keyword: Mobile Edge computing, network function virtualization, VNF instance deployment, virtualized service provisioning, approximation and online algorithms, delay-sensitive request admission, utility gain maximization, user mobility, cloudlets or edge-clouds, resource allocations and provisioning in MEC, optimization problems

1. INTRODUCTION
MOBILE gadgets, such as smart phones and tablets, are becoming increasingly popular as business, social networking, and personal leisure communication tools. Meanwhile, for the convenience and enjoyment of users, more and more computation-intensive mobile apps with advanced features, such as interactive online gaming, object recognition, and voice control, are being created. However, the execution of computing/storage heavy apps on portable mobile devices is severely hampered by the mobile devices' low compute, storage, and battery capabilities. Offloading computation-intensive apps to faraway clouds with abundant processing and storage resources can considerably expand the capabilities of mobile devices.

However, doing so may result in unavoidable lengthy response latencies, as clouds are often located far away from their end customers, degrading the user experience of utilizing the services, particularly for services with tight latency requirements. Mobile Edge Computing (MEC), as a cloud complement architecture, delivers cloud services to mobile consumers at the network edge, dramatically reducing reaction time. The MEC architecture can take use of mobile devices' capabilities to offload application services to adjacent edge-clouds (cloudlets). As a result, mobile device service quality and energy

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A NOVEL SOFTWARE ENGINEERING APPROACH TOWARD USING MACHINE LEARNING FOR IMPROVING THE EFFICIENCY OF HEALTH SYSTEMS

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ABSTRACT
This study examines how software engineering and machine learning interact in the context of health systems. We proposed the software framework and methodology as a fresh framework for health informatics. Health informatics engineering for machine learning (SEMLHI). The SEMLHI framework consists of four modules (software, machine learning, machine learning algorithms, and health informatics data), which group the tasks in the framework according to the SEMLHI methodology. This enables researchers and developers to examine health informatics software from an engineering standpoint and gives developers a new road map for creating health applications with system functions and software implementations. In order to comprehend both the function of objects linked with the system and the machine learning techniques that must be used on the dataset, users can study and analyze user demands with the help of our new technique, which sheds light on its qualities. Real data from a hospital run by the Palestinian Authority during the last three years make up our dataset for this study. The SEMLHI technique is broken down into seven phases: creating, managing, defining, and implementing procedures; gathering data; ensuring security and privacy; testing and evaluating performance; and delivering software applications.
KEYWORDS: Health Dataset Analysis, Machine Learning, Software Engineering

1. INTRODUCTION

The area of health informatics (HI) seeks to connect different ideas on a big scale. Typically, a healthcare dataset is discovered to be inadequate and noisy; as a result, reading data from dataset linkage typically fails within the first few minutes. field of software engineering. Because it can store data on a massive scale, machine learning (ML) is a fast expanding discipline of computer science. Many ML technologies may be used to evaluate data and generate information that can enhance the quality of work for both staff and doctors; however, there is presently no technique that can be utilized for developers. There has been a shortage of techniques to assessing which software engineering activities are best completed by automation and which require human involvement or human-in-the-loop approaches in the past.

1.1 HEALTH DATASET ANALYSIS

Health care analytics is a subset of data analytics that employs both historical and present data to provide actionable insights, enhance decision-making, and maximize results in the health care business. Health care analytics is utilized to benefit not just health care companies, but also to improve patient experience and health outcomes. The health-care business is brimming with useful information in the form of precise records. Many of these documents must be kept for a specific amount of time, according to industry standards. As a result, individuals working with "big data," or vast pools of unstructured data, have taken an interest in health care. Big data analytics in health care, as a still-developing discipline, has the potential to cut operational costs, enhance efficiency, and treat patients.

1.2 MACHINE LEARNING

Machine learning (ML) is a subset of artificial intelligence (AI) that enables software programmes to grow increasingly effective at predicting outcomes without explicitly programming them to do so.

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A SURVEY A HYBRID MODEL FOR CENTRAL BANK DIGITAL CURRENCY BASED ON BLOCKCHAIN

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ABSTRACT

With the development of blockchain technology, research on digital currency is gaining popularity, especially Central Bank Digital Currency (CBDC), which is essential to the growth of a nation's economy. However, CBDC requires a more complicated system than other crypto currencies do. a stronger focus on supervision and controllable decentralization Therefore, the technical foundation that is in accordance with economic ecology, efficient consensus methods, and network architecture that conserves computer resources are essential elements of CBDC. In this study, we propose a modularity network-enabled hybrid blockchain system for CBDC. Common digital currencies are recorded using the account system, especially for numerous small payment transactions, whereas digital assets and smart contracts with major value fluctuations and low liquidity are recorded using the Unspent Transaction Output (UTXO) scheme. To boost the concurrency of this structured network, a sliced data storage solution is developed, and a modular blockchain design is recommended. The DPOS-BFT technique is enhanced based on the block chain's CBDC supervision mode, which condenses the original algorithm's two rounds of consensus into a single round. The effectiveness of this approach in speeding up consensus and transaction processing is shown in three simulated studies on scheme, network, and consensus.

KEYWORDS: Blockchain,Central Bank Digital Currency,Prototype System

1. INTRODUCTION

1.1 BLOCKCHAIN

Blockchain is a decentralized, unchangeable database that makes it easier to track assets and record transactions in a corporate network. An asset may be physical (such as a home, car, money, or land) or intangible (intellectual property, patents, copyrights, branding). On a blockchain network, practically anything of value may be recorded and sold, lowering risk and increasing efficiency for all parties. Information is essential to business. It is best if it is received quickly and is correct. Blockchain is the best technology for delivering such information because it offers real-time, shareable, and entirely transparent data that is kept on an immutable ledger and accessible exclusively to members of a permission network. Among other things, a blockchain network can monitor orders, payments, accounts, and production. Additionally, because everyone has access to the same version of the truth, you can see every aspect of a transaction from beginning to end, increasing your confidence and opening up new prospects.

1.2 CENTRAL BANK DIGITAL CURRENCY

Bank of America Digital currencies are digital tokens that are issued by a central bank and resemble crypto currencies. They are linked to the value of the fiat money used in that nation. CBDCs are being developed by several nations, and some have even put them into practice. Understanding digital currencies and what they signify for society is crucial since so many nations are looking at how to make the shift. A government-issued currency known as fiat money is one that is not backed by a tangible commodity like gold or silver. It is regarded as a type of accepted legal money for the exchange of goods and services. Banknotes and coins served as the traditional forms of fiat money, but technological advancements have made it possible for governments and financial institutions to

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EFFECTIVE APPROACH FOR FACE RECOGNITION AND ACTIVE SHAPE 3D MODELS USING KERNEL PRINCIPAL COMPONENT ANALYSIS

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ABSTRACT

Face Recognition is a computer application that is capable of detecting, tracking, identifying or verifying human faces from an image or video captured using a digital camera. Although lot of progress has been made in domain of face detection and recognition for security, identification and surveillance purpose, but still there are issues hindering the progress to reach or surpass human level accuracy. These issues are variations in human facial appearance such as; varying lighting condition, noise in face images, scale, pose etc. Kernel principal component analysis (KPCA) as a powerful nonlinear feature extraction method has proven as a preprocessing step for classification algorithm. A face recognition approach based on KPCA and genetic algorithms (GAs) is proposed. By the use of the polynomial functions as a kernel function in KPCA, the high order relationships can be utilized and the nonlinear principal components can be obtained. After that nonlinear principal components, we use GAs to select the optimal feature set for classification.

KEYWORDS: Face recognition, human faces, KPCA, classification algorithm, GAs, surveillance, feature, classification.

1. INTRODUCTION

1.1 KERNEL PRINCIPAL COMPONENT ANALYSIS

A brief background study of biometric and face recognition algorithms were presented. To study assesses the performance and KPCA Computational time and face recognition accuracy. The experimental results shown an Average Testing Time of 1.54 seconds for PCA and 67.0929 seconds for KPCA, it implies that it takes a longer Computational time for KPCA than PCA. However, the experiment revealed that 72.5% performance recognition accuracy while KPCA has 80.0% performance recognition accuracy, indicating that KPCA outperforms the PCA in terms of recognition accuracy should be noted that the results were basically limited by configuration of the computer system used, resolution of the digital camera, different environmental conditions like illumination and different distances between the camera and every face. In summary PCA tradeoff recognition accuracy for testing time while KPCA tradeoff testing time for recognition accuracy.

1.2 KERNEL PRINCIPAL COMPONENT ANALYSIS FEATURES

- Kernel PCA is the nonlinear form of PCA, which better exploits the complicated spatial structure of high-dimensional features.
- Reconstruction of pre-images for kernel PCA.
- Linear dimensionality reduction and feature extraction
- Reconstruction of pre-images for kernel PCA.
- Pattern Classification for Synthetic Data
- Classification for Aligned Human Face Images

1.3 FACE RECOGNITION

Step 1: Face detection

The camera detects and locates the image of a face, either alone or in a crowd. The image may show the person looking straight ahead or in profile.

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ACADEMIC MANAGEMENT SYSTEM

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ABSTRACT

A software platform called an Academic Management System (AMS) is created to handle the academic operations of educational organizations like colleges, universities, and schools. To handle student details, attendance, fees, grades, performance, and course content/exam modules, the system provides a number of modules. Administrators and instructors can handle student data like personal information, contact information, and academic records using the student profile administration module. Students can seek a leave of absence through the leave request administration module, and instructors can accept or reject these requests. Parents can watch their child's scholastic data, including attendance, fees, and grades, through the parent-viewing module. While the fees management module tracks student fee payments and enables administrators to create fee reports, the attendance management module tracks student presence and gives reports on student attendance. Teachers can input student scores for tests, quizzes, and examinations in the mark administration section, which also produces reports for parents and managers. Grades, attendance, and instructor feedback are all included in the student performance management module's complete perspective of student success. Administrators and instructors can compare student performance across courses, assess student performance over time, and pinpoint areas for growth using the performance analysis tool. The graphical reports section presents student achievement data in graphical form, enabling managers and instructors to spot trends and patterns right away. Administrators and instructors can create reports and progress cards for specific students or complete classes, download them, and then transmit them to the students or classes in question. Teachers can submit course materials, such as lesson notes and readings, and handle test schedules and modules using the course content/exam module administration module. Overall, an academic management system aids educational establishments in successfully and efficiently managing their academic activities. It also enhances interaction and cooperation between educators, administrators, students, and parents.

KEYWORD: School, Admission, Management, Students, Parents

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INVENTORY MANAGEMENT SYSTEM

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ABSTRACT

A vessel shop needs a stock availability management system to control inventory levels and make sure the correct materials and parts are accessible when required. The three main components of this system are usually Purchase and Sales, Stock Availability, and Reporting. Managers can follow the purchaseing process, from the purchase order to the processing of the money, using the Purchase and Sales module. Managers can watch source performance, keep tabs on inventory influx and outflow, and make sure that inventory levels are kept at their ideal levels with the help of this feature. The Stock Availability function is in charge of continuously checking product levels and making sure they are higher than predetermined limits. Features like inventory monitoring, stock notifications, reordering options, and reporting tools are included in this section. Managers can minimize the risk of stock-outs and downtime by keeping an eye on inventory levels to make sure the appropriate components and materials are accessible when required. Managers can access thorough data on inventory movements, trends, and patterns through the reporting tool. This section has features like slow-moving inventory analysis, inventory turnover, and planning tools. With the help of this tool, managers can pinpoint areas for growth, maximize inventory levels, and cut costs associated with having inventory. In a nutshell, a vessel shop's Stock Availability Management System is a crucial instrument for controlling inventory levels, lowering stock-outs, and ensuring that the appropriate components and materials are accessible when required. Managers can increase productivity, cut expenses, and boost customer happiness by using the Purchase and Sales, Stock Availability, and Reporting tools to streamline the purchase process, optimize inventory levels, and lower the risk of stock-outs and downtime.

Key Words: Vessel Shop, Stock, Sales Employee

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Office Administration System

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Abstract: ***Office administration system is a software application designed to help schools and educational institutions. It manages day-to-day operations more efficiently. It typically includes various modules that handle tasks such as admission management, employee management, accounts department, resource management, student, student performance management, performance analysis of student, course content.***
There are various contents included regarding class details, classroom attendance for each grade, management of student attendance, subject details, exam details, automatic timetable generation, report, download timetable. The system can be a powerful tool for school administration management, streamlining processes, improving efficiency, and enhancing communication between staff, students, and parents.
Keywords: Office Administration, Management, Security and Privacy, Communication and Educational institutions.

I. INTRODUCTION

School office administration system is a software tool designed to manage various administrative tasks and operations within a school.

It aims to streamline administrative processes and enhance the overall efficiency of school management by providing a centralized platform for staff to access and manage important information, records, and reports. Some of the key features of school administration system include student information management, attendance tracking, grade reporting, scheduling, and communication with parents and teachers.

The system may also include financial management tools for budgeting and payment processing. Staff members can access and update student records in real time, monitor attendance, and generate reports for teachers, administrators, and parents. This helps to improve communication between teachers and parents, leading to better collaboration and support for students.

II. LITERATURE SURVEY

"Ahuja, N.(2018).a comparison of office management systems in small and large enterprises".A comparison of office management s ystems are available, including paper-based, computer-based, and cloud-based systems. These systems offer benefits such as improved efficiency, security, and accessibility, but also present challenges related to implementation, cost, and user adoption. Case studies illustrate the benefits of using office management systems in different industries and contexts. Comparative analysis of key features, pricing, and user satisfaction can help organizations make an informed decision when choosing an office management system.[1]

"Bhatia, M. (2017). The role of technology in modern office administration systems "It highlights the importance of technology in modern office administration systems and its impact on organizational efficiency and productivity. Literature on the adoption and use of technology in office administration suggests that it can improve communication, collaboration, document management, and task delegation. Studies also indicate that technology adoption can lead to changes in work culture, including increased job satisfaction and flexibility. However, challenges related to cost, training, and user resistance may also arise when implementing new technology in the workplace.[2]

"Burroughs, S. M. (2019). Improving office administration systems with automation and AI" It discusses the potential benefits of automation and artificial intelligence (AI) in improving office administration systems. Literature on automation and AI in the workplace suggests that it can increase efficiency, accuracy, and speed in tasks such as data entry, scheduling, and document management.

Studies also indicate that automation and AI can lead to cost savings and better utilization of human resources. However, concerns related to job displacement, data privacy, and ethical considerations must also be addressed when implementing these technologies in the workplace.[3]

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Social Network Mental Disorders Detection via Online Social Media Mining

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Abstract: ***The rapid growth in popularity of the social networking results in problematicusage. An increasing number of social network mental disorders (SNMDs), like Information Overload, Cyber-Relationship Addiction, and Net Compulsion, are recently mentioned. Mental disorders symptoms are normally observed today passively, which are resulting in delayed clinical process of intervention. In this study, users alleged that mining online social behavior yields an opportunity for active identification of SNMDs in an early stage. It is challenging for finding SNMDs since mental status cannot be directly observed from social activity logs data. This approach, novel and innovative to practice the SNMD detection, is not relying on self-revealing of the mental factors using questionnaires in the Psychology. Depression detection taken from tweets records are processed out after proper preprocessing steps. Moreover, to address the above said problems, this project proposed a new depression detection classification model which use K-Nearest Neighbor and a Support Vector Machine based classification. Python 3.7 is used as the language for project development.***

Keywords: Social Media, Support Vector Machine, K-Nearest Neighbor, Mental Disorder.

I. INTRODUCTION

Everybody have experimented sadness at different times. Still, depression is very different and unavoidable in this scenario. Depression is a psychiatric disorder that needs to be coping with the medication.

A. Definition of Depression

According to the World in Data -Website, Depressive disorders occur with varying severity. The WHO's International Classification of Diseases (ICD-10) denotes this as set of disorders ranging as mild to moderate (to severe). The Institute for Health Metrics and Evaluation (IHME) adopt the definitions by disaggregating to i) mild, ii) persistent depression (dysthymia) and iii) major depressive disorder (severe). All forms of the depressive disorder experience some of the below symptoms:

1) Reduction of concentration and attention
2) Reduction of self-esteem and self-confidence
3) Ideas of guilt/unworthiness (even in a mild type of episode)
4) Bleak/pessimistic views of the future
5) Ideas or acts of self-harm/suicide
6) Sleep disturbance
7) Appetite diminish

Depression is one of the leading causes of disability worldwide. Almost 70% of people with mental disorders remain untreated in the developing countries with almost one million people taking their lives every year. Moreover, according to the World Health Organization (WHO), one in thirteen globally suffers from anxiety. The WHO reports that the anxiety disorders are the most common mental disorders around the world with specific phobia, major depressive disorders and social phobia are the most common anxiety disorders.

B. Depression on Social Media

Social media platforms become an integral part of the people's life. They reflect our personal life. People want to share joy, happiness and sadness on the social media. These platforms are used for the researchers for identifying the causes of depression. Twitter knows when you're suffered/ depressed and possibility of creating an artificial intelligence model which can scan the Twitter feeds and tell if you're at risk of depression or receive notices from the third parties, for instance, warning you that you want to seek help, just based on an automated scan of the tweets. The people who are suffering from the depression mostly wants to be isolated from others, which makes them hope for finding a solution in By sharing the feelings and illness believes that would be able to yield relief and able to solve their worries and anxieties. Instead, it is being found that this social communication and sharing increases the worries and anxieties. Amongst many other social network sites Facebook is one of the fastest growing.

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PLC BASED MULTICHANNEL TEMPERATURE MONITORING AND CONTROLLING SYSTEM

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Abstract – **This paper presents a temperature control inspection system designed for industrial control applications such as temperature control in boilers used in steel, chemical plants, and thermal power plants. The system consists of an up-computer, which is a programmable logic controller (PLC), and multiple down-computer clews in the form of AI smart meters. The system is designed to allow for remote centralized management and security monitoring. The hardware structure of the system is explained, along with the interconnections between various components. The communication system of the down-computer is described in detail, and a portion of the communication system program is provided. The system uses intelligent instruments for real-time collection, processing, and feedback of temperature data from the site, and the remote monitoring function is successfully implemented. The system's advantages include high efficiency, high universality, and reliable stability.**

Keywords: **IoT (Internet of Things), PLC, PH100. ESP8266, Multichannel Temperature Sensor.**

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IoT Enabled Smart Television Control System for Children

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Abstract

Now a days, television has become an integral part of daily life. Substantially Children are obsessed with cartoons, rhymes, and 3D pictures. Therefore, the use of long periods of TV viewing has a negative impact on their health, including optic nerve damage. Jitters that impair their vision and heighten their stress level without their knowledge causes headaches, etc. This proposed system will produce a smart app that covers and controls both biases and allows you to shoot parents and guardians can disable SMS announcements if they find them inconvenient. The bias automatically from anywhere at any time. The main ideal of this design is to give an IoT-enabled security system control over and long-time usage of TV. If the children use the TV for a long time automatically TV will be shut down by the parents with the help of blynk app. This design avoids the causes of health problems such as increased stress, neck pain and vision loss as well as the effects of optic jitters on the brain. This system aims to develop a prototype that's independent and capable of controlling television automatically via an Android smartphone using the Arduino UNO Microcontroller. If the children are sitting in front of the television within the distance limit from 20cm to 100 cm, the wi-fi module tracks the distance from the ultrasonic sensor. The tracked signal from ultrasonic sensor is send to the Arduino microcontroller and microcontroller will turn off the screen of the television.

Keyword: blynk app, Wi-Fi-module, Arduino Uno, ultrasonic sensor

1 Introduction

The Television have become the part of our life in this 21st centuries. Mostly Children are obsessed with it and Using Television for long time affects their healthlike damaging the optical nerves that reduces their eye vision and increases the stresslevel without their knowledge causes headache etc. In this project using blynk app we can monitor and control the television and that enables automatic shut-down & send notification to parents and guardians. Iot can be described as connecting everyday objects like smart phones, internet televisions, sensors and actuators to the internet where the devices are intelligently linked together to enable new forms of communication amongst people and themselves. With the IoT concept various electronic devices like home appliances can be controlled via Bluetooth, internet, short message service (SMS) based, etc. Because of its development, now IoT has been implemented in various industries and cities to make life and work easier. This research uses a concept of IoT for the implementation of Smart Home with TV as an object. The system was developed without compromising the function of the TVitself, where the system was built separately and stand alone. Hardware that is developed is placed or taped around the TV power button which acts as an assistantto the TV owner to interact with the power button on the TV. In addition, with this system, the TV in a power off condition can be turned on and vice versa through pressing the button on the home smartphone Android app users.

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A HYBRID FULL ADDER USING A NOVAL XOR GATE FOR LOW POWER APPLICATION

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Abstract- **Using a combination of Pass Transistor Logic (PTL), CMOS logic, and transmission gate (TG) logic in 65-nm technology, a unique Hybrid Full Adder (HFA) has been developed. This implementation includes various modules such as the XOR module, the carry generator module, and the sum generator module, which are used to realize a 1-bit HFA. To design the proposed HFA, an inverter logic is used in conjunction with the XOR logic to obtain the logic of XNOR. The proposed design is impressive as it uses only 13 transistors, resulting in a small area. This improvement in terms of Power-Delay Product (PDP) makes it suitable for basic building blocks of Very Large-Scale Integration (VLSI) circuits. Furthermore, the power consumption of the proposed HFA is significantly lower, resulting in improved PDP compared to other hybrid full adders. A comparison of the essential parameters between the proposed HFA and other existing HFAs has been made.**

Key Words: **Hybrid full added, XOR Gate, XNOR gate,**

INTRODUCTION

The increasing demand for battery-powered electronic devices like the Personal computer, smart phones, bioelectronics and PDA devices. Very Largescale Integration (VLSI) designers are focused towards minimum power delay characteristics of the circuits . One of the major concern for designers to achieve minimum power delay is to design energy efficient VLSI circuit . In order to develop a low power VLSI circuit, the designer need to consider the transistors count, heat transfer and area of the circuit. The main goal is to keep the battery life longer with reduced cost and area of packaging which is suitable for portable device applications So, researchers are developing efficient basic circuits for the application of low- power circuits by implementing hybrid technology. As a result, the performance microelectronic circuits is improved in a tremendous manner. A one bit Full Adder (FA) is considered as a basic logic module of building arithmetic logic circuits like binary addition, subtraction and multiplier etc. Hence, highly efficient basic FA blocks in the arithmetic logic unit (ALU) circuit is needed for large scale arithmetic operation of high resolution image and video processing, and many other microprocessor applications. The complementary metal-oxide semiconductor (CMOS), Transmission gate FA and dynamic CMOS logic are the most widely used logic styles for the building of 1-bitFA. The conventional CMOS logic style is widely preferred due to its excellent driving capabilities and good output swing. But, the drawback of employing CMOS circuits is its higher power consumption due to high current switching time and leakage of current due to short circuit. Further, the design can be implemented by using multiple logic which are known as hybrid logic, to enhance the overall performance of the FA. Hybrid logic styles consist of two or more different logic styles CMOS-CPL, PTL-TGA, CMOS-TG, hybrid CMOS, for designing the circuits. Arithmetic operation such as additions and subtraction and also in multiplication and division are widely used and play an important role in various digital systems such as digital signal processor (DSP) architecture and also for microprocessor further being used in microcontrollers and data process unit. Although adders are the logic circuits that had being designed to perform some of the high speed arithmetic as well as logical operations and are important components in digital system because of their extensive use in other basic operations such as subtraction and multiplication and good to be likely used for division Nowadays in many of computer and other kinds of processor and adders are likely to be used hence not only in the arithmetic logic unit functions but also in other important parts of the processors where they are used to calculate addresses and table indices and same kind of operations performed thus the very basic arithmetic operations is the adding of two binary digits bits. A conventional ALU can be used to perform basic arithmetic and logic operations such as AND, OR, NOT,ADD, Subtract. The Arithmetic logic unit take two operands and also performs the desired operations between those units also the control signal is to be used to select the output from the operations that had been performed thus; the control unit is designed by using a multiplexer which selects the required operations. All the operations are performed in one cycle but only the one that is required in the output is selected by the Multiplexer and an Arithmetic logic unit does not perform multiplication between two operands and also an extra circuitry is being required along with the Arithmetic logic unit which increase the chip area therefore, in this paper we propose the design of an ALU which supports multiplication. The Multiplier is designed using the Both's algorithm is a multiplication algorithm that multiplies two numbers which are binary by using two's complement notation also in an conventional array multiplier requires a large number of devices.

LITERATURE REVIEW

Salam Surjit Singh in November 2020 A unique 1-bit HFA is designed using a standard cadence virtuoso platform at 90-nm technology. The transistor count of the designed HFA is only 13T, which is less than the reported hybrid style. Moreover, the designed HFA has less power and power delay product compared to the existing FA design. The results of the proposed HFA have improved in overall performance in terms of power delay. The area of the circuit is significantly smaller because of 13 transistors used in the proposed HFA. In future, the layout of the designed HFA may be done to study the area of the proposed

WASTEWATER MONITORING AND CONTROLLING USING CLOUD-BASED IOT SYSTEM

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Abstract- **A new industrial IoT cloud-based model for real-time wastewatermonitoring and Controlling is proposed for monitoring water from treatment plants. This system consist of several sensors used to measure the physical and chemical parameters of the water. The parameters such as Temperature, pH, Phosphorus of the water can be measured and O_2 sensor is used to measure the oxygen level in atmosphere in treatment plant, thereby indicating the wastewater that the plant cannot handle. The Nodmcu collects and uploads real-time sensor readings to the cloud using an IoT Wi-Fi Module. Additionally, it reports or identified unexpected industrial wastewater outlets usingSMS notifications and alarms. Control Valves are used to close the outlet of the waste water from treatment plants to prevent it from damaging the water bodies and it sends the wastewater to retreatment to the plant. The tools that areused in proposed solution are thingspeak, PIC Microcontroller, Nodemcu, LCD display and sensors like temperature sensor, pH sensor, phosphorus sensor and O_2 sensor.**

I.INTRODUCTION

The importance of IIOT(INDUSTRIAL INTERNET OF THINGS) has been demonstrated by its use in mission and safety-critical systems. Because it handles critical and sensitive data, a detailed search is required to determine its susceptibility to security issues. Existing security solutions are becoming less effective and applicable as the Existing security solutions are becoming less effective. Monitoring the wastewater outlet into the plant is important to provide early detection and alerts in cases of not properly treatment wastewater outlet to the water bodies. As a result of the growth of IoT in industrial and environmental monitoring, a viable solution for dynamic, continuous, and real-time wastewater monitoring has emerged. In this paper, an integrated cloud based IoT model is developed to monitor the outlet treatment wastewater to the river or ocean. In this paper the concept is to develop a cloud-based IoT system for monitoring and controlling wastewater in industry in order to reduce the environmental impact of wastewater. This system will allow for real-time monitoring of wastewater levels in various locations, as well as the ability to set alarms and alerts for when certain levels are reached. Additionally, this system will be able to control wastewater levels by automatically controlling pumps, valves, and other wastewater management systems. Using IIOT it allows authorities to track water composition and establish an enterprise asset management (EAM) system as well as a computerized maintenance management system (CMMS). It improves data gathering capabilities and provides real infrastructure monitoring. Performance characteristics of machines can be monitored utilizing real-time data collected 4 from various embedded sensors, resulting in increased equipment productivity and a reduction in maintenance tasks. IIOT in recycled wastewater management can also be utilized to determine residual chemicals after treatment. This data can also be used to determine the efficiency of the treatment process and ensure that water quality requirements are fulfilled before it is discharged into a water bodies.

II.LITERATURE SURVEY

"Reconfigurable smart water quality monitoring system in IoT environment" was proposed in the year 2017. The proposed WQM system collects the five parameters of water data such as water pH, water level, turbidity, carbon dioxide (CO2) on the surface of water and water temperature in parallel and in real time basis with high speed from multiple different sensor nodes.

"Real-Time Water Quality Monitoring and Estimation in A IoT for Freshwater Biodiversity Conservation" was proposed in the year 2021. A IoT techniques can be applied to pollutant discharge monitoring and other water quality regulatory applications for freshwater biodiversity conservation. IOT unmeasurable parameters are estimated using a general regression neural network (GRNN) model and a multivariate polynomial regression (MPR) model.

"An Internet-of-Things Enabled Smart System for Wastewater Monitoring" was proposed in the year 2022. The special conditions of the sewer environment bring special challenges for the design of an IoT system and of its real-time algorithm for anomaly detection and localization in wastewater networks.

"An IoT-based innovative real-time pH monitoring and control of municipal wastewater for agriculture and gardening". They proposed realtime pH monitoring and control system of local wastewater using IoT for gardening and agriculture applications. The system was programmed to use a solenoid valve that operates automatically. For online monitoring of water pH and temperature, the Arduino Mega 2560 and a Wi-Fi transceiver (Wi-Fi shield) were utilized, as well as an android app. The microcontroller and Wi-Fi module can transmit and receive and instructions within a 100-foot interior limit and 300-foot LOS communication range if needed.

"Control Console of Sewage Treatment Plant with Sensors as Application of IOT" was proposed in the year 2020. The project involves using the sensors to make the traditional STP more robust and efficient. By monitoring the quantities of gases, it is possible to instantaneously account for the extent of treatment that is taking place at any given point of time.

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Advanced suction based static trash collector using IOT

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Abstract-- *The level of cleanliness in the rooms should be ensured for quality living. By using this system the neatness of the living space is constantly verified by analyzing the level of the garbage in the dustbins which are placed in various parts of the rooms. This project presents a advanced suction based static trash collector using Internet of Things (IoT) technology. The proposed system is able to monitor the trash collector levels and provide real-time data to the users. This system consists of different components such as sensors, a microcontroller, cloud storage and a web-based user interface. The sensors will be used to measure the trash collector levels and the microcontroller will collect data from the sensors and send it to the cloud for storage. The web-based user interface will allow users to view the real-time trash collector levels and take appropriate actions accordingly. The proposed system can be used to reduce the amount of waste being disposed of, as users can be alerted of when the trash collector levels are reaching the capacity. It can also help reduce the cost of waste management by providing an efficient monitoring system. We can monitor the patient the through internet and smart phones.*

I. INTRODUCTION

Recently, there has been a lot of interest in the concept of smart waste collection. In the subject of IOT, significant efforts have been undertaken to increase the dependability and productivity of urban areas. IOT found problems like inadequate trash collection and fuel waste. In this paper, we present an intelligent garbage monitoring system that combines IOT and the cloud to eliminate the need for a lot of manual labour. The suggested Smart waste monitoring system has a moisture sensor to help separate dry and wet trash. This ingenious device, called Advanced suction based static trash collector using IOT, will help to keep the environment clean. Essentially, this system sends the user information via email about the amount of garbage that has accumulated in the trash cans. It sends an alert when a bin is full using sensors connected to the Internet of Things (IoT). The amount of time, money, and labour needed for manual trash collection and disposal may be decreased thanks to this technology. It can also assist towns in better planning their services and enhancing their environmental performance by giving real-time data. The technology can be used to assess the different waste types, monitor the amount of trash collected in a certain location, and even improve the trash collection route..

II. LITERATURE SURVEY

Z. Kang et al[1] proposed to Develops a machine-learning algorithm based on ResNet-34 and three tailor-made modifications, including multi feature fusion and re-use of residual unit. The automatic garbage collection system is integrated with the required algorithm and hardware, and the system works well in the high class classification system and it is stable in the fast classification system.

N. L. Husni et al[2] proposed to the 3G-bot can send data efficiently and mobile phone can receive data directly.The rising level of waste detected can be follow the presentation of mobile phones, is different corresponds to the reading value of the sensor. They will be decreased during the percentage of litter..

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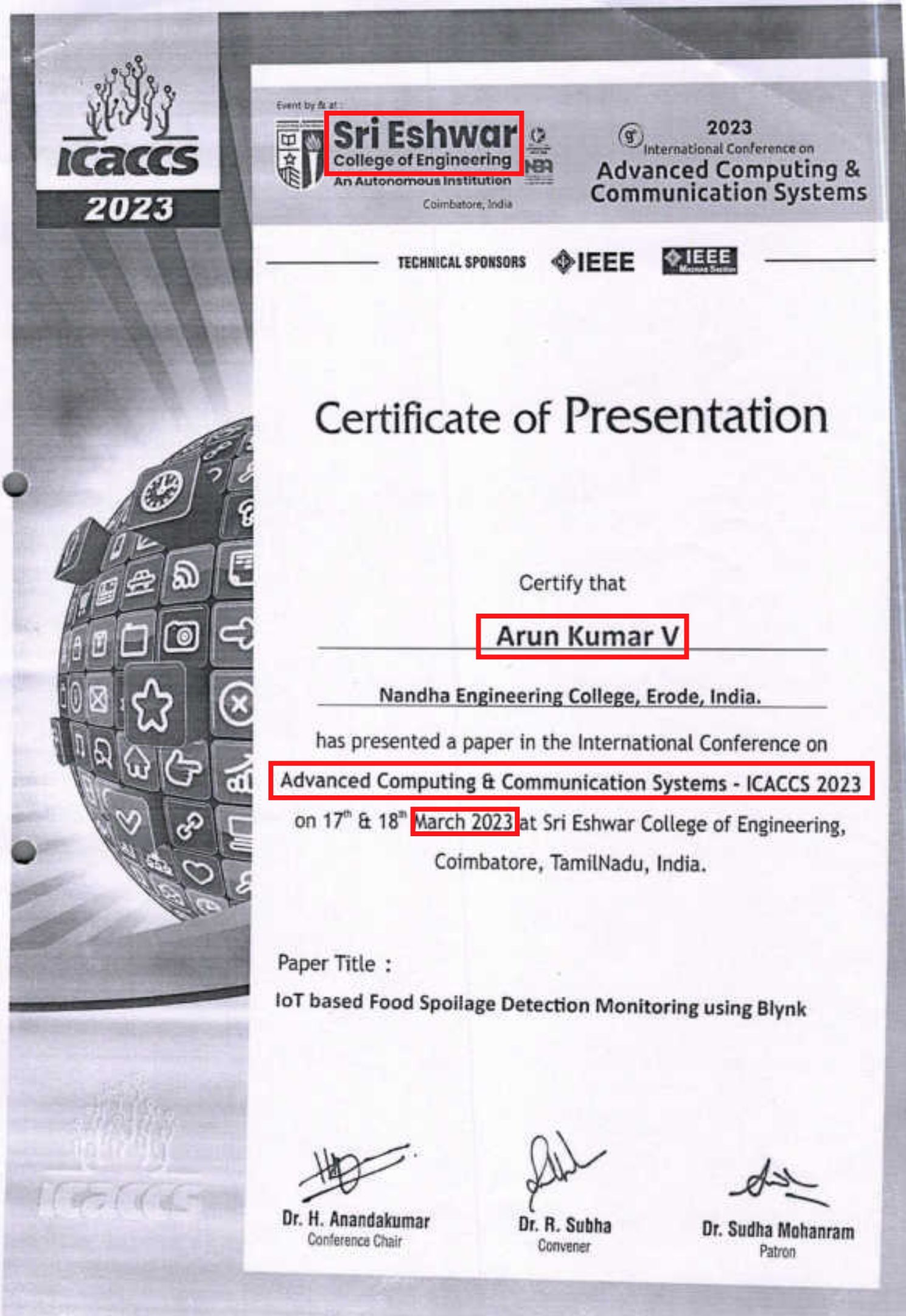

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Social Science Journal

The Influence of Social Media Marketing on Consumer Buying Decision Through Brand Image in The Fashion Apparel Brand

By

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Abstract

Social Media Transformed Consumer Communication. The New Trend Affects Fashion Apparel Brand Also. Despite This, Social Media's Role In Consumer Decision-Making Is Still Understudied. The Research Examined How Social Media Affects Brand Image-Mediated Customer Purchase Choices. During The Covid-19 Epidemic, Fashion Clothing Customers Were Surveyed Online. This Research Found That Fashion Clothing Businesses' Social Media Marketing Affects Customer Purchase Decisions. Hence, Social Media Helps Fashion Clothing Firms Create A Personality And Build Trust. Hence, Social Media Marketing Enhanced Top-Of-Mind Brand Memory By Increasing Brand Presence On Social Media Platforms

Keywords: Social Media Marketing, Consumer Buying Decision, Brand Image And Fashion Apparel Brand

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in the International Conference on Advanced Materials and Technologies for Industry 4.0 -"ICAMT 4.0" organized by Department Of Mechanical Engineering, Bannari Amman Institute of Technology, Sathyamangalam, Erode, held during March 23 & 24 - 2023.

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Implementation of low power full adder using CMOS technology

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***Abstract*—A crucial part of digital and VLSI systems is played by adders. The use of arithmetic operations is crucial in digital systems. The entire study in VLSI systems is focused on reducing the transistor scale to enforce any other digital system. This suggested design is implemented by various logic system types, each of which plays a specific function in the hybrid system. This structure uses a hybrid Full Adder cell with a single bit. Using a 16-nm CMOS hybrid full adder, the proposed approach is studied. Based on the findings of the simulation, the suggested architecture shows significant efficiency in both power consumption and delay. The simulation's output indicated that the data channel architecture for contemporary high speed central processor units used a full adder circuit. This type of hybrid full adder, which is mostly employed in nanotechnology applications, decreases latency while enhancing efficiency. For a 1 -V supply at 16-nm technology, the average power consumption of 1.5317μW with moderately low delay of 10.4078n was determined to be incredibly low. Compared to earlier full adder designs, this form of adder offers considerable advantages in power, high speed.**

***Index Terms*—efficiency, power, delay, high speed**

I. INTRODUCTION

Today's technology reduces gate length and transistor thickness as it moves from micrometer to nanoscale scale. Full adders are crucial to VLSI systems because they boost the efficiency of digital and nano computing systems. Minimizing power consumption for digital systems requires optimization at all design stages.

This paper illustrates the approach of creation that incorporates the technologies for creating digital circuits, their architectural designs, and the most advanced algorithms. Arithmetic units are employed in contemporary computing applications to increase the effectiveness of adder systems. The hybrid adders highlight the significance of low power design approaches. In this transistor logic, the transistors serve as voltage-controlled switches. A complete adder is employed with various logic models and offers various advantages. As a result, these various complete adder types can implement the methods in microprocessor systems.

The logic design style of Hybrid-CMOS uses more than one element full adder design. For example, this kind of adders added in to the hybrid CMOS design. The different method of adders are use more than one logic design, called as hybrid-logic design style, these hybrid full adder designs is used for complex circuits and it's also used in nano technology applications. This style of logic design gives the high efficiency and high performance of logic circuits. The one bit full adder performance is good but the performance degenerated rustically as the chain size increased. A new 1 bit hybrid full adder using different types of gates like PTs ,TGs, and static CMOS logic was introduced. In this type of hybrid full adder was designed by 16 nm technology. To comparing C-CMOS circuits, the hybrid structure circuit gives high speed, low power.

II. WORKING FUNCTIONALITY

This technique made use of PTs, TGs, and C-CMOS circuitry, creating a hybrid FA. The hybrid adder circuit's primary capacity is one of its most valuable resources, and researchers are working to preserve this form of reasoning.

This study illustrates the switching behavior, transistor size, and intermediate node capacitances as the power dissipation characteristics in CMOS circuits (diffusion, gate and wiring capacities). A recent technique for analyzing the behavior of hybrid logic circuits has been developed in order to prevent complicated structure.

The major goal of this study is to apply several types of logic styles to enhance the hybrid structure. In instance, while using a typical tool, a large delay error and excessive power usage occur. Use the Spice tool, which uses smaller transistors and lower power and delay requirements, to prevent this kind of error.

It is possible to improve the time analysis of nanotechnologies by using hybrid structure methodologies. Currently, researchers are utilizing a hybrid design method that combines the advantages of many logic types into a single full adder unit. TG Adder (TGA) and Transmission Function Adder are used to utilize TGs in the architecture (TFA). The key advantage of TGA and TFA FA is that they do not experience voltage loss or poor performance.

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ANALYSIS OF HIGH RADIATION EFFICIENCY ULTRA WIDE BAND BOWTIE ANTENNA FOR IDENTIFICATION OF TUMOR CELLS

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Nandha Engineering College, Erode, Tamil Nadu, India.

Abstract: In the clinical industry, antennas are crucial. In order to create a bio verbal exchange machine among clinical gadgets and outside gadgets for short-variety biotelemetry applications, antennas can both be implanted into the human frame or absolutely booked up over the skin. The Ultra-Wide Band (UWB) Bowtie Antenna applied on this assignment is described handiest with the aid of using the attitude fashioned with the aid of using the separation of the 2 planar steel portions with the aid of using the radio nice and poor terminals. UWB Bowtie Antennas are regularly created with inside the 3.1 to 10.6 GHz frequency variety. The most frequency has been set to six GHz for utilization in clinical microwave imaging (MWI). The tissues with a great water content material had an antenna mirrored image coefficient that became much less than - 12dB. It has an above-common radiation performance of 80%. The offered antenna's ability became proven with the aid of using a MWI-technique image reconstruction from the measured data.

Index Terms—Microwave Imaging (MWI), UWB antenna, Tumor cells.

I. INTRODUCTION

Magnetic resonance imaging (MRI), computed tomography (CT), and positron emission tomography (PET) are a number of the present day traditional imaging strategies which have been considerably studied with inside the preceding two decades as alternatives. The gain of MWI technology is their low operational cost. The MWI strategies rely upon electromagnetic (EM) wave publicity of the imaging area and detection of meditated and scattered EM waves at surfaces with numerous dielectric characteristics, usually with the usage of antenna arrays. Depending at the MWI method, a couple of reconstruction strategies may be used to interpret records approximately the EM waves that man or woman antenna factors have acquired so that you can test and display the vicinity of interest (ROI) in 3 dimensions. The characteristics of the antenna factors we hired had a widespread effect at the MWI system's potential to reconstruct images. It is feasible to apply nonionizing radiation and associated structures in a compact and modest manner. The duration among the onset of a mind stroke and its remedy may be substantially shortened with the usage of MWI, which has the capability to be carried out correctly at once in ambulance trucks. This is critical so that you can do away with awful fitness outcomes and enhance affected person prognosis. Non-invasive temperature tracking at some point of hyperthermia therapy, wherein the goal tumour vicinity's temperature is artificially raised to a number of forty to forty four stages Celsius for as a minimum an hour, is any other capability use for MWI devices. The MWI method may be used to become aware of this temperature boom due to modifications with inside the dielectric characteristics. MWI structures result in new necessities for the antenna elements. Among UWB antennas which are appropriate for MWI at microwave frequencies are Vivaldi planar antennas, double ridged horn antennas, planar monopole and bowtie dipoles antennas. The planar Vivaldi antenna makes use of exponentially tapered antipodal hands to radiate electricity immediately to the tissue. This antenna turned into designed for the breast most cancers detection machine primarily based totally at the radar approach. Due to the very low relative permittivity of the breast (about $\varepsilon r = 6$), canola oil is used as an identical liquid. UWB ridged horn antennas have excessive radiation efficiency, and the backward and aspect radiation is suppressed. These ridged horn antennas are normally full of excessive permittivity material (e.g., ceramics) inserted in the antenna and lowering the antenna dimensions. The weight of the antenna is excessive and, because of its filling, is likewise hard to fabricate as compared with different eligible antennas for MWI. Planar UWB monopole antennas provide a low-value answer of the problem, as they're clean to fabricate. Planar monopoles do now no longer want an identical liquid due to the fact they may be located at the floor of the analysed tissue. However, the benefit of the simplicity of planar layout involves the disadvantage of electricity deliver with inside the aircraft of the monopole patch, which isn't always very suitable and makes the usage of the sort of monopole in an array hard from the array perspective. Furthermore, the radiation sample of the planar UWB monopoles varies pretty notably with frequency, which may also motive distortion with inside the time domain. Bowtie dipoles, commonly planar dipoles and its modifications, are easy to fabricate. The geometry is broadband and the antenna is absolutely attachable immediately to the tissue (the matching liquid isn't always needed). Compared with the horn and Vivaldi antennas, the bowtie antenna has a decrease radiation efficiency and is greater touchy to the encircling environment. Due to the excessive permittivity price of the muscle tissue, a better a part of the EM electricity is emitted towards the phantom, which improves the efficiency. However, the bowtie antenna calls for symmetrical feeding, that is normally appropriate handiest for a confined frequency range. This paper is to design an UWB bowtie antenna together with UWB balanced-to-unbalanced (balun) for mixed MT. In the primary step, we've got studied and as compared numerous feasible micro strip UWB baluns . The maximum promising balun became mixed with the bowtie antenna, whose dimensions have been minimized via way of means of adjusting the form of bowtie edges the usage of a numerical parametric study. In the following step, we numerically examined primary antenna parameters for antenna usability. We numerically examined antenna radiation performance and established that bowties palms are symmetrically fed via way of means of visualization of floor modern density and |E| disciplined

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IoT Enbled Smart Water Control and Monitoring System

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ABSTRACT

It is a recognized fact that 70% of the Earth's surface is covered by water, but that only 3% of that water is freshwater fit for human use. Additionally, there is a critical need for water conservation in the modern environment due to the growing population in cities. The majority of the time when filling up the overhead tanks, water spills, and water theft also occur so it resulting in significant water loss. An iot has been designed in this research to address this issue. By monitoring the amount of water in the overhead tank and alerting the user to turn on or off the engine using their cell phone, this effectively lowers water waste. The user can manage the motor with this system

1. INTRODUCTION

Only 1% of the water on Earth's surface, which makes up 70% of its surface, is used by humans. In India, access to clean drinking water has always been a national concern. Importance based on the information provided by the department demonstrates that out of 1.42 million people, Only 1.27 million rural homes are completely covered, 0.1315,917 are not covered, for a total of million partially covered are not provided with access to a supply of clean drinking water. Yet this is simply considering capacity, ignoring quality, and average supply into consideration in urban areas. There are many causes of water leaking in pipelines, including pipeline ageing, roadvibration brought on by vehicles, metal pipe rusting, pipeline hammering, etc. Aside from those, water leakage from pipes is also caused by people breaking them to steal water. One approach that can make a big difference and address the problem water scarcity in India and other countries is the detection of water theft.

With this using water flow sensors, which will identify the pressure in a pipeline, both inside and outside, that will be helpful in order to identify theft or leaking.The suggested technique explains the notion and concept of using flow sensors and wireless communication technologies to reduce leakage, water theft, and provide information on when water can be provided. The plan envisions carrying out the project at the municipal level, with kilometers-long pipelines across the entire city.

2. TECHNOLOGY STACK

Due to benefits like leak identification without altering any pipeline structures, without impairing the serviceability of the distribution, or without removing dirt from above the pipeline network, non-destructive

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DESIGN AND FABRICATION OF FOUR WHEEL OFF ROAD ELECTRIC SCOOTER – A REVIEW

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ABSTRACT

Electric vehicles are becoming more important, as not only to reduce carbon emission but also to reduce the dependency on normal combustion engine vehicles. The harmless and power-controlled vehicle with safety technologies is introduced. Besides, it also reduces time consumption. In this project, we have design and development the weightless electric scooter. Hence we use 20 HP hub motor to run the scooter. It will run with of 20-40 kmph. We use four wheels instead of 3 wheels. If helps to increase the friction on ground and reduce the drag. Here we use 40 kW lead acid batteries. It gives enough power to run scooter.

Keywords: Design, Fabrication, Four Wheels, Electric Scooter, Off Road, Review.

I. INTRODUCTION

Electric scooter is a type of a scooter that contains an electric battery which provides power to it. The electricity is provided by these electric batteries. Importance of treating e-scooter as a distinct transport mode and contributes to matching policy and practice to integrate e-scooters into transport planning. Future studies should analyse the interaction of e-scooters with other road users.

II. REVIEW OF LITERATURE

Tyh-Rong Chou et.al electric scooters are considered a new technical green product and a potential industry for many countries. In this article work concerning product design and prototype making of an electric scooter is described which was the outcome of a collaborate project for new product development.

Siddique A Khateeb et.al a Lithum –ion battery employing a novel phase change material thermal management system was designed for an electric scooter. Passive thermal management systems using can control the temperature.

R. Nasiri et.al, in recent years many countries in the world face with problem of air pollution. The fossil fuels which have been used in the urban transport are one of the major exacerbating factors. In this paper review of different structure of e-bike the limitation and standards the mathematical relation in design process the different types of batteries have been conducted.

Jakub Mesicek et.al, the combination of topological optimization (to) and 3D printing has the revolutionized the way of components are designed and fabricated. In view of this manuscript presents as to work flow considering the flame of a scooter work.

Varun V et.al, the platform is designed in such way that vehicle will have easy, safe and stable in manoeuvrability even and higher speeds. To ensure that the chassis is safe and stable in expanded as well as in contracted wheelbase condition different mechanisms are used for the expansion of wheel base and for its locking. To the consumers the mechanisms will also be electrically powered to ensure smooth functioning. The concept of the platform which can be used commonly for both, the commercial as well as passenger electric vehicles can be considered as a modern approach when the automobile industry is moving towards reducing the manufacturing cost, scraps and provide more features.

Terrance yee et.al. Road runner will accomplish these impressive schedule fielding a suite of centered on a new optical payloads. Road runner combination of high performance, powerful on board processing it is a smallest and trends will greatly enhance.

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DESIGN AND FABRICATION OF CHAINLESS BICYCLE WITH SLIP JOINT AND HELICAL GEAR

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*2,3,4,5UG Students - Final Year, Department Of Mechanical Engineering, Nandha Engineering College, Erode 638 052, Tamilnadu, India.

ABSTRACT

Chainless Bicycle System (CBS) is a setup which makes bicycles run on the road without chains. CBS uses a shaft-driven concept; it uses a drive-shaft for the transmission of power from the pedals to the wheels in place of chains. In the present era, development in internal gear technology produces various advantages. So, I decided to construct a bicycle using the shaft-driven system rather than using chain-driven. In this system, I use helical gears, shaft rod, slip joint and another two helical gears and the hub assembly. The rider pushes the pedal which rotates the shaft rod using helical gears at the front end. This rotating shaft has a helical gear at the rear end also which meshes with another helical gear on the rear hub along with the rear wheel and drive the rear wheel of bicycle. CBS is fully enclosed, requires less maintenance, and periodic lubrication through grease gun. Chainless Bicycle System is very comfortable and produces efficient transmission of power from the rider's foot to the rear wheel. The rider's footwear, pants do not get accidental damage. Cyclist of this chainless bicycle system does not get injured because of chain bite as in this system chain are not present.

Keywords: Design, Fabrication, Chainless Bicycle, Slip Joint, Helical Gear.

I. INTRODUCTION

A bicycle, also called a pedal cycle, bike, push-bike or cycle, is a human-powered or motor-powered assisted, pedal-driven, single-track vehicle having two wheels attached to a frame, one behind the other. A bicycle rider is called a cyclist, or bicyclist. Bicycles were introduced in the 19th century in Europe. By the early 21st century there were more than 1 billion These numbers far exceed the number of cars, both in total and ranked by the number of individual models produced They are the principal means of transportation in many regions. They also provide a popular form of recreation, and have been adapted for use as children's toys, general fitness, military and police applications, courier services, bicycle racing, and bicycle stunts. The basic shape and configuration of a typical upright or "safety bicycle", has changed little since the first chain-driven model was developed around 1885.However, many details have been improved, especially since the advent of modern materials and computer-aided design. These have allowed for a proliferation of specialized designs for many types of cycling. In the 21st century electric bicycles have become popular. The bicycle's invention has had an enormous effect on society, both in terms of culture and of advancing modern industrial methods. Several components that played a key role in the development of the automobile were initially invented for use in the bicycle, including ball bearings, pneumatic tires, chain-driven sprockets and tension-spoked wheels.

II. LITERATURE REVIEW

R. Bagade,et.al.,[2021] crank mechanism and different type of pedal operated bicycle.A folding bicycle with crank mechanism is a bicycle designed to fold into a compact form, facilitating transport and storage.This bicycle pedals makes an up and down moment in the both sides of the pedals and it is directly connected to wheel bearings.

K.Nagendra Reddy,et.al.,[2021]the development of the chain drive helped make the bicycle that we know today possible.More recently, bicycles with a shaft drive have been developed and it is slowly changing the bike industry. They both have unique advantages and can produce nearly the same efficiency.As we get to know about This paper illustrates the characteristics of the two alternate drive mechanisms, chain drive and shaft drive.

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INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

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DESIGN AND FABRICATION OF COMPRESSED AIR VEHICLE

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MECHANICAL ENGINEERING

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ABSTRACT

Internal-combustion engines pollute the environment seriously, and consume enormous non-renewable energy. So today the whole world is in search of alternative fuel and there are couples of option of alternative fuel such as solar power, tidal power, geothermal power, etc. and one of them is Compressed Air. The air engine runs on air only, so the need of fossil fuel is completely reduced. This practical study gives a brief description on zero pollution compressed air engine. As we are going to convert the already existing conventional engine into an air powered one, this new technology is easy to adapt and another benefit is that it uses air as fuel which is available abundantly in atmosphere. This technology is cheaper in cost and maintenance and it doesn't cause any kind of harm to the environment. Thus it is surely a revolutionary mode of transport.

Keywords: Driven Engine, petroleum and gasoline

1. INTRODUCTION

Nowadays the need of electricity is will increase, but essentially traditional source of strength is restricted due to that charge of petroleum or gasoline is constantly growing. To satisfy our need change gasoline or electricity is required. But while thinking about exchange gas some elements be considered as like availability, eco-friendly etc. Also, combustion products after the use of them performs a fundamental role in causing international issues, including the greenhouse effect, ozone layer depletion, acid rains and pollutants which might be incredible threat for surroundings and subsequently for the entire existence on planet and additionally has the strength to absolutely destroy the planet at later of its level so it Is essential to govern it on its Initial stage. Due to these factors leading vehicle manufacturers are forced to broaden cars fueled with the aid of alternatives energies. Hybrid automobiles, Fuel cellular powered vehicles, Hydrogen fueled motors can be quickly inside the marketplace as a result of it. One of the viable alternatives is the air powered car

2. CONSTRUCTION

The base reputation consists of engine setup. So it assists the whole work features, engine is coupled by way of gear the gear set up is connected to the wheel, the wheel consists of chain sprocket, chain pressure is used to attach both the gears. Wheel used right here is lively wheel. The compressor is attached to the engine.

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REVIEW OF STANDUP ASSISTANT WHEELCHAIR FOR PHYSICALLY CHALLENGED PERSON

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ABSTRACT

The prolonged seated posture and inactivity in a wheelchair expose wheelchair users to a variety of physical and psychological health issues, such as fatigue, hip joint pain, pressure sores, etc. Increased carer dependency, lower back discomfort among carers, and injury occurrences during transfer support are some other connected difficulties. Many older people who can walk are forced to use wheelchairs because they are unable to stand up on their own. With fewer carers and increased numbers of lower limb disabled and elderly subjects, there is a significant need of improved wheelchair designs aimed at enhanced independence of wheelchair users. The goal of the current endeavour was to develop a revolutionary reconfigurable wheelchair with stand-and-sit features to improve independence and quality of life. Aged and crippled subjects with lower limb disabilities. A reconfigurable wheelchair's comprehensive product design and development phases are presented in further work.

Keywords: Wheelchair, Physically Challenged Person, Stand Up Assistant, Review.

I. INTRODUCTION

In general, wheelchairs are designed to carry disabled individuals solely when seated. Similar to a standing frame, a standing wheelchair is a form of assistive technology that enables its user to lift their chair from a seated to a standing position. The mechanically operated standing wheel chair is a modification of the standard wheel chair designed to improve the quality of life for individuals with disabilities by enabling them to stand and move around. Due to the fact that it is entirely mechanically controlled, it is sociable, simple to use, dependable, and inexpensive. The design of a standing wheelchair is based on a ratchet, belt, chain, and gear system. This wheelchair is affordable and easy to maintain. Each day, participants averaged 60 (622) movements. This work can assist in the design of workplace ergonomics: a system to encourage standing and sitting movements among people.

II. LITERATURE REVIEW

Daisuke Chugo et.al, the safety standing motion must meet two conditions. The first condition is stability condition. The patient should be able to maintain body balance during standing motion. We define this condition as the center of gravity (COG) position is within range of the patient's feet, while maintaining body balance when standing. When the COG is within the safety tolerance, the patient's body stability is maintained and the caregiver is able to continue standing up with his or her own muscle strength.

Kathleen D. Klinich et.al, they are challenges in donning belt systems, as well as issues with fit, an alternate solution is for the wheelchair to be equipped with a crash-tested belt restraint system. These belt systems are currently offered on a limited number of wheelchairs and the option must be offered on a WC19 compliant wheelchair. While requirements to include crash tested belt restraint systems on all consist of a guide way through which the wheelchair wheel moves into the cabin. The wheelchair moved through the flap is done with the help of a motor which is connected to a torque increasing system which wheelchairs would simplify use of AVs and likely improve belt fit (thus increasing crash protection) for all occupants. The voluntary nature of wheelchair testing standards coupled with the increased expense of equipping wheelchairs with crash-tested belt restraints has limited their widespread deployment.

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DESIGN AND FABRICATION OF SEMIAUTOMATIC COCONUT DEHUSKING MACHINE

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ABSTRACT

There are many farm equipment's which are developed for the post harvesting of coconut. Mostly all the post harvesting operations are tedious jobs to perform. The dehusking of a coconut is regarded as the most time consuming, tiring, and difficult operation to perform. Many attempts has been done to perform this task of dehusking manually as well as mechanized. Traditionally this task of dehusking was performed by using different hand tools. By hand tools the dehusking depends on the skill of worker and involves training. In order to face this tedious job, we had introduced mechanized or the power operated machines. Coconut dehusking machine consists of high stabilized spikes on the rollers which are driven by means of external source. Due to the maximum torque experienced by the roller it creates the high force on the crushers. These forces help in removing the fibre coating of coconut easily.

I. INTRODUCTION

Today the agriculture is mechanized with the modern means. The agricultural activities like ploughing, sowing, harvesting nowadays involves many light weight to heavy machinery. Use of such machines is beneficial for both farmer and labour as it saves time of farmer and the tedious and cumbersome work is simplified to workers. It also enhances the productivity of farm. The agricultural activities are broadly classified into three groups. Pre-harvesting, harvesting and post-harvesting activities. All these three groups of activities are nowadays mechanized with machines. Pre harvesting operations are inserting seeds into farms, ploughing, irrigation etc. Harvesting means obtaining the fruits from the plants. Post harvesting is the operation which is required for the further processing of the fruits obtained from the plants. Amongst different post harvesting operations the coconut dehusking is regarded as a difficult task to perform. Coconut in India is grown on a large scale because of its numerous advantages and the atmosphere in coastal areas is favorable for its cultivation. Coconut gives coconut oil, coconut powder, husk is used to manufacture ropes, its medicinal properties etc. Hence its post harvesting is important. Many attempts have been made to make its post harvesting mechanized either manually or power operated. These attempts of mechanization have their own advantages and limitations. An invention on these kinds of tools and machines is necessary for the usage of suitable mechanism to satisfy the desired need of small scale or large scale.

II. LITERATURE REVIEW

Amal P V et.al coconut husk is used in coir industry, shell as a fuel, copra as food, coconut water as nutritious liquid. The dehusking of a coconut is regarded as the most time consuming, tiring, and difficult operation to perform and involves much human drudgery. Dehusking with traditional hand tools like machete or a spike depends on the skill of worker and involves training. Nowadays there is shortage of such skilled workers. The mechanized or the power operated machines are developed to eliminate the drawbacks of manual tools. This present work aims to design and develop a semiautomatic coconut dehusking machine with eliminating the above mentioned drawbacks of the existing tools and machines. The machine conceived shall have main parts like dehusking unit mounted on a frame with electric motor as a power source along with speed reducing unit. The dehusking unit shall have a pair of cylindrical rollers with tynes (cutting pins) on its surface. These rollers

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IMPLEMENTATION OF SMART RESTAURANT

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ABSTRACT

This paper describes an accessible online method for placing food orders. By utilizing this online food ordering system, it gets around the drawbacks of the conventional queueing system. This system enhances the process of receiving customer orders. With the online meal ordering system, which creates an online food menu, customers can easily place orders in accordance with their preferences. Additionally, customers can simply follow their purchases with a food menu. Pay on delivery method can be used for payment. Separate accounts are maintained for each user for more secure ordering by providing each user with a special ID and password.

Languages used: PHP, MySQL.

KEYWORDS :- Food ordering, user management, food menu.

1. INTRODUCTION

The online food ordering system creates an online food menu from which customers can easily place their orders. after selecting foods from the online food menu, online customers can easily track their orders. The management maintains a customer database and strives to improve food delivery service. The restaurant management systems motivate us to develop the system. There are various facilities available to ensure that system users receive effective service. Additionally, the system considers Restaurants as well as Mess facilities for customers. Again, the idea emerges that the majority of mess users are people who have relocated to new cities for various reasons. As a result, they are related. The increased use of smart phones is also considered a motivator, so that any users of this system can access all services with a single click. Another motivator is that the system will be designed to prevent users from making fatal errors, that users can change their own profile, that users can track their food items that users can provide feedback and recommendations, and that users can give ratings, that it will provide appropriate feedbacks to Restaurant service providers.

There is a need for the system because there is a lack of a full-fledged application that can fulfil customer requirements by providing food from restaurants as well as mess service. This paper will be used by people who are constantly moving from cities to cities. It will also be useful for students studying in different cities.

Customers/Users will be able to order from either Restaurants or Mess under the terms of the paper. It will also provide customers with recommendations from restaurant/mess owners that are uploaded on a daily basis. There will be no limit on the number of orders the customer can place in the paper. The same application can also be used to launch a startup business for developers. It will provide real-time feedback and ratings to the restaurant/mess owner, as well as comments. It provides appropriate feedback to users, so if an error occurs, there will be a feedback dialogue towards users..

Based on the result of this research, it can be concluded: It helps customer in making order easily; It gives information needed in making order to customer. The Food website application made for restaurant and mess can help restaurant and mess in receiving orders and modifying its data and it is also made for admin so that it helps admin in controlling all the Food system..

The paper is intended to prevent users from making fatal mistakes or acting inappropriately. The paper's scope is justifiable because a large number of people are relocating to different cities, allowing a diverse range of people to benefit from it. The system/interface will accept user input. Name, address, email-Id, mobile number, other personal related values, and so on are the major attributes that will be input into the dataset. The output will include the Order, Bill, Feedback, and Payment options for the user/customer.

The goal of the paper is to find solutions to the issues that people have when moving to a new place. The system serves

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BEST BRAIN DRAFT AND FABRICATE

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ABSTRACT:*The project aims to create a website for the construction company that serves as both an e-commerce gateway and an administration site. The customer can submit construction specifications such as the number of rooms, number of floors, size of the rooms, kitchen type, indoor or outdoor steps, tiles or marbles, outside space, and other specifications. The administrator accepts the building specification then the engineer designs the plan by the user's specifications. At the end of each day, the project tracking status is handled.*

Keywords: *Building requirements, Building Plan Construction, Project tracking status, Cost estimation.*

I.INTRODUCTION

The project's main aim is to manage the whole building's construction documents. The website is split into three categories: Administration login, customer login, and employee login. Each login will have its functionalities. The administration login will have overall control of the website. The construction specification will be provided in the customer login. The engineer designs the plan as per the construction specification. The plan will be visible in both the administration and customer login. The employee login is used to view employees' attendance and pay slips. The administration login will have control of the employees. The project status will be updated every day by evening.

II. LITERATURE SURVEY

1. "Technology and management applied in Construction Engineering Project-*Appl. Sci.* 2022, 12(22)".

Construction project management includes numerous operations activities and decisions that are closely related to carried-out enterprises, which aim to increase existing or create new fixed assets to achieve utility effects. In each construction process, according to the definition of the building's life cycle, the following four basic phases are distinguished: the programming/planning phase, the operation/use/maintenance phases, and the decommissioning or demolition phase. The appropriate planning of the entire construction process is an important operation that has a direct impact on the success achieved while implementing an investment project.

2." Construction Database-Supported and BIM-Based Interface Communication and Management: A Pilot Project [2019]"

Many interface issues frequently arise during the building phase of construction projects. The effectiveness of construction management may be hampered by the lack of appropriate platforms or systems to address these problems. As a result, improving the management of construction projects requires communication and interface management (CMI). Although email and general construction information systems are often used communication methods, they have several drawbacks in terms of recording, managing, and fixing interface issues. Contrarily, in a 3D Computer-Aided Design CAD system, building information modeling (BIM) saves and transmits information in a digital format. When BIM and web technologies are used together for construction projects, users can efficiently convey interface difficulties and get answers to them.

3. "A web-based approach for construction management information system [2013]".

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WAREHOUSE MANAGEMENT AND INVENTORY CONTROL

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***Abstract*— In today's competitive world, it is important for vendors to have a website where the goods can be maintained online. A warehouse management system is designed and developed to permit a purchaser to deliver online orders for items and services from a store that work for both in-person customers and online shoppers. The warehouse management system is an organization that maintains our raw materials. Raw materials include wood, fabric, leather, glass, cane, plastic, stainless steel, metals, and mica. The raw material section is broadly classified into two categories: type of material (raw) and type of section. This type of section is further divided into delivery and packing sections. This unit also comprises the Stock Maintenance Section, Staff Management, Labor Scheduling, Recycle Section, and Return Section. Staff management involves employee details (attendance, salary). Scheduling labor encompasses cutting, laminating, stitching, finishing, bending, designing, packing, and checking. Stock Maintenance Section is built in with two varieties, such as Interior Furniture Varieties and Exterior Furniture Varieties.**

Keywords *: Warehouse management, Stock maintenance, Furniture.*

I. INTRODUCTION

In contemporary world, it is important for vendors to have a website where the goods can be maintained online. A warehouse management system is designed and developed to permit a purchaser to deliver online orders for items and services from a store that work for both in-person customers and online shoppers. The warehouse management system is an organization that maintains our raw materials. Raw materials include wood, fabric, leather, glass, cane, plastic, stainless steel, metals, and mica. The raw material section is broadly classified into two categories: type of material (raw) and type of section. This type of section is further divided into delivery and packing sections. This unit also comprises the Stock Maintenance Section, Staff Management, Labor Scheduling, Recycle Section, and Return Section. Staff management involves employee details (attendance, salary). Scheduling labor encompasses cutting, laminating, stitching, finishing, bending, designing, packing, and checking. Stock Maintenance Section is built in with two varieties, such as Interior Furniture Varieties and Exterior Furniture Varieties.

II. LITERATURE SURVEY

Furniture manufacturing is a complex process that involves various stages, from designing to production and distribution. A warehouse management system (WMS) is a software solution that enables organizations to manage their warehouse operations, including inventory control, receiving of raw materials, and other related tasks. Over the years, several studies have been conducted to understand the benefits of WMS and its impact on overall supply chain management.

This literature survey summarizes some of the key findings from various studies on warehouse management systems.

1. Optimizing Inventory Levels in Furniture Retail Supply Chains

This study aimed to optimize inventory levels in furniture retail supply chains using simulation-based methods. The authors developed a simulation model of a furniture retailer's supply chain and used it to test different inventory control policies. They found that a combination of demand forecasting and inventory control policies could significantly reduce inventory holding costs and improve service levels.

2. Warehouse Management

This book provides a strategic approach to warehouse management, covering topics such as the role of warehouses in the supply chain, facility design and layout, inventory management, and order fulfillment. It also includes case studies and examples from leading companies.

3. A review of Industry 4.0 technologies for furniture manufacturing

This review by Cano et al. (2019) discusses the potential of Industry technologies[4.0] , such as the Artificial Intelligence , and Robotics and the Internet Of Things in these furniture manufacturing industry.

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EVENT MANAGEMENT SYSTEM

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ABSTRACT

This paper describes a website-based event administration portal. This paper offers the capability of remotely adding, deleting, and retrieving information to various event attendees. This project is capable of giving the admin and everyone else involved in a specific occasion all the necessary access. It allows the administrator to view a list of participants. Administrators will also have the ability to add or remove events. The aim of this project will simplify the event management process by reducing paperwork and labor requirements.

The goal of this project is to digitalize the event management processes. It is also simple to use, allowing anyone to conduct event management tasks from anywhere and at any time. Most of the fundamental features needed by any event manager to operate the event smoothly are provided by it. This is done in order to meet the requirements of both the event manager and the attendees. They can fill out their information and sign up for the program. The administrator receives this information and may use it to get in touch with the users.

KEYWORDS : Event Management, Participants, Customized Service.

1. INTRODUCTION

Online event management system is a best way to keep clients engaged with the service as they are on the move. As technology is growing rapidly we are also moving to a technical world where everything we want is to be online. The main aim of this proposal is to develop an online event management system. To analyze the current management system used by Fruitions Event Planners in order to identify the system requirements.

The paper entitled "EVENT MANAGEMENT SYSTEM" will beplanned to automate event booking, requisition, and cancellation through online. The project will be developed in PHP and MYSQL to store the details of every event and its consequences.

The application will be developed to suit for all events like Marriage function, conferences, birthday celebration, hall booking for official meetings, private meetings and for festival celebrations. Event manager or administrator will be the responsible person for all event bookings and event organizing. The client interested to organize their function theough this event manager or agents have to register in this portal and sign-in before booking. Event booking will be considered as arequisition at first, once the admin verified the event and availability of their time then the booking will be confirmed and the confirmation will be notified to the customer. Clients have all options like types of events listed in menus. They should select their booking option at first and the details will be collected like the date and time of event, place, arrangements needed, number of participants and other relevant information from customer. The requisition will be sent to admin for approval. The event calendar lists all pre-booked events availability of their team for admin perusal. When admin confirmed the requisition the mail alert will be sent to customer's registered id and notification will be sent to their profile.

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Machine Learning Enabled E-Commerce Analytics

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Abstract: *Sales data analysis is an important aspect of modern businesses, as it enables them to gain insights into customer preferences and behavior, optimize marketing strategies, and improve revenue. With the rise of big data and machine learning, businesses can now leverage these tools to analyze sales data and gain even deeper insights. This paperfocuses on analyzing sales data using machine learning algorithms, with a specific emphasis on the K-Nearest Neighbors (KNN) algorithm. KNN is a popular machine learning algorithm used in classification and regression problems, and it works by identifying the K closest data points to a new observation and predicting its class or value based on the majority class or average value of its nearest neighbors. The dataset used in this paperis from a retail store and includes information on product type, sales channel, customer demographics, and sales volume over a period of several years. The paper will use Python and various machine learning libraries to perform data preprocessing, exploratory data analysis, feature engineering, and modeling. Specifically, KNN will be used to develop a predictive model for sales forecasting, which can help businesses optimize their inventory and production planning. The paper will also use clustering techniques, such as K-Means, to identify customer segments based on their purchasing behavior and demographics, and association rule mining to identify product affinities and recommend complementary products. The results of this analysis can help businesses gain a deeper understanding of their sales data and make data-driven decisions to improve their bottom line. By leveraging the power of KNN and other machine learning algorithms, businesses can gain insights into customer behavior and preferences, optimize their marketing strategies, and improve their overall revenue.*

Keywords: **KNN Algorithm, Data Analytics, Machine Learning, Support Vector Machine.**

I. INTRODUCTION

The main aim of this paper is to manage purchase, sales payment and stock maintenance. The new approach helps to improve the sales volume by billing through the web site. The main scope of our paper is to collect the billing i.e. the sales data as input data and feed that into our trained machine learning model and predict the sales in the upcoming years and to provide valuable feedback to the company and also to the users who use the website. The paper also make an analysis based on the year wise and best product sales and thus increasing the sales efficiency. Additionally , the paper delivers counseling page which provides users to consult an engineer about which product will be best based on cost and lifetime.

II. LITERATURE SURVEY

Sales data analysis is an essential aspect of any business, including the construction industry. With the help of machine learning algorithms, businesses can analyze large volumes of data and gain insights into customer behavior and preferences, product demand, and market trends. In recent years, several studies have been conducted on construction sales data analysis using machine learning, which are summarized below.

[1] One study conducted by Kaya et al. (2020) used a dataset of construction material sales from a Turkish construction company to predict future sales using a Random Forest model. The study found that the Random Forest model outperformed other machine learning algorithms, such as Support Vector Machines and Artificial Neural Networks, in terms of accuracy and predictive power.

[2] Another study by Liu et al. (2018) used a dataset of construction project bidding prices from a Chinese construction company to predict the winning bid price using a Deep Belief Network (DBN) model. The study found that the DBN model outperformed other machine learning algorithms, such as Linear Regression and Random Forest, in terms of accuracy and robustness.

[3] In a study by Haddadpour et al. (2019), a dataset of construction equipment sales from an Iranian construction company was used to develop a predictive model for equipment sales using a Gradient Boosting Machine (GBM) algorithm. The study found that the GBM model outperformed other machine learning algorithms, such as Decision Trees and Random Forest, in terms of accuracy and predictive power.

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Confectionery Shop Web Application

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***Abstract*:** It is built to manage the bills, orders, client, sales report and other additional options to increase both customer satisfaction and also the growth of the bakery. Bakery Management System isa flexible and versatile package which is customized to meet customer needs, through calls and email availability to order products and thus our application paves the way for the bakery owners to brand their bakery through internet.

***Index Terms*:** *PHP, Reports, Billing.*

I. INTRODUCTION

The Confectionary Shop Web Application is grounded on PHP platform. The bakery is one of the large food service chain that serves food items to the customers and taking their orders is also a part of this firm. The manager of this bakery shop is concerned about managing the bakery and keen about the customer satisfaction. The complex part of business making is to maintain the firm, gather reports and know the revenue of the bakery. Thus, the maintheme behind this project is the facility to easily maintain the bakery and collect orders to the customers through online mode.

II. THE EXISTING MODEL

The model or methodology that is still being used are defined as existing model. The existing models used in small scale bakeries are just the pen and paperwork, so every paper should be filed to generate a single invoice. Also, it is a hectic to generate a proper report. when the manpower increases there is chances of getting lots of errors while handling bulk orders. So, it is a plan to get upgraded to an online management system. But whereas the large-scale bakeries are practical using software, but this software are limited in options. Some of the disadvantages of the existing model are:

A. Only billing software is available.

The software used in large scale bakeries do billing very well and it could also partially provide some of the limited options like revenue report, stock report etc. But there are several other problems that are difficult to manage. For example, there is no platform to order their products via online.

B. Lots of man-power

As discussed earlier, since only billing is concentrated over there and the rest of the works are being carried out manually. Every firm uses the software because of a single reason that it must reduce the work of the user. For example, the sales history for the bakery needs to be manually calculated by the owner and he must get the sales report from the software, and deduct with the product delivery status and at last calculate the overall revenue of the bakery System. Because most of the traditional software doesn't keep track of the daily sales track. Thus, doing this process indaily basis is a hectic job.

C. Exploitation of more papers

Since the small-scale bakeries still use pen and paper methodology to calculate their expenses and profits. Thus, paper along with refill pens are widely used by them, which leads to over exploitation of resources. These papersare not even recycled in an small bakery because these are needed for the revenue calculation each month or year. Even though the traditional billing system is being used by the bakeries, they still exploit papers in the form of bills, reports, order slip etc.

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TEXTILE PRODUCTION MANAGEMENT SYSTEM

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Abstract - The paper titled "TEXTILE PRODUCTION MANAGEMENT SYSTEM " is designed for the textile production units in the textile industry. The problem faced by the production unit is that all the process maintenance that are happening in the textile production units are still done manually. Hence , it often leads to error in the production unit process. As a result , there may be a delay in the production delivery process and also in the product sales. A solution to the problem faced is to create a web-based maintenance for the textile production unit. Items Details, Warehouse Categorization, Employee Details, Product Management and Order Management are typically the various modules that make up the system. The Representative Subtleties module permits producers to oversee and keep up with worker data like individual subtleties, work jobs, and contact data. For resource planning, job allocation, and performance evaluation, the Employee Categorization module helps manufacturers classify their employees according to their job roles, skills, and experience. Manufacturers can use the Employee Attendance module to track employee attendance and work hours for payroll processing and resource planning. Manufacturers can manage their production processes, monitor production progress, and monitor resource utilization with the help of the Production module. Resource planning, job allocation, and capacity management all make use of this data. Lastly, manufacturers can use the Production Billing module to generate invoices and bills for their production services, which can be used for financial management and reporting. In general, a textile production management system gives textile manufacturers a complete solution for managing every aspect of their production process, from managing employees to planning and billing production. The system contributes to increased productivity, cost reduction, and operational efficiency, all of which ultimately lead to increased profits and customer satisfaction.

Key Words: Textile, Employee, Order, Production

I. INTRODUCTION

Fabrics, clothing, and other textile goods are produced by the textile industry, which is an important part of the global economy. The production of textiles is a dynamic and complex process that necessitates the precise management and coordination of a variety of resources, such as raw materials, machinery, and human capital. The textile industry has developed textile production management systems as a result of the significant rise in technology adoption over the past few years. A software program called a textile production management system is made to help textile manufacturers make their production processes more efficient and their operations more effective.

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Online Furniture Shopping Management

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Abstract **- Now a days E-Commerce website not only allows the user to look into various types of products that are available, but it also help the companies to take their business to the next level and connect across the globe. Our paper is focused on furniture e-commerce site specified into executive and consumer. In the Executive section, admin adds the catalogue of the products which are then available for the clients to place order. They can also overlook the stocks and supervise the sales reports. The consumes search for their desirable products under various categorizes and place their order. Affirmation of the order will be looked after by the executive side and shipment process will be carried on. Our system helps to manage the furniture products to upload in the web application by the admin. Push notification is used to inform the customer to check the newly available products. This is the new feature added to our system to intimate consumers.**

I. INTRODUCTION

Currently there are a lot of E-Commerce website which has been commonly used by the companies for the enhancement of their own industries in an large scale. Our paper is planned in a way to help a particular furniture store to handle their business through online. It is developed in a way that, furniture commodities can be purchased through network with an advantage of not being physical present which avoids time consumption. Having an consumer advantage, it also works in a favour of executive side by reducing the labour cost. Admin can add their company products according to the availability. They can also check into the sales that are so far made and the details of every individual cosumers who place their order. The order confirmation is done only by admin after the verification of the product availability and a bill is generated if it is confirmed. The consumer can surf through the whole website and find their favorite products and add them to the cart. Once Order is placed, bill is generated and customers can view the shipment details in the site. Overall the paper is built by keeping in the favour of both Executive and consumer side.

II. LITERATURE SURVEY

A. Customization of furniture products

An rapid growth in IT field, helps the industries to improve their business. Customization is a needed one for every companies to meet with their client needs. This paper gives a clear importance for providing a customized furniture designs for the customers. It is tested with various design modals so

that the end users can get a personalized furniture items. A working model is also developed using pervasive computing method.

B. Successful e-commerce development ideology

With today's technology any one with a device and proper network can create a website but what is important is that, the success of it. Having an successful e-commerce website can be helpful for the industries to improve their business by having an high profit form that and with an unpopular website it is a mere waste of time and resources. It sometimes may lead to capital loss. So this paper gives an detailed information and strategies for creating a popular and effective e-commerce website.

C. Growth of furniture of E-Commerce Website in today's era

As technologies evolve over the time with a growth of networks across the globe it is important for the companies to make an right decision for their improvement, by choosing a correct e-commerce platform to sell their products. Featured products will be shown in the e-commerce website for the consumers to purchase the products. Mostly the website's are constructed based on the decision system and this paper presents the evaluation of the e-commerce website.

D. Productive and Resourceful E-commerce Website

This paper presents the various designs and layout models for a resourceful website. It comes with an importance fact of having an high scale profit for the corporations. Good user interface and customer interaction sections are important for this type of large scale profit. The customer satisfaction is always an important aspect for the business growth and earning high profit

E. Customer Categorization in website

Nowadays, with the widespread growth of Internet technology, many number of companies are enticed by the vast potential profits and market opportunities presented by e-commerce, prompting them to invest into this type of online field. The topmost priority for companies is to have a great strategies to retain existing customers, attract new ones to join their e-commerce platform, and expand their business efficiently.

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Intelligent Sales Prediction Using SVM Algorithm

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Abstract **— The Analysis report proposes a solution that grants businesses complete visibility into their inventory and streamlines sales operations from the distribution center to the store. It is used to determine the balance of existing materials when it is demanded to know the stock balance, control the levels of materials, and daily movement of the materials. Data is gathered from the web application and processed to form a group of charts called a dashboard. This dashboard helps to analyze the sales and performance of every product report. Analysis report deals with the organization's requirements, performance analysis, sales, and financial problems, and solving them, in addition, to saving all the materials information, and process in a private system database. The quality of wood used in the furniture and performance analysis of furniture based on design are represented in form of charts for a better understanding of the user. Admin can view their financial and sales reports by daily, weekly, monthly, and yearly trends. This Furniture Web Application System is created for the convenience of the customers, of this specific shop. It is not only for users but also convenient for the owner to sell their products online along with analytics reports using machine learning techniques. To analyze reports, the system uses Support Vector Machine (SVM), a supervised machine learning technique.**

Keywords—furniture, machine learning, analysis report

I. INTRODUCTION

In the competitive furniture inventories market of today, having an online platform where products can be sold is essential for retailers. The final version of the website includes a front end for customers and a back end for store owners to efficiently manage the site. Additionally, sales and transaction reports, product reports, order reports, and stock reports are all available as part of this website's analysis reports.

In this paper, data analytics is implemented with machine learning techniques. It provides design decisions, competitive analysis along with database rudiments. The topmost non-discriminatory of this paper is to build a website that is both professional and cost-effective. To achieve this goal, the e-commerce system will be developed using an open-source solution called osCommerce. Data analytics is used in various domains in this ultramodern era. Data gathered from various areas like customer, product, purchase, and stock details are made into a graph with the use of a machine learning algorithm. With this technique, users can fluently analyze reports from the admin side. These analytic reports help increase organization sales and acquire further furniture market customers, eventually increasing the store's growth.

II. LITERATURE SURVEY

A. Exploring the Effectiveness of SVM through Performance Analysis

Machine learning refers to the analysis of algorithms that can improve automatically by learning from experience. In supervised learning, the algorithm uses classified training data to learn and can then make predictions for new, unseen data. Using a kernel trick technique, this algorithm transforms the data and identifies the optimal boundary between issues. The kernel trick is a method used in machine learning to form highly linear data from non-linear at this point, it becomes easier to classify. It allows algorithms to efficiently perform calculations on the data in the multi-scale space without using the data points coordination. This function manipulates the dot product among the transformed points in the feature space, which can be used to make predictions and classify new data points. The kernel trick is commonly used in support vector machines and other classification algorithms.

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DATA ANALYSIS REPORT

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ABSTRACT

An essential piece of software that aids in managing a vessel shop's everyday activities is the vessel shop management system. Cooking effectiveness, vessel sustainability, design performance analysis, and security performance analysis are the four key modules that this data analysis report focuses on. By examining data gathered over time, the report offers insights into the performance of the vessel shop in each of these categories. The cooking efficiency module offers details on the cost, quality, and duration of meal preparation. Data on fuel use, emissions, and the vessel sustainability module provides other aspects that have an impact on the environment. The design performance analysis module provides information about customer flow, space use, and vessel layout. Data on security measures, incidents, and response times are available through the security performance analysis module. This analysis shows

Key Words: Vessel, Shop Management, Analysis, Cooking Efficiency

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TEXTILE INVENTORY MANAGEMENT SYSTEM

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Abstract - A software application that aids businesses in managing their inventory, invoicing, and customer relationships is known as an employee stock maintenance and billing system with online user details. It normally incorporates a few modules, like worker the executives, stock administration, charging the board, request the executives, detailing and examination, online client the board, and client relationship the board. Businesses can manage employee information, such as their personal information, work schedule, and position within the organization, with the help of the employee management module. Product stock levels are monitored, inventory is updated, and alerts are sent out when stock levels fall below a certain threshold by the stock management module. The charging the executives module produces solicitations for clients in light of their orders, processes installments, and tracks the monetary status of the business. Customers can track the status of their orders, give feedback on the ordering process, and place orders online with the help of the order management module. In order to provide insights into sales, inventory levels, and other key performance indicators, the reporting and analytics module generates reports and dashboards. Registration, login, and user profile management are all handled by the online user management module. Finally, the customer relationship management (CRM) module tracks customer inquiries, feedback, and support requests, assisting in the management of customer interactions and the improvement of the customer experience. Businesses can improve their overall efficiency and productivity by combining these modules into a single system. They can also provide a better customer experience and keep accurate financial records. Businesses can manage their employees, stock, billing, and relationships with customers from a single location with the help of the system.

Keywords: Textile, Shop Management, Employee, Stock, Billing.

I.INTRODUCTION

A piece of software aimed at assisting businesses in managing their customer relationships, billing, and inventory is an employee stock maintenance and billing system with online user details. Employee management, stock management, billing management, order management, reporting and analytics, online user management, and customer relationship management are all typical modules of this system. Any business can find it challenging and time-consuming to manage inventory, billing, and relationships with customers. On the other hand, putting in place a robust employee stock maintenance and billing system with online user information can significantly boost productivity and efficiency in the business. Businesses can streamline their processes for managing inventory, track orders and shipments, generate invoices, process payments, and manage interactions with customers thanks to the system. Additionally, businesses can provide customers with an easy-to-use online platform for placing orders, monitoring order status, and providing feedback with the help of the online user management module. The customer experience is improved, customer satisfaction is raised, and business expansion is ultimately fueled by this. In addition, businesses can get real-time insights into inventory levels, sales performance, and other key performance indicators through the reporting and analytics module. Businesses can use this information to improve their operations, make better decisions, and stay ahead of the competition. Overall, a powerful tool that can assist businesses in increasing efficiency, decreasing expenses, and increasing customer satisfaction is an employee stock maintenance and billing system with online user details.

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ONLINE TEXTILE SHOPPING CART

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Abstract: A website that lets users browse and buy products online is known as an online shopping platform. Most of the time, the platform is made up of several modules that work together to give customers a smooth shopping experience. The platform's home page provides access to featured products, promotions, and various product category navigation options. The products that can be viewed and purchased are categorized into main collections by the categories module. The dashboard module furnishes clients with a customized part of the site where they can deal with their record data, request history, and inclinations. Users can search for specific products using keywords, attributes, or filters with the help of the search box module.Users can add selected products to their virtual shopping cart using the add to cart module, which displays the product's name, quantity, and total cost. Users can enter their payment and shipping information, select a payment method, and confirm their purchase on a secure page provided by the payment page module. Last but not least, the confirmation page module displays the order summary, confirms that the order was completed successfully, and provides information regarding the estimated delivery time and order tracking. An online shopping platform may include additional modules to further enhance the shopping experience. For instance, design stores might incorporate a size diagram or a virtual take a stab at instrument, while home stylistic layout stores might incorporate a room organizer or a 3D model watcher. In general, an online shopping platform is a comprehensive tool that makes it easy for customers to browse and buy products online while also making shopping a breeze. The various modules collaborate to simplify the shopping experience and guarantee customer satisfaction.

Keywords: online shopping platform, textile, shopingcart, payment.

1.INTRODUCTION

Online shopping has become an essential part of modern life in today's fast-paced world. Customers can now shop for goods from the convenience of their own homes through an online platform that has gained popularity in recent years. Most of the time, an online shopping platform is made up of several modules that work together to give customers a smooth shopping experience. The home page, categories, dashboard, search box, add to cart, payment page, and confirmation page are all examples of these modules. Extra modules might be incorporated to upgrade the shopping experience further, contingent upon the idea of the items sold. Businesses can sell their products to customers all over the world thanks to online shopping platforms, which give them the chance to go beyond traditional brick-and-mortar stores. Additionally, they give customers the ability to shop from any location and at any time without having to leave their homes. Be that as it may, the progress of an internet shopping stage relies upon a few variables, including the nature of the items offered, the ease of use of the stage, and the productivity of the buying system. By integrating the vital modules and guaranteeing their usefulness, organizations can make an internet shopping stage that furnishes clients with a charming and bother free shopping experience. In conclusion, platforms for online shopping have changed the way we shop and are now an essential part of modern life. Businesses can create a successful platform that meets customers' needs and expectations by utilizing the necessary modules. This will ultimately result in increased sales and customer loyalty.

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Electronic Communication

IOT Based Paraplegia Patient Communication Device Using Smart Glove

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ABSTRACT

Paraplegia is a paralysis that affects the legs and often seriously affects the lower half of a human body. Paraplegia happens whilst there may be damage underneath the neck. The maximum common motive is trauma, such as sports injury or vehicle accident. other causes are stroke, spine tumors, together with cancers. This paper provides a novel design to enhance the conversation of paralysis sufferers. The device is a clever glove that is used to seize hand gestures and convert them into verbal commands. The glove is geared up with sensors and processors that discover the hand gestures and convert them into indicators. The tool is designed to be simple and user-friendly, allowing patients to quickly adapt to its use. The tool is likewise designed to be low-cost and handy, permitting more paralysis patients to use it. The device is tested and evaluated for its performance, and the outcomes display that it may accurately capture and interpret the hand gestures of the sufferers. In most cases paralyzed affected person (like Monoplegia, Hemaplegia, Paraplegia) aren't capable of interact or communicate with others or their caretaker. This net of factors primarily based clever glove facilitates the affected person to convey their needs to the caretakers. It measures pulse, temperature, blood pressure and gyro. In gyroscope sensor there is a message, based at the route or motion in which it can be conveyed thru show and audio. it is able to screen thru internet and smart telephones. but it can not be used for tetraplegia patient. It is concluded that in quadriplegia as patients can not move their body, if in future we can able to read the neuron signals of the patients through sensor or any device and then we can able to understand what they need or what they want. Consequently the system can be able to display or hear through audio which can be used according to the need, updating into neuro reading sensors which are economically viable

KEY WORDS: SMART GLOVE, HEART RATE SENSING, GESTURE, TEMPERATURE, GSM, SPEAKER, DISPLAY.

INTRODUCTION

According to a survey conducted by WHO in Every year, around the world, between 250 000 and 500 000 people suffer a spinal cord injury (SCI). The majority of spinal cord injuries are due to preventable causes such as road traffic crashes, falls or violence. Males are most at risk in young adulthood (20-29 years) and older age (70+). Females are most at risk in adolescence (15-19) and older age (60+). Studies report male-to-female ratios of at least 2:1 among adults, sometimes much higher. This type of patient is can't able communicate with others like normal people like drinking, switching on fan. After analysing this problem, we propose a machine known as smart glove with a view to combine a function to serve the disabled individuals and assist them to speak freely with the open world. They can send a message to their caretaker; they can call to their doctor for any assistant. Consequently, at the same time as these controls are beneficial for a generally abled character, they may be not very beneficial for the bodily handicapped or especially, the aged people, who do now not have the capability to use sufficient strain to move their hand.

Workers have proposed a first-generation prototype glove, where the glove converts gesture to text, just by moving the fingers. The blind person cannot walk casually in busy roads, the glove has an in-built obstacle sensor. The buzzer will ring when an object comes in front of the person (Nair, 2020, Kumar 2021). This is a unique device which incorporates multiple sensors, making it capable to do multiple tasks. Proposed a majorly useful for deaf and dumb, paralyzed patient to monitor their mental health by displaying the output commands in android application with vocal output in speaker. In case of emergency, GSM will send alert message to the respective person (Nair, 2020, Kumar 2021)

Proposed devices are mostly used in ICU to monitor the patient health in real-time, where the data is uploaded to the webserver and to the mobile application in which the

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IoT Based Antenna Positioning System

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Abstract: *Proper positioning of antennas is necessary for wireless communication. So herewe are giving a project on an IOT based antenna positioning system that allows for remotely positioning of antennas based over IOT. The method that is used here to control the antennas position is by using Arduino UNO R3 and Servo motors. The Blynk app acts as a remote and is used to send the signal to the Arduino through the Internet. The project helps to control the antenna's positionby the user's command. If we have android mobile with internet connection, we can easily access the antenna position. Also to monitor the environmental conditions we have used temperature, humidity and raindrop sensors.*

I. INTRODUCTION

A. Introduction to Embedded System

When we look around, we see that different kinds of embedded systems are all around us. Every device, whether it be a washing machine, a mobile phone, or a digital camera, has a CPU inside.

The embedded software is connected to each CPU. An embedded system's soul is represented by its embedded software, while its embedded processor serves as the system's brain. The main factor influencing how embedded systems operate is embedded software. Programs were created using assemblers and fused into the EPROMs during the early years of microprocessor-based devices. There used to be no way to track the program's activity. To verify that the programme was running properly, LEDs, switches, etc. were employed. Some people are "extremely lucky."

B. Objectives

1) To build a positioning antenna device that can be controlled from a remote location
2) To position the antenna to the exact angle to receive maximum signal of a specific frequency
3) To adjust the antenna position through a simple software.

C. Introduction To IOT

The Internet of Things (IoT) is the networking of physical items with electronics built into their architecture to enable communication and the detection of interactions between them or with the environment .The IoT-based technology will provide higher levels of services in the future years, effectively altering how individuals go about their daily lives. Just a few categories where IoT is well established include improvements in medicine, power, gene therapies, agriculture, smart cities, and smart homes. The Internet of Things (IoT) is a network of networked computing devices that are implanted in commonplace things and allow them to send and receive data.

SENSOR: The main component of all IoT applications is a sensor. It is a physical apparatus that measures and detects certain physical quantities and transforms them into signals that can be supplied as inputs to processing or control units for analytical purposes.

D. Parabolic Antenna

An antenna that directs radio waves using a parabolic reflector, a curved surface with a parabola-shaped cross-section, is known as a parabolic antenna.

The most popular type, which is fashioned like a dish, is known as a dish or a parabolic dish. Of all antenna types, parabolic antennas offer some of the highest gains, which enables them to create the smallest beamwidths. Parabolic antennas are used in the high frequency region of the radio spectrum, at UHF and microwave (SHF) frequencies, where the wavelengths are small enough that reasonably sized reflectors can be used.

This is because the parabolic reflector must be much larger than the wavelength of the radio waves used to achieve narrow beamwidths. High-gain antennas that use a parabola.

ICCSC 2023

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Performance Evaluation of Cooperative Eigen value Spectrum Sensing GLRT Under Difference Impulsive Noise Environments in Cognitive Radio

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Abstract- *Spectrum sensing plays an important role in cognitive radio. Spectrum sensing with multiple receive antennas is addressed in the cognitive radio network under impulsive noise environments. Cognitive radio is a technology developed for the effective use of radio spectrum sources. The spectrum sensing function plays a key role in the performance of cognitive radio networks. The ever increasing demand for higher data rates in wireless communications in the face of limited or under-utilized spectral resources has motivated the introduction of cognitive radio. Various measurements of spectrum utilization have shown substantial unused resources in frequency, time and space. The concept behind cognitive radio is to exploit these under-utilized spectral resources by reusing unused spectrum in an opportunistic manner. The phrase "cognitive radio" is the idea of using learning and sensing machines to probe the radio spectrum was envisioned several decades earlier. Cognitive radio can be detecting unused spectrum. It shares this with no interference to the licensed spectrum. It makes viable communication in the middle of multiple users through co-operation in a self-organized manner. The proposed system evaluates the performance of cooperative eigen value under difference impulsive noise environments.*

Keywords- Cognitive radio, impulsive noise, spectrum sensing.

I. INTRODUCTION

Cognitive radio (CR) is a form of wireless communication in which a transceiver can intelligently detect which communication channels are in use and which ones are not. The transceiver then instantly moves into vacant channels, while avoiding occupied ones. These capabilities help optimize the use of the available radio frequency (RF) spectrum. A cognitive radio network (CRN) is split into two main networks, a primary network and a secondary network. The primary network owns the licensed band and consists of the primary radio base station and users. The secondary network shares the unused spectrum with the primary network. It consists of the cognitive radio base station and users. The secondary network shares the unused spectrum with the primary network. Spectrum sensing in Cognitive Radios is an energy-consuming task that also degrades the spectral efficiency of the SUs since they need to spend time and energy on a task that does not result in transmitted bits.It helps to avoid the interference between the primer user and the secondary user.

The Cognitive Radio Network has three basic components. They are Mobile station (MS),Base station/Access points (BS/Aps), Backbone networks. The machine learning-based sensing techniques aim at detecting the availability of frequency channels by formulating the process as a classification problem in which the classifier, supervised or unsupervised, has to decide between two states of each frequency channel are free or occupied. The main functions of cognitive radios are Power Control, Spectrum sensing, Transmitter detection, Wideband spectrum sensing, Null-space based. MATLAB allows matrix manipulations, plotting of functions and data, implementation of algorithms, creation of user interfaces, Interfacing with programs written in other languages and create models and applications. Application of CR networks to military action such as chemical biological radiological and nuclear attack detection and investigation, command control, obtaining information of battle damage evaluations, battlefield surveillance, intelligence assistance, and targeting.

II. RELATED WORK

Cooperative Spectrum sensing–CRNs have been performed by machine learning. The existing works can be classified into two main categories. The technique in the first category uses two steps. In the first step, unsupervised machine learning techniques are used to analyse data and discover the PU's patterns. In the second step, supervised machine learning techniques are used to train the model with the data labelled in the first step. For instance, a two-step machine learning model for Spectrum sensing can be

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Internet of Things (IoT) Feedback System using Raspberry Pi

at the

7th International Conference on Computing Methodologies and Communication (ICCMC 2023)
organized by Surya Engineering College, Erode, India
held on February 23-25, 2023.

Session Chair

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Principal

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A Novel Efficient AI-Based EEG Workload Assessment System Using ANN-DL Algorithm

R. Ramasamy, M. Anto Bennet, M. Vasim Babu, T. Jayachandran, V. Rajmohan & S. Janarthanan

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Abstract

Individual's mental and physical health, as well as their performance, is affected by excessive mental workload. The mental effort of operators doing vital activities must be monitored. EEG can collect electrical signals produced by neural structures in the brain and provide information about an operator's mental state. It can be deduced that the power distribution of these transmissions in various frequency bands has changed. The mental workload has been assessed using this method. Because of the poor signal-to-noise ratio, these noisy signals

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DESIGN AND FABRICATION OF PLANTING MACHINE

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Abstract *Manual method of plant planting, results in low plant placement, spacing efficiencies and serious back pain for the planting workers which confines the size of field that can be planted. The cost price of imported planters has gone beyond the purchasing power of most of our workers. workers can do much to increase plants and small trees production, if hard work can be reduced or totally removed from their planting operation. To get the best performance from plant planter, the above limits are to be enhanced by proper design and selection of the components essential on the machine to suit the needs of plants. Requirement of planting machine is increasing nowadays because it unique features planting in well arrangement and in well manner. planting by planting machine saves so much struggles of human being. The people who use this type of planting machine and worker are economically poor. This paper provides directions for growths in planting machine used in India. Planting small trees is very old method from many years ago & having long history since many years & their methods of small trees planting are changed in this decade. Use of planting machine machines has increased but current machines are expensive. So the main focus of this project is to reduce the cost of that machine.*

Keywords: *Planting machine, Economy and Mechanization*

I. INTRODUCTION:

India is known to be a farming country. About 71% of the population of India is dependent on farming direct or indirect manner. The farmers are using the same methods and apparatus since ages. As the time changes and things required to change as well in order to advance the techniques and equipment's. So, that productivity of farming increases. Agriculture also plays an important role in economy of India. Its contribution in the GDP is now extend one sixth of the total. The Indian Government has also in progress taking steps in the form many initiatives in which the farmers are made aware about the different farming techniques. There are basically five steps that a farmer needs to do correctly to get increased output. These five steps are different farming techniques. There are basically five steps that a farmer needs to do correctly to get increased output. These five steps are as follows: Ploughing, Seed Sowing, Irrigation Process, Harvesting, Threshing. As we know that the rice is one of the primary food of the India. A large number of farmers is carry the in the cultivating process and rice production. Presenting the newer method to a rice farming will result in many advantages such as: • Better production • Good quality • Less labour required • Saves time • Low cost. Today, As India is facing a huge problem of child labour and farming. The above point is that child labour and farming are interconnected to a great amount. If the farming technology rises, it reduces the labour requirement. This will help the country to throw away two major problems. The maximum number of worker required in planting is for planting i.e. seed planting. Many new instruments are developed and improved in order to saving the energy and get more end result in this process. A planter is being developed countries like china, japan, etc. it is at present taken in use. But here in India the planter machine not economical to farmer due to high price. The planter in

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A REVIEW OF DESIGN AND FABRICATION OF REMOTE CONTROLLED 360 DEGREE FIRE PROTECTION SYSTEM

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ABSTRACT

Robots have become out to be an aspect wherein many human beings have shown their interest and gained reputation due to the development of many technologies. Consequently, it has been decided to design something that may make human existence less difficult and more cozy, and the interest of this assessment is to make a "far flung managed 360 degree fireplace protection device." The proposed "faraway controlled 360 diploma fire safety machine" is designed for extinguishing hearth in a small floor plan of a residence, workplace, or shopping mall of precise dimensions with the help of family water and a water pump. Controlling this robotic demands an operator who can easily manage it from a faraway area without being concerned in fire fighting. The far flung manage system for this undertaking is based on conventional RF technology, however with one of a kind techniques. The accuracy of the control system has been fine throughout this undertaking. The fire getting rid of performance and model movement pace were both near expectation.

Keywords: Design, Fabrication, 360 Degree Fire Protection System, Review.

I. INTRODUCTION

In most of the countries fire accidents are occurring commonly such as Indian people has suffered and loosed many lives because of fire accidents. A fire threat is the third most serious threat to the business continuity and operations. So, to minimize losses and lives resulting from accidents fire extinguisher robots will play the major role. The location of the fire accidents for example: garment factories, gas, petrol pumps and chemical companies etc. This type of accidents results in loss of lives and pollutes the environment. The government and other regulatory has prescribed fire safety standards and measures. In this project we have made a prototype of remote controlled 360 degree fire protection system which can control the fire without a help of man.

Fires can start at any time in big factories, ports, and commercial production facilities. A lack of efficient fire fighting techniques could have serious impacts, cause financial losses, and perhaps result in a significant loss of human life. The following disadvantage applies to typical fire protection systems that are placed in buildings.

- The sprinklers are not focused and spray an entire apartment or building, damaging computers, furniture, and paperwork. They spray little amounts of water from each sprinkler, which may not be enough to put the fire out.
- While this sprayer weapon can only spray water in the desired quantity at the location of a fire outbreak to extinguish the flames without injuring all of the office items and furnishings.
- This demo version is made to be remote controlled from few meters but future version will operate remotely from fire dept.

An amiable and controlled high-capacity water jet is used with fire monitoring and sprayers to fight huge fires. Fire Monitors cannot be moved, in contrast to fire fighting equipment, and are placed constantly. This fire monitor features RF control and an inbuilt camera, whereas conventional fire monitoring technology requires a human operator to adjust the water jet's direction and aim it properly. Allowing the user to control it from a safe distance.

The system is driven by two motors in combination with a potent spray motor, pipes, and integrated wirelessly stream camera. The tip directional movements is controlled by the two motors. The user can send movement directions using a remote. Accepting commands from the user, the program's receiver circuitry 2 mounts the

AN EFFICIENT REAL TIME SMART SPEED CONTROL SYSTEM FOR MOTOR VEHICLES USING INTERNET OF THINGS

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Abstract. The project's primary goals are to prevent human fatalities in collisions and to maintain a specific speed in accordance with traffic regulations. Here, speed control is constructed on a microcontroller-based platform, and voice boards are used to create alerts. So, there is a great need for a system that does provide safety. The Automated Vehicle Speed Control System is a name for such a system. The Arduino Uno R3 board's microcontroller-based platform is used to create this automatic speed control system. The microcontroller in this instance has been configured such that the speed restriction is integrated with the transmitter unit, which sends the signals using an antenna and is picked up by the receiver built inside the car. Here, GPS has been incorporated to determine the vehicle's location. When using Google Maps, the speed restriction is displayed in real time, and when a car is approaching an area with a speed limit, it slows down.

Key words: Arduino UNO, Transmitter, Receiver, GPS, GSM.

1. Introduction

According to research, there are IoT-based devices that can either fully or partially regulate the speed of the vehicle. And some are still being worked on even though they cannot be implemented. Government regulations like those requiring seat belts and helmets are also in place, but there is no effective system in place to regulate speed in order to reduce traffic accidents. That is why a mechanism that can regulate the vehicle's speed is required. Although this technique won't stop accidents from happening, it can somewhat lessen their frequency. A microcontroller called an Arduino Uno R3 is used to build this project. In addition to the microcontroller, an RF module is used. In essence, it is a tiny electrical gadget that connects two other devices by transmitting and/or receiving radio signals. It is frequently needed to communicate wirelessly with another device in an embedded system. In this project, the RF (radiofrequency) Module will be used. The set of signals is employed in this project in a similar manner. The RF receiver is located within the vehicle, while the RF transmitter is positioned in the restricted areas. The controller will receive the signal from the transmitter antenna. The vehicle speed will then be compared to the restricted speed. The proximity sensor uses a DC motor, which also transmits data to the controller, to measure the current speed. Pushbuttons that are integrated into the circuit can be used to manually increase or reduce the vehicle's speed. The LCD display will alert the driver to slow down if the vehicle is travelling faster than the posted speed limit in the region. People in these developing nations struggle with the problem of traffic accidents brought on by drivers who don't want to follow the rules when driving in restricted areas where the speed is required to be regulated as permitted by those zones.

Rash driving makes city roads unsafe

Speeding and reckless driving are now two of the most serious traffic infractions. Driving recklessly is a sign of the driver's mental state. According to psychologists, irresponsible driving often results in the driver taking personal risks. Due to the rise of ground vehicles, there are more accidents every year. The main factors contributing to road traffic accidents are speeding, irresponsible driving, breaking the law, misreading traffic signs, tired driving, and alcoholic driving. The first suggestion is to use an ultrasonic sensor to determine the vehicle's speed. The height of the speed breakers has been raised in accordance with this vehicle speed. But doing it in a way that is both practical and economical is challenging. This system would initially select an IR (infrared) module for this purpose, but using this module has drawbacks. Due of the RF module's ability to operate in line-of sight circumstances, this system ultimately chose to use it. A radiofrequency (RF) transmitter and a radiofrequency (RF) receiver make up a radiofrequency module. The RF receiver must be within the

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Multi-Antenna Assisted Spectrum Sensing for Cognitive Radio in Nakagami-M Fading Channel

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Abstract: *CR (Cognitive Radio) is a key technology that enables the limited and inefficiently used frequency bands to be used more effectively with an opportunistic approach. Communication performance and continuity in cognitive radio networks are highly dependent on whether the spectrum sensing function is performed correctly or not. Spectrum sensing is a critical issue of cognitive radio technology because of the shadowing, fading, and time-varying natures of wireless channels. To sense the limited or unused frequency bands, different methods for spectrum sensing have been proposed. Here, improved energy detection is used for this work. Energy detection is a spectrum sensing technique based on measuring the received signal energy and deciding the presence or absence of the primary user by comparing the received energy level with a threshold. Fading channels shows that the speed of the SU increases, the energy detection performance decreases in deterioration in detection probability.*

Keywords: Cognitive Radio Networks, Energy Detection, Nakagami m Fading Channel, Spectrum Sensing

I. INTRODUCTION

In CR systems, the use of diversity branches for spectrum sensing has emerged as a potential solution for reliable, efficient sensing and to combat the effect of fading. In an early work by Urkowitz, energy detection (ED) based spectrum sensing was proposed. By investigating the performance of ED for various diversity combining schemes. Diversity branches in these prior works were assumed to be sufficiently apart and thus independent. As diversity branches increase, antennas become closely spaced due to space limitations on user terminals. Thus, the diversity branches become spatially correlated, and inter branch correlation among them cannot be neglected

Antenna correlation can be classified as uniform, exponential, or arbitrarily correlated. Even though the uniform and exponential correlation are mathematically convenient, these models are seldom applicable. Practically, there may be cases when the antennas need not be evenly/uniformly spaced.

For instance, a linear array of antennas may be arbitrarily correlated depending on the spacing between the antennas, height of the antennas or the incident angle. Under such circumstances, it is important to analyze the impact of arbitrary antenna correlation on the sensing performance of mobile CR users.

II. SYSTEM MODEL OF COGNITIVE RADIO NETWORK

In cognitive radio, the CU establishes communications on the PU channel in such a way that the PU communication remains unaffected by following a cognitive engine cycle, which comprises the following steps, namely, spectrum sensing spectrum analysis and decision, spectrum accessing and spectrum mobility. Initially, the CU performs spectrum sensing on the channels to detect the status of the channel that is idle (free) or active (busy). Furthermore, the CU selects the most suitable idle channel for the communication and starts the data transmission on that channel by using the appropriate spectrum accessing technique. The reappearance of the PU communication is an important phenomenon during the CU communication, and if it happens the CU needs to switch its communication to the other available channel, and this process is termed spectrum mobility. Interference avoidance to the PU communication by the CU communication is achieved by using various spectrum accessing techniques: interweave, underlay, overlay, and hybrid spectrum accessing techniques.

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Social Media Marketing and Buying Intentions Among the Consumers of Home Appliances

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Abstract

The promotion of a product or service using web-based social networking platforms and websites is known as social media marketing. The majority of these online social networking platforms have their own implicit information investigation tools, allowing businesses to monitor the progress, success, and engagement of promotions. The present study aimed to know the influences of social media marketing in buying intentions among the consumers of home appliances. 200 online customers in Erode district were purposively selected by applying convenience sampling. The study reveals that customers of home appliances will accept that the items are of top quality in view of the reasonable endorsement marks granted by outside organizations. Accordingly, they can guarantee that their web-based store is reliable by performing item assessments. Make a point to add the quality confirmation testament if any and furthermore attempt to definitively give every one of the insights concerning item. Online stores ought to offer 24×7 client assistance administrations and thoroughly prepared staff who can deal with the requests of clients without any problem.

Keywords: Promotion, Online, Social media, Consumers, Quality.

Introduction

Communication has increased as technology has advanced. It is now less expensive and easier to communicate with people all over the world. Communication breakdowns are no longer justified by distance. Wireless devices have replaced wired ones in communication systems. Additionally, the internet has had a negative impact on the current and available means of communication. It is responsible for the rise of social networks. People's involvement with social networks is becoming increasingly apparent. Tweets and status updates from friends and family are increasingly being checked on tablets and smart phones by a large number of young people. People are under pressure to live differently as technology advances. Sites like Facebook and Twitter can help young people become more socially adept. However, they may also render them

A Study on The Impact of Covid LOCKDOWN On Women's Mental Health with Special Reference to Erode City

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Abstract
Corona virus disease (COVID) created a pandemic situation of general distress. Although the focus has been initially more on the physical health during the pandemic, mental health concerns linked to the lockdown have quickly risen. The aim of this article is to study the effect of the lockdown on mental health of Erode women and the possible impact of lockdown on violence against women. To our knowledge, this study is the first to evaluate the impact of lockdown during the COVID-19 pandemic on women's mental health and violence in Erode city.An online survey was conducted for the working women on the basis of snowball sampling techniques. A total of 150 participants originating from the erode city completed the questionnaire.Simple percentage and weighted average tools used for the analysis of the project.

Keywords; *Mental health, Anxiety, Quarantine, Corona virus.*

Influence/Impact of Economic Factors Towards the Domestic Gender Equality of Rural Women Self Help Groups –An Analytical Approach

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Abstract

Self Help Groups (SHGs) encompass accelerated the operation during credit accesability and teaching. Economic entrust involves access to resource, manegiral decisions, egalitarianism and benefits among beneficiary and community. A woman entity is the predominent labor force in farming created adequate chances to ingress rural wealth magnifies the financial position of rural women. Women are measured as an especially vital end in the operation of switch in the rustic areas. Preconception influence many infects in the lives of female from profession advancement and growth of psychological wellbeing chos. Around 50% of the population in district is women, who also contribute to their livelihoods through working in agricultural and unorganized sectors. The Erode District administration implements various schemes formulated by State and Central government for the upliftment of female in frontier and is required to know whether the contribution of self-help group schemes and initiatives taken by the government has any positive effect on enhancing domestic gender equality in their households. In spite of these issues, the learnings focuses to analyses the economic empowerment of rural women and its impact on domestic gender equality in their houseworks. This study aimed to accomplish the below-mentioned research objectives

I. To observe the influence of demographic variables on the domestic gender equality in households of women from self-help groups of Erode District.

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EFFECTS OF COVID-19 ON EMPLOYEE ENGAGEMENT AMONG THE BANK EMPLOYEES

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Abstract

In the banking sector, employee engagement has always been a challenge. For most banks, improving employee engagement is worthwhile. Employee engagement is a never-ending process that necessitates ongoing action plans. Different banks approach employee engagement in different ways, and some banks have in-house employee engagement teams. Operations are outsourced by others. This study aimed to know the effects of covid-19 towards employee engagement among the nationalised bank employees in Erode District. 100 employees of nationalized banks in Erode District were selected as sample by adopting convenience sampling. During covid 19 pandemic employee engagement was viewed as a crucial process alongside other standard HR procedures, and teams and activities are created to provide an engaging and distinctive experience. However, it is essential to understand how engaging employees appropriately and promptly can yield promising outcomes.

Key Words: Banking, Employee engagement, Effects, Covid-19, HR procedures.

Introduction

Employee engagement is based on trust, integrity, two-way commitment and communication between an organisation and its members. It is an approach that increases the chances of business success, contributing to organisational and individual performance, productivity and well-being. It can be measured. It varies from poor to great. It can be nurtured and dramatically increased; it can be lost and thrown away. Employee engagement is attracting a great deal of interest from employers across numerous sectors. In some respects, it is a very old aspiration – the desire by employers to find ways to increase employee motivation and to win more commitment to the job and the organisation. This is more important in the current scenario than it has ever been. In this economy, organizations

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A Study On Impact Of Service Quality In Customer Satisfaction In E-Commerce

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Abstract

The level of service that an e-commerce platform provides has a big impact on the level of satisfaction that a customer has, which in turn has an effect on the level of success that an online business . Website design, speed, dependability, security, and support are only few of the aspects of service quality. When consumers have a positive impression of the service they get, they are more likely to enjoy their time spent buying online and ultimately become devoted patrons. Despite the convenience of doing business online, studies demonstrate that buyers still demand a high level of service from e-commerce platforms. Because of this, it is crucial for internet firms to place a premium on providing excellent service if they want to attract and keep loyal customers. The purpose of this research is to investigate how online shoppers evaluate the quality of services. A total of 300 customers were surveyed for this research. The survey technique is used to choose the sample population. SPSS was used to examine the main data that was obtained. The data analysis was conducted using a sampling method that was both quick and easy to implement.

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ARTIFICIAL INTELLIGENCE IN MITIGATING CLIMATE CHANGES

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Abstract— Climate change challenges societal functioning, likely requiring considerable adaptation to cope with future altered weather patterns. Machine learning (ML) algorithms have advanced dramatically, triggering breakthroughs in other research sectors, and recently suggested as aiding climate. Although a considerable number of isolated Earth System features have been analysed with AI techniques, more generic application to understand better the full climate system has not occurred. For instance, AI may aid tele connection identification, where complex feedbacks make characterisation difficult from direct equation analysis or visualization of measurements and Earth System model (ESM) diagnostics.

Keywords— *Machine learning, research sectors, Earth System, climate system, tele connection, direct equation analysis, Earth System model*

I. INTRODUCTION

Artificial intelligence (AI) can then build on discovered climate connections to provide enhanced warnings of approaching weather features, including extreme events. While ESM development is of paramount importance, we suggest a parallel emphasis on utilizing ML and AI to understand and capitalize far more on existing data and simulations.

AI ESM

Machine learning (ML) and artificial intelligence (AI) increasingly influence lives, enabled by significant rises in processor availability, speed, connectivity, and cheap data storage. AI is advancing medical and health provision, transport delivery, interaction with the internet, food supply systems and supporting security in changing geopolitical structures. Society is approaching the era of self-driving cars, helping medical practitioners avoid misdiagnoses, accurate speech recognition, and receiving tailored purchase suggestions. Most applications are beneficial, although ethical issues exist, e.g. Bostrom (2014), New Scientist(2017). Simultaneously, evolving lifestyles must interact safely with climate change. There is a growing realisation that climate change impacts are not an isolated threat, instead needing more holistic responses alongside addressing other societal issues. Climate change is a complex scientific and multi- faceted issue, amenable to ML and AI analysis, but in general, this has not yet occurred. Many ML algo- rithms have been available for decades, and possibly most notably neural networks. However, until recently, constraints of computational architecture and power have restricted their application, and especially for issues as data-intensive as climate change.

Various names describe new computational methods, including big data, ML and AI. Big data is concerned with using complex datasets, so large that traditional analysis techniques are unsuitable. AI is a form of computer science, where the goal is often to teach a computer to complete tasks a human cannot do, and generally involves decision making in different contexts. ML is a sub-area of AI where computers learn relationships from large training datasets. For climate and weather applications, a simplistic characterisation can be: (i) big data as the collection for analysis of meteorological—or Earth System-related measurements, and high spatial and temporal resolution Earth System model (ESM) outputs, (ii) ML as refining or discovering new linkages between locations, times and quantities in the datasets (e.g. where sea surface temperature features aid weather prediction months later over land regions) and (iii) AI as building on connections that ML discovers, to provide automated warnings and advice to society of approaching weather extremes. The recent ease of application of ML methods through better computational capability is partly supported by novel use of computer graphical processing unit

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BLOCK CHAIN WASTE MANAGEMENT USING SECURE DATA STANDARD A NOVEL APPROACH

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Abstract— It is either replaced or discarded old devices. The term "e-waste" refers to the electronic and electrical equipment (EEEs) that users throw away. The board of e-squander incorporates legitimate assortment, isolation and reusing of disposed of gadgets in a climate cordial way. The unorganized sector still dominates e-waste collection and recycling in India today, making it difficult to enforce these laws. We propose a novel strategy for Modified EWM that makes use of DES (Data Encryption Standard Algorithm) and block chain-based smart contracts. The technology that makes it possible for us to write smart contracts is block chain. Brilliant urban communities can possibly conquer natural issues brought about by inappropriate garbage removal by working on human wellbeing, safeguarding the sea-going environment, and diminishing air contamination. Notwithstanding, the present frameworks, approaches, and advancements utilized for squander the board are manual and brought together. Because of this, they are susceptible to manipulation and the problem of a single point of failure.

I. INTRODUCTION

Since the previous 10 years, overall urban communities have been persistently creating a huge measure of waste that is putting a destructive impact on human wellbeing and the climate. It is assessed that the world creates up to 1.3 billion tons of strong waste every year and it is normal to increment to

2.2 billion tons each year by 2025. Every person produces between 0.11 and 4.54 kilograms of solid waste per day on average. It is accounted for that 33% of the created strong waste in urban communities don't oversee in a harmless to the ecosystem and more secure way. Animals that unknowingly consume waste, such as food waste or plastic bags, can be harmed by improper waste management, which can contaminate the oceans, spread disease, and contaminate the oceans. Sathish Kumar was the associate editor who coordinated the review of this manuscript and approved its publication. Proper waste management in smart cities is required. Close coordination and joint effort among the elaborate partners like waste generators, gatherers, transporter, and waste treatment offices. Nonetheless, the current frameworks utilized to oversee squander are exceptionally broken down and face a few difficulties due to an absence of means to satisfactorily divide squander related information between elaborate partners in squander the executives processes. Cities' waste management stakeholders can use block chain technology to share data in an efficient, secure, transparent, and verifiable manner on a single, unified platform. The decentralized architecture of block chain makes it a highly fault-tolerant, reliable, and secure technology.

Block Chain

Block chain, in some cases alluded to as dispersed record innovation (DLT), and makes the historical backdrop of any computerized resource unalterable and straightforward with a decentralized organization and cryptographic hashing. A Google Docs document is a straightforward analogy for how block chain technology functions. Instead of being copied or transferred, a Google Doc is simply distributed when shared with a group of people. This establishes a decentralized distribution chain and simultaneously grants everyone access to the base document. All changes to the document are being recorded in real time, making them completely transparent, so no one is locked out while they wait for changes from another party. The block chain's level of security is enhanced by the fact that, in contrast to Google Docs, original content and data cannot be altered after being written. Due to its ability to scale transparency, eradicate fraud, and reduce security risks, block chain is a particularly promising and revolutionary technology. Promoted by its relationship with cryptographic money and NFTs, block chain

A BLOCK CHAIN-BASED DECENTRALIZED FRAME WORK FOR FAIR DATA PROCESSING

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Abstract—Aninformationdisclosureandspreadconventionforremotesensororganizations(wsns) is liable for refreshing setup boundaries of, and disseminating the board orders to, the sensor hubs. All current information revelation and scattering conventions experience the ill effects of two disadvantages. To start with, they depend on the concentrated methodology; just the base station can appropriate information things. Such a methodology isn't reasonable for developing multi-proprietor multi-client wsns. Second, those conventions were not planned in light of safety and consequently foes can without much of a stretch send off assaults to hurt the organization. This paper proposes the primary secure and dispersed information revelation and spread convention named did rip. It permits the organization proprietors to approve numerous organization clients with various honors to all the while and straightforwardly spread information things to the sensor hubs. Besides, as shown by our hypothetical investigation, it tends to various conceivable security weaknesses that we have recognized. Broad security investigation show didrip is provably secure. We likewise execute didrip in an exploratory organization of asset restricted sensor hubs to show its high productivity practically speaking.

1. INTRODUCTION

Aninformationdisclosureandspreadconventionforremotesensororganizations(wsns) is liable for refreshing setup boundaries of, and disseminating the board orders to, the sensor hubs. All current information revelation and scattering conventions experience the ill effects of two disadvantages. To start with, they depend on the concentrated methodology; just the base station can appropriate information things. Such a methodology isn't reasonable for developing multi-proprietor multi-client wsns. Second, those conventions were not planned in light of safety and consequently foes can without much of a stretch send off assaults to hurt the organization. This paper proposes the primary secure and dispersed information revelation andspread convention named didrip. It permits the organization proprietors to approve numerous organization clients with various honors to all the while and straightforwardly spread information things to the sensor hubs. Besides, as shown by our hypothetical investigation, it tends to various conceivable security weaknesses that we have recognized. Broad security investigation show didrip is provably secure. We likewise execute didrip in an exploratory organization of asset restricted sensor hubs to show its high productivity practically speaking.

2. LITERATUREREVIEW

2.1 Trickle: A Self-RegulatingAlgorithm For CodePropagation And MaintenanceInWireless Sensor Networks

WepresentStream,acalculationforproliferatingandkeepingupwithcoderefreshesinremotesensororganizations.Getting procedures from the pandemic/tattle,versatile multicast, and remote transmissionwriting, Stream utilizes a "courteous tattle"strategy, where bits intermittently broadcastacoderundowntonearbyneighborshowever keep silent on the off chance thattheyhaveasoflateheardasynopsisindistinguishablefrom theirs.At the pointwhen a bit hears a more seasoned synopsisthanitsown,itcommunicatesanupdate.Ratherthanfloodingan organization withbundles,thecalculationcontrolsthesendratesoeverybithearsalittlestreamof parcels, to keep awake to date. We show thatwith this straightforward system, Stream canscale to thousand-crease changes in networkthickness, spread new code in the request forseconds,andforce an upkeepcost on therequestforacouple sends60minutes.

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Dr.R.Kanagaselvam

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River The Reviver: A Construal Of Gita Mehta's A River Sutra

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Abstract

Rivers are regarded with love and reverence and figure prominently in the epic and the folk literature of Indians. As K.R.S Iyengar states, "The River in India is a feminine power and personality, and the land must woo her and deserve her love if their hopes of fruitfulness and security are to be realized" (1993:105). The river Narmada, flowing since time immemorial without ever changing its course, symbolizes the eternal flux of human life. A River Sutra serves as the novel's setting and organizing principle. This novel is a string of short stories linked by love, suffering, and redemption themes. Each narrative has a unique title, and the narrator's continual commentary binds them together. All the stories revolve around the river Narmada and are told by an unnamed narrator. The present study examines the treatment of rivers as revivers.

Keywords: River Narmada, A River Sutra, Reviver, Gita Mehta

The word 'Sutra' literally means string or thread. Mehta's second novel, A River Sutra (1993), is a didactic, intimate, and profoundly focused work. It is a series of myopic experiences as told to a retired bureaucrat on the bank of the river Narmada by a motley crowd of pilgrims and travelers. In the title of the novel A River Sutra, Gita Mehta makes the reader ponder over the wisdom encapsulated in the tale and refers to the link and serves as the thread joining various stories as well as storytellers, located on the bank of the river Narmada, which provides the background for the entire novel.

The fascination of the novel A River sutra is the river Narmada and its banks, a place densely populated with pilgrims who came from different parts of the country. People's faith in the power of river Narmada to heal and cause tragedy forms the novel's central theme. As portrayed in the book, some characters find true love, while others paint a gloomy picture of themselves as destroyed by love. Mehta also gives many insights into different types of people who undergo physical and moral suffering to become spiritually purified. Many of the stories deal with ordinary people who become intoxicated with riches or overcome by lust and their search for enlightenment.

Further, the river Narmada is picturized as a living person, a character, and the tales can be described as the stream of the river's consciousness. While the six stories provide the book its diversity, the Narmada River gives it harmony. The river becomes a recurring motif in each of the stories. In its historical and mythic presence, the river becomes an archetype of fertility and immortality. It is a symbol of enlightenment, understanding, and maturity.

In A River Sutra (1993), the story runs with the central character, a retired bureaucrat. He, who has no family, decides to withdraw from the turmoil of life and voluntarily spends his life like vanaprastha in the Narmada Rest House on the bank of the river Narmada. The Manager hopes to live a life of tranquility and peace on the bank of the river. There he confronts a variety of people and hears their stories, and he is caught in their experiences.

In varying degrees, the bureaucrat comes across six independent stories. At each level, the summit of attentiveness is love and Revival of life: the love of money, beauty,

Incongruence to Congruence:Immigration – an Expedition towards Self-Realization in the Select Novels of Bharati Mukherjee

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Abstract

Every country has a unique history, traditions, customs, conventions, and civilization. These social norms are inherently ingrained in every citizen of a particular country. Letting one's tradition and culturego off and adjusting to the new culture becomes difficult. Immigrants often experience the predicament of cultural displacement. The predominant themes in Bharati Mukherjee are the incongruence out of the cultural clash, emotional strain, alienation, and the quest for identity, and the unity out of flexibility, adaptability, and assimilation.Bharati Mukherjee, one of the eminentdiasporic writers, mirrors her immigrant experiences through her writings. She mainly writes about the phenomenon of migration and its related issues. She best depicts the psychological disintegration of her expatriate protagonists due to their multicultural existence and the tragedy they meet with at the end.The exploration of her works shows that her results delineate not only psychological disintegration but also several physical and psychological reincarnations of the immigrant protagonists to adapt themselves to the new land and emerge as a new women by acquiring a new identity.

Keywords: Expatriation, Immigration, Transformation, Reincarnation, Self-realization, Identity.

The history of migration is as old as human history. Migration, either voluntary or forced, makes some people to be alienated beings. It transforms people from their traditional environments to strange soil with strange traditions, customs, and cultures. Their conventional modes of behavior become insufficient to meet the challenges of the new atmosphere. To readjust and redefine themselves, people must work out new relationships and acquire new meanings to their lives, often under harsh and hostile circumstances.

In the process of transplantation, between severing old ties and establishing new ones, the immigrantsexistin an extreme situation. Like the uprooted and replanted plants, the immigrants sometimes wither away or lead hollow existences while a few survive and rejuvenate to get firmly rooted. Regardless of sex and nationality, each immigrant undergoes a traumatic stage to assimilate into the dominant culture. Loneliness, despair, estrangement, and existential anguish trouble the immigrants, which in turn causes them emotional and psychological changes. They become incompetent in refashioning their self and establishing their identity. A few immigrants acclimate to their new setting in more or less parallel fashion, managing to become both culturally and socially competent in contemporary society and simultaneously exiting the ethnic community together. They

Infringement of Conviction - A Swing towards Exuberance in the Novels of Anita Nair

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Abstract

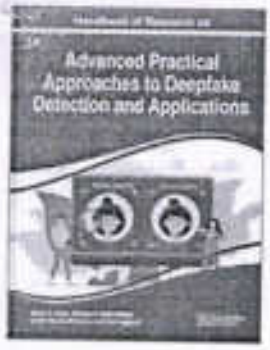
Literature is life. The incidents that occur in our lives become books people can read. The fiction genre has traditionally provided amusement and education about the various lifestyles that members of society lead. Indian past and present authors have offered a wide range of feelings and viewpoints in their works. Anita Nair, an Indian woman novelist, has devoted much attention to South Indian culture and perfectly encapsulated all of their emotions. The characters have solid reflexes and are quick to react. Her surroundings consistently evoke recollections in the readers and powerfully engender the notion that the author is a neighbourly figure. This paper discusses the characters' worldviews and how it was severely damaged during their lives. It also discusses a typical problem that everyday people encounter as well as the events that force a person to make choices and abandon their worldview.

Keywords: Belief system, emotions, decision-making, Existence

Anita Nair is familiar with the variety of roles women fill in their life, and her writing reflects this. She creates magnificent works quietly while composing with incredible energy. The part of the woman and her dependence—financially and socially—is at the center of this situation. Therefore, the more passionately its female novelists, like Anita Nair, raise what many readers should seriously consider forbidden questions about the role of women in modern India.

Anita Nair has established a unique position as a writer in Indian writing, even though other female novelists are more renowned for their style and ``l methodology in dealing with fiction. Anita Nair is unique in how she portrays characters, her sense of style, and the rights and duties women have in everyday life. She describes their sorrows in public in a distinctive way. Anita Nair is particularly adept at capturing the conversational subtleties that define the lives of her characters, such as passive Sunday food, a family column, and the sights, sounds, and smells of a busy train station. She has acknowledged that her books are somewhat novels to recognize the truth, and she seems better at putting together a collection of short pieces than going for the long term.

Women's rights are not a firm concept in any manner, shape, or form. If one were to look for a common thread among some of its varieties, it would be the study of male-centric ways of thought, emphasizing male dominance and female subjugation. This male-centric mindset advises women to hide this notion when engaging in social interactions. It puts the false ideals of sex in the forefront. Reading Simone de Beauvoir, humankind's historical background is defined by deliberate attempts to silence women, which gave rise to the fair conclusion that a woman does not become what she is by birth. This entire process of development results in an animal that can be represented as female.



Experimental Work and Discussion of Results on Deepfakes in Stock Prices Using Sentiment Analysis and Machine Learning

Anbarasu N. (Nandha Engineering College, India), S. Karuppusamy (Nandha Engineering College, India), S. Prabhu (Nandha Engineering College, India)and P. Sobana (Nandha Engineering College, India)

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Abstract

In the field of artificial intelligence, the employment of computer algorithms that develop themselves mechanically as they get more and more experience in experimental work and discussion of results on deepfakes is essential to the research process. It is frequently thought of as being in close proximity to artificial intelligence. Machine learning is a set of techniques that generates a model by making use of sample data, commonly referred to as training data, in order to make predictions about the future without actively attempting to do so, by separating the various types of tweets taken from the data on Twitter regarding a number of different companies. A classification algorithm was applied to the data that was collected and used in order to categorise the tweets. In addition, the OHLCV of the data from a number of different organisations is taken into account in order to improve efficiency.

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Literature Survey

Gurav, and Sidnal (2018) in view of the fact that reducing one's exposure to risk in the stock market is closely connected with reducing one's level of error in one's forecasts, this article presents the findings of a study that investigates several topics pertaining to dynamic stock market forecasting. The EMH, which is the foundation of a large portion of economic theory, has yielded encouraging results in the predicting of stock values based on financial news (Naseri et al., 2018b). The goal of developing a model for a time series is to research and learn about how the series evolves over the course of time so that the changes in the series may be predicted (Naseri et al., 2017).

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An Introduction to Deepfakes on Cryptographic Image Security

P. Boobalan (Nandha Engineering College, India), K. Gunasekar (Nandha Engineering College, India), P. Thirumoorthy (Nandha Engineering College, India)and J. Senthil (Nandha Engineering College, India)

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Abstract

The level of protection afforded to the encryption key is directly proportional to the level of security afforded to the data being encrypted. Data transmission via networks is the primary application for encryption use. There have been many different methods developed and put into use, all of which are utilized for safeguarding sensitive image data from any kind of illegal access. Text, audio, video, graphics, and still photos are some of the numerous types of data that can be included within multimedia files. A rise in the use of multimedia content transmitted over the internet has resulted in an increase in the sortage for the content. The vast majority of current encryption algorithms are typically reserved for use with informations since they are mismatched with digitalized data. A block-based transformation technique was utilized for this project.

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Introduction

Image Security, in our rapidly developing world, where the Internet allows critical communicates with entire peoples anong worldwide and is being progressively used as an application for e-commerce, security becomes a major issue that needs to be addressed. Image Security. Information security has evolved into an extremely important component of modern computing systems. As a result of the widespread adoption of the Internet, virtually every computer in the world is now connected to each other; however, this connectivity has also resulted in the emergence of new security threats. Therefore, there is an urgent need for security, and one component that is vital for ensuring the security of communications is cryptography (Ishaq et al., 2021).

Data in the form of digital photographs is widely communicated, stored, and utilised. Because of the importance of protecting the privacy of individuals, it is essential that biometric pictures such as fingerprints, faces, and irises not be shared outside of authorised channels. Some applications of picture encryption include the Internet, multimedia systems, medical imaging, telemedicine, and military communications. When dealing with extremely large image sizes, traditional encryption methods such as data encryption standard (DES), international data encryption algorithm (IDEA), and advanced encryption standard (RSA) are inefficient (Yousaf et al., 2021). Existing methods for text encryption are inadequate for securing digital images for a number of reasons, including the fact that an image's size is nearly always larger than that of a text message and that standard algorithms require a very long time to encrypt digital images. The goal of this research is to use this approach to create and develop new methods for image encryption, which together offer a very high level of protection.

Images undergo a SCANNING pattern that is applied to each pixel as part of the Block-Transformation procedure, where the matrix is essentially ignored. As a result, this image seems very different from the original. SCAN generates scan patterns to shuffle the blocks around, and a simple substitution rule is used to change the pixel values within each block to get the desired permutation (Rupapara et al., 2021). The final stage in producing the encrypted image is to conduct an Ex-OR operation between the block transmitted image and the carrier image, the image formed by the random numbers (Sadiq et al., 2021). The standard approach of image encryption, which employs the Blumblum algorithm to create random integers, is contrasted with the suggested system.

Cryptography

In today's digitalized world, cryptography plays a vital role in data security, It contains many terminologies like Encryption and Decryption, by using this many techniques all our datas are secured as per highy preffered mathematical and logical methodologies.

An Overview of Available Deepfake Datasets in Neural Network-Based Soil and Weather Prediction Models for High Quality Crops

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Abstract

Transportation, the environment, business, and agriculture are just a few areas where IoT and DL-based solutions are profoundly impacting. Soil nutrient insufficiency is a prevalent problem that can spread and harm plants if not addressed right away. An IoT-based system that monitors soil and weather conditions for nutrient deficiencies can help increase crop yields. One of the most crucial factors to include in existing deepfakes datasets is soil temperature when modelling terrestrial ecosystems. From January 1, 2010, through December 31, 2018, the Baker, Beach, Cando, Crary, and Fingal weather stations in North Dakota recorded daily weather and soil temperature readings. This study presents an enhanced convolutional neural network-based approach to soil and weather forecasting (CNN). In order to enhance the classification accuracy of the pre-trained CNN architecture, the slime mold algorithm is employed to optimise the model weight.

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Introduction

If crops are not chosen properly, yields will suffer. How to interpret soil test results is a big difficulty for farmers trying to decide which crops to plant (Rehman bt al., 2020). In light of this, the question of how to predict crop yields is fascinating (Ruxandra et al., 2018). Early attempts at estimating agricultural yields relied on the farmer's familiarity with a certain land and crop (Barbedo, 2013). Additionally, it will be easier to decide on additional steps if moisture, water level, and current temperature are all monitored often (Saddik et al., 2021). In addition, the system needs to know what nutrients are already present in the soil and conduct research to see if the crop needs more nutrients (Winéhn, L., 2018). Keeping an eye on nutrient levels is essential for producing the best harvest possible (Mee et al., 2017).

Plants' capacity to take in water, sunlight, and nutrients is crucial to the success of this system. Macronutrients and micronutrients are needed by plants in various proportions (Ray et al., 2018). More abundant than micronutrients, macronutrients are essential to a plant's cells and tissues (Semary et al., 2015). Nitrogen, phosphorus, potassium, calcium, sulfur, and magnesium (Mn) are all macronutrients that a plant need (Asfarian et al., 2014). When leaves aren't getting enough macronutrients, crop production suffers. Lack of nutrition can result in stunted growth, reduced flowering, and fewer fruits produced. The symptoms of nutritional deficiencies, such as altered leaf coloration and stunted development, are listed in Table 1.

Table 1. Macronutrient deficiency symptoms

Macronutrients	Symptoms
Magnesium (Mg)	Yellow between the leaf veins with red-brown tints and early leaves fall
Nitrogen (N)	Light green of upper leaves and yellow of lower leaves.
Phosphorus (P)	Slow growth and yellow foliage.
[illegible]	Yellow and purple leaves with brown at leaves edge and poor flower and fruit.

Deepfakes on Smart Devices in Stock Price Prediction Using Machine Learning

P. Sobana (Nandha Engineering College, India), S. Prabhu (Nandha Engineering College, India), S. Karuppusamy (Nandha Engineering College, India)and N. Anbarasu (Nandha Engineering College, India)

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Abstract

The stock market is a widely used investment scheme promising high returns, but it has some risks. It is an act to forecast the future value of the stock market. The change in the stock market is explosive, and there are multiple sophisticated financial indicators. Still, the enhancement in technology provides a chance to grow constant fortune from the stock market and so helps experts to detect the most enlightening indicators to produce better predictions. Machine learning algorithms have made a magnificent effect in determining stocks precisely. This paper proposed a multiple regression algorithm for determining the future value of a stock. The first thing that was taken into account is the dataset of the companies Apple and Microsoft. Live historical data has been collected from yahoo finance. The dataset was preprocessed and tuned up for real analysis. Hence, this paper also focused on preprocessing of the raw dataset. After preprocessing the data, some forecasting measures are suggested, such as momentum, volatility, index volatility, and stock.

Chapter Preview

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Literature Survey

Kanade (2020) presented a structure by the usage of various boundaries assembled from the historical information for a chosen organization utilizing Long Short Term Memory Machine Learning Algorithm and Adaptive Stock technical indicator for proficient estimating. Information is acquired from Yahoo Finance for working on this algorithm. There are two modules at the expectation of stock cost utilizing Long Short Term Memory, such as training sessions and forecasting values based on previously trained data. The stock development was anticipated by considering the end cost of the stock as input and news heading. It was inferred that Stock market development could be anticipated all the more unequivocally by utilizing Machine Learning calculations.

Torres et al., (2019) makes sense of the fact that it is so conceivable to involve PC as an instrument to consequently deal with the information gathered from financial activities. The fundamental goal is to consequently deal with the information utilizing Artificial Intelligence procedures, especially the utilization of Machine Learning algorithms.Random Trees and Multilayer Perceptron algorithms were utilized to foresee the end cost of a chosen organization (Deepika & Prabhu, 2019). The forecast has been performed with the stock exchange information of Apple Inc, with elements like opening cost, closing cost, highest cost, least cost and volume. WEKA software was utilized to execute the Machine Learning algorithms. Both the algorithms were tried on similar arrangements of information of Apple Inc. Henceforth, it was inferred that the two executions fit the genuine historical cost information as 0.998 for the Random tree and 0.9976 for Multilayer Perceptron. Additionally, mistakes are recognizable.

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Machine Learning Algorithms to Detect Deepfakes Fine Tuned for Anomaly Detection of IoT

N. Sridhar (Nandha Engineering College, India), K. Shanmugapriya (Nandha Engineering College, India)and C. N. Marimuthu (Nandha Engineering College, India)

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Abstract

The internet of things (IoT) is a worldwide network of interconnected gadgets that enables devices to communicate with one another and share data in a continuous manner. Any deviation from the typical course of events is referred to as an anomaly, and it might serve as an early indicator that there is a problem. The authors differentiate themselves from previous tactics by requiring less time to identify and respond to attacks since they implement a variety of machine learning algorithms while the programme is running. This effort intends to establish a system for anomaly detection that is capable of screening IoT flaws and alerting the organization's CEO as well as the help network. The authors make use of a machine learning approach called k-nearest neighbor (KNN) in conjunction with a random forest (RF) algorithm in order to fine-tune the parameters of the spreading network. As a result, this framework improves the performance of the model without causing it to overfit.

Chapter Preview

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Introduction

Internet of Things refers to the network of physical objects that are capable of exchanging and requesting data from one another or in relation to the external environment through the utilization of technology that is incorporated into the design of the object. People will be able to take care of daily routines in different ways and give more complex administrations as a result of developments based on the Internet of Things in the years to come. Among the most evident domains in which IoT has been unquestionably established are the pharmaceutical business, the electricity sector, the production of high-quality pharmaceuticals, agriculture, sophisticated urban networks, and sophisticated residences (Farouk, et al., 2018). There are approximately 9 billion 'Things' (real-world, living items) that are connected to the internet at this same moment. It is anticipated that by the end of this decade, this number will have skyrocketed to a staggering 20 billion (Farouk, et al., 2020). When compared to the entire planet for a tiny town that is universally related by just going from one side of the globe to the other, the definition of the Internet of Things consists of just two words that clearly clarify what it means (Aoudni et al., 2022). There has been a significant increase in the use of the Internet of Things across many different areas, including the medical field, the information technology sector, and the agricultural sector (Farouk et al., 2015). The ability to provide assurance of safety is likely the most important factor, given that it is the factor that is at the heart of a variety of problems, including government enterprise (Adil et al., 2021).

Any deviation from the norm, often known as an anomaly, might serve as an early warning sign for impending trouble (Heidari, et al., 2019). A problem in a manufacturing unit, for instance, may be indicated by abnormalities in the time-series data collected by an Internet of Things sensor (Mendonça, et al., 2021). Despite this, the process of spotting anomalies has become significantly more difficult over time. The application of techniques from machine learning allows for the detection of anomalies in data. Unsupervised, semi-supervised, and supervised anomaly detection methods are the three categories that make up the overall anomaly detection landscape (Naseri, et al., 2018). Labels in a dataset indicate the most appropriate detection strategy. In this paper, a methodology for finding irregularities in IoT devices is proposed in order to identify them and alert the top management or senior managers in a business. This approach is proposed in order to identify them and bring them to the attention of the readers. We make use of a machine learning approach called K-Nearest Neighbor (KNN) in conjunction with a Random Forest (RF) algorithm in order to fine-tune the parameters of the spreading network. As a result, this framework improves the performance of the model without causing it to overfit, and it makes it possible to get a fit and a mean score by making use of cross-validation (CV). After that, look into the many discrepancies that are caused by the dataset's use of substitute components. Finally, we utilize both a binary and a multi-class machine learning classification model to recognize dangers and abnormalities that may

Data Storage, Data Forwarding, Data Retrieval With Big Data Deepfakes in Secure Cloud Storage

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Abstract

Deduplication technologies are extensively used in distributed storage management to lower the space and transfer rate needs of services by eliminating redundant information and storing only its single replica. Many clients redistributing comparable data to a shared repository is ideal for deduplication; however, this practise raises concerns about data ownership and confidentiality. Each data owner can confidently show a distributed storage server that they are the rightful owner of a piece of data via confirmation of holding plans. In contrast to state, many clients would encrypt data before re-appropriating it to distributed storage for added safety. Due to the unpredictable nature of encryption, this prevents data duplication. Some recent deduplication systems have been proposed to solve this issue by allowing multiple owners to share the same encryption key for identical data.

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Introduction

Distributed computing is a term that is commonly used in the IT industry. An authentic depiction of what awaits registrants in the future from a specialised and based on societal perspectives forms the backdrop of this extravagantly beautiful presentation (Abdolmaleky, et al., 2017). It wasn't until much later that the term "distributed computing" was invented, but the idea of housing data and processing capacity in remote data centres owned and operated by private enterprises isn't novel (Abulkasim, et al., 2019). Regaining favour wasn't possible until the 1990s, when it was used in conjunction with other distributed registering providing mechanisms like matrix processing. Distributed computing's original intent was to use a utility pricing model to offer IT as a service to businesses and individuals via cloud computing on-demand (Adil, et al., 2021a). The developments in matrix processing might be seen as the earliest examples of distributed computing (Adil, et al., 2021b). In late 2006, Eric Schmidt, CEO of Google, was the first to offer a concrete definition to the term "cloud processing" (Aoudni, et al., 2022). Thus, the evolution of distributed computing is a highly remarkable quirk, despite the fact that its basis is built on some outmoded principles that have been modified to integrate new business, specialised, and social viewpoints (Farouk, et al., 2016). Technically speaking, the cloud is an extension of a preexisting network-based design (Harnik et al., 2010) that makes use of the framework's administrations while also incorporating some novelties, such as virtualization and different approaches (Farouk, et al., 2020).

Deployment Models

Access to the cloud might be public, private, hybrid, or community, and is defined by organisational structures (Farouk, et al., 2015). The Public Cloud has made it possible to efficiently release previously inaccessible frameworks and administrations to the broad public (Naseri, et al., 2018). Due to its dynamic nature, public cloud services like email may not be as secure as their more immobile private counterparts (Vijayalakshmi, C. 2020). Access to a company's own frameworks and management is made available through the deployment of a private cloud (Kaaniche and Laurent, 2014). There is an added layer of security thanks to the fact that it is hidden (Naseri, et al., 2015). As a result of the Community Cloud, numerous organisations can work together to create shared infrastructures and administration structures (Heidari et al., 2019). However, private clouds are used for the more fundamental types of training, while public clouds are used for the more advanced types of training (Wang, C. et al., 2010).

A Privacy Protection Method for Deepfake Hybrid Cloud Computing

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Abstract

Cloud computing developed the world rapidly, so in our lifetimes, other cloud services are entered, and the security protection in our cloud services, particularly the protection against data sequestration, is gaining importance. Still, the protection separation implementation causes a huge drain. Therefore, it is difficult to implement the most appropriate product to reduce consumption power while protecting separation. The proposal proposes a full-scale sequestration scheme (PPPS) to provide usable sequestration protection that satisfies stone sequestration requirements while system performance can be maintained. First, the separation is unidentified by the drugs they carry, and they quantify the degree of security and perform the TripleDES standard and AES standard encrypts algorithms. The safety formulation is also derived from analysis results and professional data. Finally, similar results display that PPPS also meets the request sequestration from stones and maintains the performance in various cloud environments.

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Introduction

Cloud computing is the most suitable pattern for individuals and is related to penetrating affordable and on-request computing checkouts and scalable operations and storing data services. The cloud storage systems, related to Google Drive, Microsoft OneDrive, Dropbox etc., allow a large amount of data to be stored from druggies that penetrate and participate between drugs, time regardless and constrained position. Cloud computing of growing vogue, and the amount of businesses and separate moving towards using the cloud continues to increase.

The ordinary businesses association and individuals cloud services are using. The data owners move the sensitive data to the lobby, and the element of control over the data is lost. They have no guarantee for cloud druggies of how cloud providers will handle and protect this sensitive data.

The cloud gives druggists the comfort of accessing data over many biases, using the cloud services to make the data from the unsafe number of cruel attacks and traps. Security events happen all the time. Even worse, cloud service providers can falsify data to an unapproved reality of profiteers.

One possible outcome is the use of Cryptography to overcome these problems. Various data owners must shift the sensitive data before being stored in a potentially untrusted field. The encryption scheme strength was largely depending on the decoding operation strength method. The encryption security scheme lies in the secrecy keys, identified only for narcotics permits to study the individual data, and the encryption algorithm is used not only in the secrecy.

Due to the number of documents that are saved and the cloud is connected, and added amount of stored data drugs, cloud storage wants a cryptographic scheme design that encounters the security conditions, efficiency, inflexibility, and ease to use is an exhausting task. The home results are generally suffering from limited applicability in encryption operations operate. The data owners manually encrypt their documents before uploading them to the palette.

Operating railway systems better enforce encrypting media. A customer operation interacts with the original encrypted train system, and the translated data is stored back on cloud storage. The design includes hybrid, speed, and safety views.

The [illegible]ring are explained in detail.

Deep Learning Algorithms in Cluster Analysis on an E-Learning System in Data Mining

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Abstract

Data mining is one space that helps in churning out helpful data from the abounding knowledge offered. Mining is gaining immense quality currently. To perform data processing, a majority of techniques exist. Agglomeration approach relies on the scholar performance and activities allotted as a district of process. Clusters are accustomed realize the relation between the attributes. The cluster analysis was performed by organizing collections of patterns into team-supported student behavior. In this chapter, several agglomeration approaches of area unit are used including agglomerated hierarchal agglomeration, K means, and C means.

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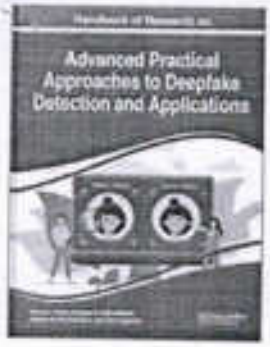
Introduction

It unearths information that has been buried inside the data, which can either be connected to machine learning or exploratory information analysis, both of which are becoming increasingly common in today's world (Guiamalon, et al., 2022b). Agglomeration is a method that can be used in processing that assembles information of similar types into clusters (Guiamalon, T. S., 2022a). It is a method of learning that occurs without a teacher present. Unsupervised learning is supposed to have occurred when the clusters formed for a number of classes that were not known. As a result, this region is considered to be one in which unsupervised learning took place. The most important goal of agglomeration is to minimise the degree to which different classes are alike and maximise the degree to which individual classes are alike, with the criteria for this determination being printed on the factor of characteristics (Raja and Priya, 2021b).

The machine learning technique known as "deep learning" will be among the options under consideration (Demeter, et al., 2021). It's a discipline where experts can study computer algorithms to learn on their own. Deep learning involves artificial neural networks that are meant to mimic the way humans think and learn, whereas machine learning sticks to more simplistic approaches (Balas-Timar and Lile, 2015). In the recent past, computational power constraints capped the complexity of neural networks. Thanks to developments in big data analytics, however, computers now have access to larger, more sophisticated neural networks, allowing them to analyse, understand, and respond to complex information at a rate that exceeds that of humans. Speech recognition, language translation, and image categorization are just few of the areas where deep learning has proven useful (Raja and Lakshmi, 2022). As such, it can be used to remedy any issue with pattern recognition that arises without the need for human intervention (Lumapenet, et al., 2022).

Comparable to the neurons that make up the human brain, neural networks consist of layers of nodes. Adjacent nodes on different layers are linked together (Rad, et al., 2020). The greater number of layers in the network is used as evidence that it is more complex (Raja and Priya, 2021a). A single human brain nerve cell is constantly bombarded by millions of impulses from other neurons (Roman et al., 2020). Signals are transmitted between the nodes of a synthetic neural network, where weights are then assigned based on the information conveyed. A node with a higher weight has a great deal of influence over the nodes below it (Rad and Balas 2020). A final layer aggregates the inputs and generates an output based on their relative importance (Raja, and Lakshmi, 2020). Due to the large amount of data they collect and the complexity of the arithmetic they employ, deep learning systems can only run on high-end computers. However, it will take weeks to train a neural network, even with this cutting-edge gear (Rad, et al., 2019).



COVID-19 Diagnosis Using Transfer Learning Techniques and Applications on Chest X-Ray Images

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Abstract

COVID-19 is a viral disease caused by a new type of coronavirus called SARS-CoV-2. The World Health Organization (WHO) declared it a pandemic due to this disease spreading over many countries. Currently, there is no medicine available to prevent or cure infectious diseases. COVID-19 samples are commonly tested using reverse transcription polymerase chain reactions (RT-PCR), which are more expensive and take 24 hours to deliver either a positive or negative result. This chapter aims to develop a rapid and accurate medical diagnosis support system for COVID-19 in chest x-ray images by combining transfer learning techniques with the KNN algorithm. There are multiple approaches to building a classification system for analyzing radiographic images in deep learning. In this way, the knowledge acquired from a pre-trained convolutional neural network can be used to solve a new problem. Stacking is a machine learning method that combines the performances of the many transfer learning-based models to ensure the robustness of the proposed system.

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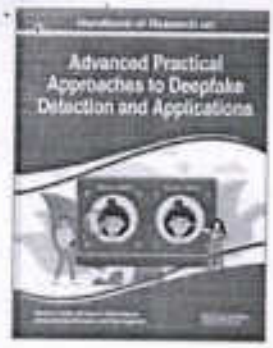
Introduction

Covid-19, an epidemic that impacts the breathing system of human beings, become first identified in Wuhan city in China on December-2019. The sickness is effortlessly spread from one man or woman to any other via droplets released from an infected man or woman while coughing, sneezing or exhaling. Nearly all nations are operating tough to reduce the quantity of COVID infections (Aoudni, Y. et al. 2022). The possibility of decreasing the rate of covid-19 contamination through preventive movement depends on knowing the actual quantity of covid-19 cases in a given location, and this may most effective be done through proper covid testing (Naseri, M. et al. 2017). Tests for the Covid-19 virus should be selected based on their accuracy in detecting positive cases, the time required to obtain a result, and the cost of the test (Metwaly, A. F. et al. 2014). World Health Organization has encouraged RT-PCR test because the gold general for testing for Covid-19. This test provides excessive accuracy in diagnosing sicknesses. The downside is the cost and time it takes to complete the test. Early analysis of patients with covid-19 can be carried out by computed tomography (CT) test of the chest (Li and Xia, 2020), an advantage of this approach is its speedy with diagnostic rate.

However, the accuracy is decrease in comparison to RT-PCR tests. Loop-mediated isothermal amplification (LAMP) (Liu et al., 2016) amplifies the target genetic material and offers outcomes within an hour. But it produces much less accuracy, so it isn't commonly used. Cases of COVID are diagnosed using antibody tests based on antibodies produced by the immune system. It has worked well to identify people infected with Covid in the past, but it cannot identify people who are currently infected and has a low accuracy problem. using deep learning, Covid-19 turned into distinguished from other various pneumonia instances with an AUC of 0.87 (Wang, S. et al., 2020). We used social optimization to extracting the efficient features from X-ray of chest images the usage of a CNN model to come across Covid-19 cases (Toğaçar et al., 2020). Covid-Net is a deep convolutional neural network developed for cancer detection from X-ray images (Wang et al., 2020). A convolutional neural network with a transfer learning approach was used to detect disease from X-ray and CT scan images (Alom, M. Z. et al. 2020). When CT scans had been used, accuracy turned into higher (Naseri, M. et al. 2015). With the assist of X-ray [illegible] Covid-Net has been used to hit upon corona instances and non-corona instances (Ozturk, T. et al. 2020).

By [illegible]Net model, accuracy was achieved for several classes, including covid, non-covid and pneumonia (Farouk, A. et al. 2018). The usage of the Fr[illegible] Enhanced Fractional Moments (FrMEMs) method (Elaziz, M. A. et al. 2020), we extracted the features from X-ray of chest images and lab[illegible] the [illegible] primarily based on machine learning techniques (Naseri, M. et al. 2018). We advanced a deep learning depended system,



Features Manipulation of Classification and Recognition of Images Under Artificial Intelligence Using CNN Algorithm and LSTM

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Abstract

The established model provides appropriate picture pixel gaining knowledge in image detection. Additionally, it also affords an alternative solution for item tracking and predicting the usage of deep gaining knowledge of strategies. The proposed technique offers a fine overall performance in photo recognition issues or even outperforms humans in positive cases. Deep learning architectures containing dispensed techniques will become more critical as the scale of datasets increases. Then, it is important to understand which are the most green approaches to carry out distributed education, so as to maximize the throughput of the gadget, while minimizing the accuracy and model regression. This chapter explores features manipulation of classification and recognition of images under artificial intelligence using CNN algorithm and LSTM.

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Introduction

Artificial Intelligence

The phrase "artificial intelligence" (AI) refers to a subset of neural networks that fall under the umbrella of "machine learning algorithms" and are known as "artificial neural networks" (ANN). The data in this kind of model are represented through the use of a graphical model that is composed of neurons. ANN is a type of computational system, and its neurons are constructed according to a technique that processes and manipulates data in the same way as a human brain does (Farouk, et al., 2015). The availability of vast amounts of data in the network has led to the development of ANN, which is designed to comprehend the factors that enable outcomes to be favourable (Farouk, et al., 2020).

An input layer, then a number of hidden layers (anything from one to many), and finally, an output layer, make up the feed-forward information of the architecture of neural networks (Farouk, et al., 2018). These layers carry out processing in a methodical manner in order to establish the output of the ultimate system, which is located in the middle of the incoming and outgoing levels (Aoudni, et al., 2022). The incoming information is transformed into useful output information that can be used by the middle layers or hidden layers, which then work on the information before moving on to the next step (Doopika and Prabhu, 2019). The input layer is responsible for providing the middle layers or hidden layers with the incoming information. They are completed with the assistance of connections that are weighted (Heidari, et al., 2019). The information from the intermediate layer is then examined, and the network system is aware of a variety of ways to convey the information to the subsequent output layer based on the facts that it knows about each other (fig.1).

Figure 1. Structure of ANN
(https://igiprodst.blob.core.windows.net:443/source-content/9781668460603_299208/978-1-6684-6060-3.ch016.f01.png?sv=2015-12-11&sr=c&sig=m7YC164StOQTILMJYoNqSED0b%2FhlkorpMeOkpEIAtDI%3D&se=2023-02-05T04%3A03%3A18Z&sp=r)

Processing of Image

The [illegible] is an essential part of the photograph processing field. Research into the topic evolved into a decade-long examination of the issue from the perspective of working from the ground up. This was the endeavour that had been described previously to establish policies that would [illegible] organisms.

Security Enhancement in Cloud Computing Using CBC Technique

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Abstract

The data protection mechanism in cloud storage systems is based on two-way factored inversion. With the authors' solution, users can store encrypted communications in the cloud and distribute them to their intended recipients. There is no requirement for the sender to have any other information (public key, certificate, etc.) except from the name of the receiver. There are two things the decoder needs in order to decipher the ciphertext. Your computer's private key is the first. The second is a one-of-a-kind computer-based security system for the individual. The ciphertext cannot be cracked without both keys. The loss or theft of your security device will also cause it to become inoperable. In other words, it can't be utilised to read encrypted messages. A cloud server is an option for this. The sender will not be aware of any of this activity. In the same vein, cloud server reads encrypted Chrome content. The system's practicability is supported by analyses of its safety and efficiency.

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Introduction

In the cloud computing model, data is often stored in pools managed by a third party. Using cloud storage has a number of benefits. The accessibility of information stands out the most. Cloud-based information is always available to anyone with an internet connection. Upkeep tasks in the warehouse, such replacing B. When working with a service provider, it is possible to delegate the task of purchasing more storage space. With cloud storage, customers can benefit from the sharing of data. Emailing large files can be problematic if Alice wants to send them to Bob. Alice then uploads the file to a cloud storage system from which Weave can retrieve it at any moment. Outsourcing information capacity has several advantages, but it also increases the attack surface, which must be considered. In the case of distributed information, for example, the greater the number of storage locations, the greater the risk of unauthorised physical access. With so many people accessing the same storage and network, it's possible for malicious individuals to steal data. This could be the result of careless use, a faulty equipment, or malicious intent.

A promising solution for risk compensation is the use of encryption technology. Encryption allows you to protect your data while it is being sent to and received from your cloud services. In addition, you can protect the data stored by your service provider. Even an incorrect attacker can access the cloud. The data is encrypted so that an attacker cannot get the information in plain text. With asymmetric encryption, the encryption feature uses only public information (such as the recipient's public key or ID) to generate the ciphertext, and the recipient can use the private key to decode the ciphertext. Usually, the foremost helpful encryption mode for sending information is as it does not require symmetric key management encryption.

Enhanced Security Protection

In asymmetric cryptography, the public key or ID is paired with only one corresponding private key. The ciphertext can be unlocked with this key alone. The key is kept in a safe place, like your computer or a server you trust, and is protected with a password. When a server or computer is accessible from the outside of a network, the default security settings should be adequate. This, sadly, is not how things work in the real world. A hacker could potentially compromise a private key without the key owner being aware of it if the machine or server in question is linked to the Internet. For reasons of physical security, the computer storing the user decryption key is changed if the original computer user (that is, the keychain) is missing (for example, if the client walks to the [illegible] while without locking the machine). Users can take advantage of it. Sharing computers is prevalent in workplaces and educational institutions. In a college setting, for instance, it would be useful to have an open computer in a replica data room so that students on the same

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INVESTIGATION ON PRODUCTION OF EDIBLE OIL FROM RICE HUSK

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ABSTRACT

Rice husk, the hard protective covering of the grain of rice (paddy), is a massive agricultural residue. Rice bran oil (RBO) also called wonder oil is well known for its numerous health benefits. The presence of a unique antioxidant called oryzanol contributes maximum antioxidant activity to rice bran oil. Rice bran oil has number of advantages over the other edible oil. The results showed that the rice bran has 21.44% of raw oil, with a chemical composition (based on fatty acids) of 48.48% oleic acid, 35.26% linoleic acid, and 14.54% palmitic acid, as well as a free fatty acid content of 8.15%. The oil contains vitamins such as B and E, proteins, fatty acids, antioxidants, collagen, elastin, oryzanol and ferulic acid. Antioxidants and Vitamin E are good for the heart as they reduce the amount of bad cholesterol and prevent cardiac arrest. Compounds such as oryzanol and ferulic acid are used as functional food supply ingredients. Apart from these benefits, the consumption of rice bran oil maintains the immune system, aids in weight loss, prevents diseases like cancer, relieves symptoms of menopause and enhances skin health. These advantages motivate capitalists to venture into rice bran oil manufacturing and thus can supply cooking oil and various other essential products that require rice bran oil as a component of it. Is. Although it is classified as an "oil", rice bran oil is completely safe for consumption by patients with heart problems, diabetes, cholesterol, or high blood pressure. Because of all these benefits, you can expect good profits in the Rice Bran Oil Making Business.

Keywords: *Rice husk, protective layer, agricultural residue, wonder oil and antioxidant*

1. Introduction

Rice Bran Oil (RBO) is an edible oil extracted from rice bran which is a byproduct of rice mills. RBO is superior among the other edible oils because it contains unique antioxidants and nutraceutical complexes present in its composition. In the unsaponifiable fraction of RBO contains g-oryzanol and tocols[1,2]. These compounds have been reported in the scientific literature as powerful antioxidant agents that are effective for preventing degenerative diseases. It is suggested that bran antioxidants are mainly g-oryzanol and vitamin E, as well as unsaturated fats capable of lowering cholesterol. g-oryzanol component of RBO was first presumed to be a single component, but later it was determined to be a fraction containing ferulate (4-hydroxy-3-methoxy cinnamic acid) esters of triterpene alcohols and plant sterols[3-6]. Cycloartenyl ferulate, 24-methylenecycloartanyl ferulate, and campesteryl ferulate are the three major components of g-oryzanol.

Under-nourishment is the problem that all the developing countries face to-day.Studies carried out by the United Nations have indicated that diets of the people in these countries are deficient in calories [7-11]. Similar is the case with India, where the prices of oils and fats are always on the ascent. The reasons for this are-(i) over increasing population and (ii) rise in standard of living of bulk of the lower echelons of the population. These factors have increased and continue to increase the demand for oils and facts both for edible and non-edible purposes, But the increase in the production of oil seed crops is not in keeping with the increasing demand, so much so that India, an exporter of oil twenty years ago, is forced to-day to import oil for domestic consumption [12-16]. This is true for both edible and essential oils. The short supply of oil has not only created a food problem, but has hit the industrial scene in a big way.

During the rice polishing process, a unique vegetable oil that is rich in antioxidants produced from the outer layer of rice is what we called Rice bran oil (RBO).The global studies have confirmed the cholesterol lowering properties due to the presence of unique nutraceuticals in this oil known as oryzanol & tocotrienols.The crude rice bran oil is mainly composed of glycerides (80%) while phospholipids, glycolipids, free fatty acids and waxes are also present in less

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RECENT DEVELOPMENTS IN MULTIPURPOSE TILLER MACHINE DESIGN – A CRITICAL REVIEW

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ABSTRACT

The Indian economy is based primarily on agriculture. The human ecology has traditionally placed a high value on agriculture. On the other hand, conventional farming practices require a lot of labor and take a long time. Most Indian farmers still use traditional farming tools like the sickle and plough in 2020. Energy and human resources are wasted as a result, and the labor force's yield per worker is decreased. One of the most labor-intensive agricultural practices is farm tilling. Hand field tiling is a laborious task, and tractors are expensive. By decreasing human effort at a very low cost, this portable tiller machine provides an all-in-one modern solution to improve traditional farming methods. Real design and manufacturing are necessary for mechanical engineering education because they are the foundations of engineering. The tiller's ingenious portable design helps to reduce the time and cost associated with tilling, which increases agricultural productivity and efficiency. The tiller machinery is two-wheeled agricultural equipment with a rotary tiller that easily manages all farm tasks. It cultivates the ground, plants, scatters seeds, and applies fertilizer.

Keywords: Multipurpose Tiller Machine, Design, Recent Developments, Review.

I. INTRODUCTION

As is common knowledge, one of the many farm mechanization tools is the soil tiller and cultivator. Power tillers, also known as walking tractors, have been utilized as equipment to prepare/use for farming and for transportation. We were receiving recommendations from OLEO-MAC. The rotary tiller (MH-195) that the business will produce has faster speed and less torque, making it unsuitable for Indian farming. Due to its lightweight design, development, and manufacture, the soil tiller and cultivator is a system that may be employed on small lands of 1.5 to 3 acres (30-35 kg). This cultivator would be managed by anyone. The Indian government claims that 65-70% of farmers have less than 2.5-3 acres of land under cultivation, and 50% to 60% of farmers earn less than 1.5 to 2 lakhs a year. These farmers have no trouble affording this kind of equipment. Farmers are reportedly dealing with challenges like a manpower scarcity, rising labor costs, and high tractor costs. In order to design and manufacture soil tillers and cultivators, a mix of user, survey, and expert viewpoints will be used as a solution to the problem.

II. SUMMARY

This paper's primary goal is to design and construct a ploughing machine for use in soil cultivation. Our goal is to decrease the amount of labor needed to operate the plough. The only option is to automate it, but we are unable to automate it owing to a few limitations, such as the need for electricity, which is not always available in rural areas, and for microprocessors and sensors, both of which add to the cost and may require technical expertise to operate. The answer we came up with was to use engines, motors, and power transmission equipment to semi-automate it rather than fully automate it.

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DESIGN AND FABRICATION OF CASTING DEFECT SEGREGATION MACHINE

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ABSTRACT

Nowadays industries are playing a vital role in the national economy. So, it is very important for an industry to maintain the quality of the product they produce. So, the goal of this paper is to propose an automatic system to assert the dimensional accuracy or casting not filled of a product and the rejection of the defective products. An IR or ultrasonic sensor is used to detect the presence of the object. When a product is arrived then the motor starts running and so as the conveyor belt also starts running. Sensor detects the dimensions of the product. If the product has corrected dimensions, it will be further transferred to the acceptor bin, and if not, then the product is rejected by pneumatic actuator into the rejecter bin.

Keywords: Design, Fabrication, Casting, Defect, Segregation, Machine.

I. INTRODUCTION

In order to automate the process of manual inspection in the casting defect system we have created a deep learning model which classifies into two different classes Good and Defective 'Good' - only if the product is free from scratches and defects like blow holes, extra casted materials, less casted dimensions and so on. And the other one is 'Defective' where it has scratches, blow holes, pin holes, less casted dimensions etc. Materials handling involves the movement, storage, control, and protection of materials during their manufacturing, distribution, consumption, and disposal there are different material handling systems and equipment in industrial plants, which use conveyor system. It moves objects from the source to the terminal instead of moving objects with people due to its ability of continuity in the operation speed and consistency of objects in movement. Material handling systems ranges from simple pallet rack, shelving projects to complex overhead conveyor systems, automated storage, and retrieval systems. Material handling also consists of sorting and picking. In recent times, various sorting systems have been developed. The applications of sorting vary from agricultural products, consumer manufactured products, books, etc.

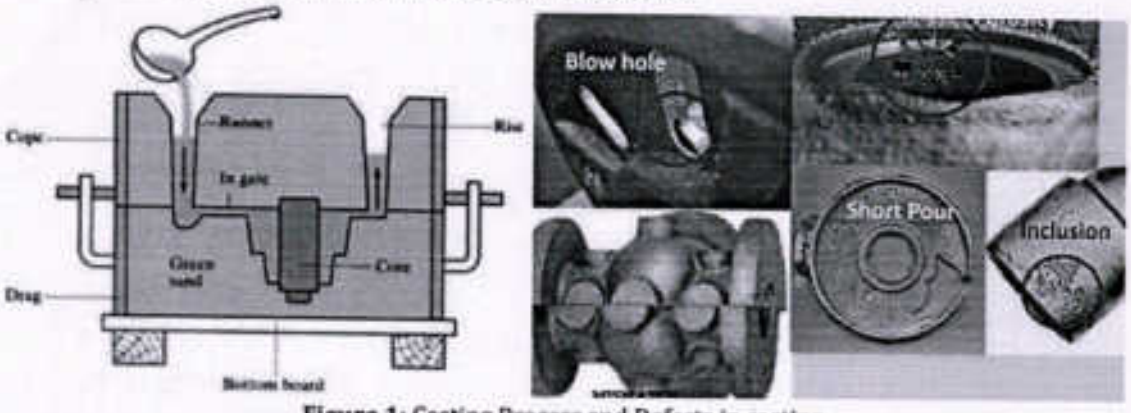

Figure 1: Casting Process and Defects in casting

II. LITERATURE REVIEW

[1] Avinash Juriani et al (2015): In this current scenario of globalization, foundries play a key role for manufacturing industries as they are the major source of castings. Castings are the major inputs for most industrial products hence foundry industry is most indispensable. This study provides an intense knowledge of critical casting defects and their root cause analysis. In this paper efforts are made to achieve technically

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A REVIEW: DESIGN AND DEVELOPMENT OF INTEGRATED 2 & 3-WHEELER ELECTRIC VEHICLE

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Abstract - *Electric bicycles have grown in popularity in recent years, particularly among the elderly. More recently, people with disabilities are also showing interest in this product because of the ease of moving from one place to another. According to the literature, the electric bicycle has either two or three wheels, with the possibility of developing an integrated two- and three-wheel electric bicycle in the future. The proposed design could be used by normal persons as a 2-wheeler and by persons with disabilities as a 3-wheeler. Also, the electricity consumption and charging pattern of the proposed design were investigated. The proposed design of a 2- and 3-wheel electric bicycle with a motorized handle attachment shows better mobility solutions for disabled and non-disabled persons.*

Keywords: *Charging, Design, Electric Bicycle, Motorized, Mobility.*

1. INTRODUCTION

In recent years, electric bikes have been used by all riders, primarily older people, as part of a shift toward sustainable and active transportation in many countries to address the problem of air pollution and as a mode of physical exercise. Ongoing research studies revealed that cycles with two wheels are being used by non-disabled persons, and cycles with three or four wheels are being used by disabled persons. Riders aged 40 and up are experiencing knee pain, joint pain, and other muscular issues. So both disabled and non-disabled riders are using two- and three- or four-wheeled cycles separately. If the above-mentioned disabled and non-disabled riders belong to one family, they need to have two cycles. With this background, the current paper aims to develop a bicycle with an electrical drive that is adaptable for both the above-mentioned disabled and non-disabled riders.

2. ELECTRIC WHEELCHAIR

George Klein created the first electric wheelchair in order to aid injured World War II veterans. It has changed over time to take on numerous styles and shapes. The power chairs come with a variety of features, including chin and hand controls, tilting, seat elevation, and many more. Some of the models can be disassembled and transported when travelling because they are portable. Three general categories can be used to classify electric wheelchairs:

- The front-wheel powered chair: A power chair designed for indoor use. This chair has four wheels and is the most adaptable of the bunch.
- The rear wheel powered chair: An outdoor-friendly power chair. They are suitable for rocky roads because they are rear-wheeled.
- Mid-wheel powered wheelchair: This electric wheelchair is suitable for indoor use but has reliable steering capabilities.

A wheelchair that uses an electric motor to move itself, typically via differential steering, is known as a motorised wheelchair, power chair, electric wheelchair, or electric-powered wheelchair (EPW). People who are unable to push a manual wheelchair or who may need to use a wheelchair across rough terrain or over long distances may find motorised wheelchairs handy. They may also be utilised by persons who have diseases related to the heart and exhaustion, in addition to those with "conventional" mobility disabilities. [1]. Table 1 below gives a description of the many types of electric wheelchairs.

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Experiment on the Flexural Functioning of Cold-Formed Steel Built-Up Complex Hat Section

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Abstract: *Cold-formed steel members are comprehensively utilized in the building construction industry, especially in residential, commercial, and industrial buildings. Thin sheet steel products are widely noticed in the building industry and range from purlins to roof sheeting and floor decking. Generally, these are used for basic building elements for the congregation at the site or as prefabricated frames or panels. They obtained the generic title 'Cold-Formed Steel Sections. The uses of these products are many and varied, ranging from "tin" cans to structural piling, from keyboard switches to mainframe building members. This paper dispenses an experimental and software analysis of the flexural behavior of cold-formed steel built-up sections. The experimental results are also verified with finite element analysis using Manual Designs and ANSYS Software. The analytical results obtained are better exposure to the experimental results.*
Keywords: *Cold-formed Steel Section, Cold-rolled steel sections, Cold-Rolled tubular sections*

I. INTRODUCTION

Cold-formed steel products such as sections have been often used in the metal building construction industry for over 45 years. The vogue for these products has dramatically increased in recent years due to their wide range of applications, economy, ease of fabrication, and high strength-to-weight ratios. Sometimes they are also known as Light Gauge Steel Sections or Cold Rolled Steel Sections. Cold-formed steel products occur in all aspects of modern life; in the home, the shop, the factory, the office, the car, the petrol station, the restaurant, and indeed in almost any imaginable location. In the market, various shapes of these products are available C-sections are predominantly used in light load and medium span situations such as roof systems. The use of cold-formed steel structures is getting increased across the Universe with the production of more economic steel coils, especially in coated form with zinc or aluminum/zinc coatings.

These coils are later formed into thin-walled sections by the cold-forming process. The steel regularly used for these sections may have yield stress for the various ranges.

II. OBJECTIVES

The prime objectives of this research are:

1) To inquire about the function of cold-formed steel (CFS) - Complex Hat sectioned beams.
2) To set the moment carrying capacity of specimens theoretically by using, NORTH AMERICAN COLD FORMED STEEL SPECIFICATION, 2007.
3) To the possible modes of failure of the members under static loading byperforming Eigen buckling analysis using ANSYS R2 software.
4) To resolve the moment carrying volume of specimen experimentally and to endorse the modes of failure arrived in numerical analysis..
5) To compare the results obtained from Theoretical and Numerical works with Manual designs and specific Software.

III. COMMENDATION OF COLD-FORMED STEEL SECTIONS

1) The steel members generally weigh low so that they will reflect low dead load resulting in less deflection. The notable view is that they are corrosion-resistant.
2) It can be used in large spans so we need not complicate splitting the parts for a perfect mold.
3) Economically, it is analyzed to be considered in comparison with the other components.
4) They are pre-tensioned and pre-casted members. The tensile carrying capacity is considerably high suiting for all places.
5) Lightness, High strength and stiffness, ease of prefabrication and mass production, fast and easy erection, non-shrinking, and accurate detailing.

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Experimental Strength on Polypropylen Fiber Reinforced Concrete

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Abstract: *The paper presents research work of experimental investigation on polypropylene fiber reinforced concrete by replacing river sand to artificial sand with and without admixture. Use of fiber reinforce polymer in civil engineering increase rapidly. Various type of fiber is used such as glass, carbon, steel, asbestos, polyester and polypropylene. The various experimental investigations for determination of properties of polypropylene fiber are discussed in paper work. This paper presents the effect of polypropylene (PP) fibers on various properties of concrete such as compressive strength, tensile strength, workability, and fracture properties with various content of fiber(0% ,0.5%,1.0%,1.5%). The result of this present investigation indicates that by adding of 0.5% of polypropylene fiber shows maximum compressive and tensile strength.*
Keyword: *Polypropylene Fibers, Compressive, tensile strength, Flexural strength*

I. INTRODUCTION

Concrete is one of the most important materials among the building materials in all types of civil engineering works. Since the adaptation of concrete as a building material, lot of researches and studies has been made to improve the quality, strength and durability of it. By the same time efforts are also being made to economize concrete construction compared to other materials. Plain concrete is good in compression but weak in tensile strength with very limited ductility and little resistance to cracking. Internal micro cracks are inherently present in concrete and its poor tensile strength is due to propagation of such micro cracks, eventually leading to brittle fracture of concrete. Generally in case of rigid pavements cracks are formed due to the variation in temperature, shrinkage and heavy moving loads.

II. LITERATURE REVIEW

1) B. Vijaya and Dr.S.Elavenil et al.

State that The mix withmanufacturing sand as 100% fine aggregate gives initial workability of 170mm, which is much higher than that of the mixes with 100% river sand(RS) and crusher dust. The standard mix with 100% manufactured sand has exhibited much higher compressive strength 53 MPa. The standard mix with 100% of river sand has exhibited compressive strength of 49MPa, 7.5% lower than that of manufactured sand. Research findings concluded that, compared to concrete made from river sand, high fines concrete generally had higher flexural strength, improved abrasion resistance, and higher unit weight & lower permeability due to fillings the pores with micro fines.

2) Rajendra P. Mogre , Dr. Dhananjay K. Parbat et al.

We concludes that, the replacement of natural sand with artificial sand is fissile and behaviour and strength of reinforced concrete will improved. Also the use of polypropylene fibre will enhance strength and behaviour of reinforced concrete also improves resistance against impact loading and fire. Polypropylene fibers have a positive impact on ultimate strength of heated beams. For a heating duration of 4.5hours, the residual ultimate strength is larger than the corresponding strength of beams without polypropylene fibers by more than 60 %. No sudden failures are observed inall beams containing polypropylene fibers.

3) Roohollah Bagherzadeh, , Hamid Reza Pakravan, AbdolHossein Sadeghi, Masoud Latifi, Ali Akbar Merati et al

The influence of polypropylene fibers has been studied in different proportioning and fiber length to improve the performance characteristics of the lightweight cement composites. Fibers used in two different lengths (6mm and 12mm) and fiber proportions (0.15% and 0.35%) by cement weight in the mixture design. Compared to unreinforced LWC, polypropylene (PP) reinforced Lightweight Cement Composites (LWC) with fiber proportioning 0.35% and 12 mm fiber length, caused 30.1% increase in the flexural strength and 27% increase in the splitting tensile strength. Increased fiber availability in the LWC matrix, in addition to the ability of longer PP fibers to bridge on the micro cracks, is suggested as the reasons for the enhancement in mechanical properties.

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Comparative Study About AAC Block with Porotherm Brick

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Abstract: *Autoclaved Aerated Concrete (AAC) blocks are recently one of the newly adopted building materials. AAC is a product of fly ash which is mixed with lime, cement, and water and an aerating agent. The AAC is mainly produced as cuboid blocks and prefabricated panels. AAC is a type of concrete that is manufactured to contain lots of closed air voids. AAC blocks are energy efficient, durable, less dense, and lightweight. It is manufactured by adding a foaming additive to concrete in different sizes of molds as per requirement, then wire-cutting these blocks or panels from the resulting 'cake lump' and 'heating them with steam. This process is called as Autoclaving. Porotherm clay bricks are horizontally or vertically perforated clay bricks. they are manufactured in variety of sizes (common size is 400x200x200 mm) from natural clay, coal ash, rice husk, and granite slurry. The term Porotherm is used for this type of brick due to its desired thermal insulation characteristics. The perforation of the clay brick provides an exception walling system which facilitates thermal insulation resulting in cooler interiors in hot seasons and warm interior conditions in cold seasons. The Porotherm clay bricks are easy to use, economical, environmentally friendly, and it can be used for the construction of both non-load bearing walls and load bearing walls. The Porotherm bricks are low weight, durable, strong, and possess a satisfactory fire resistance. It can be used with dry mortar which eliminate the need for curing time. Various researchers throughout the world carried out numerous works to investigate and study the behaviour of AAC block and Porotherm brick. Those works were discussed in the review of literature. Different test were conducted in both blocks and its strength are noted. In this project, AAC block made of quartz sand (SiO_2 with impurities), calcined calcium sulfate (or plaster of paris), lime (CaO), cement, water and aluminum powder. In this regular practices, cement (26%), fly ash (25%), lime (38%), gypsum (2%), Aluminium powder (9%). In this project cement reduced to 20% , and fly ash increased to 30%. Various strength test can be performed and it can be compared with AAC block and Porotherm brick.*

I. INTRODUCTION

A. General

In this project, the works are made to comparative study about AAC block with Porotherm brick and yeast combined block are discussed. Based on the literature study, the methodology and future work process of the project will be discussed

B. Introduction

Construction industry which is rather growing at rapid phase due to the rapid advancing economy and rising standards of living and to meet the requirements of people. This rapid increase leads to increase in use of natural resources which are depleting alarmingly without the source to replenish it. Due to that reason we are forced to exploit other resources that are left behind during development of a society as waste. The concept of Reduce Recycle Reuse has now garnered tremendous attention by the people of present decade. So large technology arise to materials used in the construction purpose. AAC blocks are produced for its light weight and it indirectly reduce the usage of conventional materials. Porotherm is available in two main categories: Non-load Bearing (Infill/partition walls) and Load-bearing (G+1 construction without RCC). The non-load bearing hollow blocks include Porotherm HP (Horizontally Perforated), Porotherm HP G (Grinded) and Porotherm Thermo brick; whereas the load-bearing brick includes the brand Porotherm VP (Vertically Perforated). All blocks come in 3 sizes (4",6" and 8") along with half bricks. As a value add Wienerberger also provides END Bricks for wall endings & junctions, door & window jambs as well as 'T' & 'L' junctions.

II. LITERATURE REVIEW

A. Mohammad Arif Kamal , J. Build. Mater. Struct. (2020)

The traditional bricks are the main building materials that are used extensively in the construction and building industry. Autoclaved Aerated Concrete bricks are recently one of the newly adopted building materials.

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A Review: The Effect and Behaviour of Concrete Using Lime Stone Powder

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Abstract: ***Concrete is a major worldwide building material, in which Portland cement is the usual binder. Taking into account environmental factors in cement production, especially concerning CO2 emissions and energy consumption, this works aims at the development of concrete with lime powder. M30 grade of concrete is taken for investigation. The cement is replaced by lime of 5%, 10% and 15%.The concrete mix design will be done as per IS10262-2009. The properties are yet to be study including the workability and characteristics of fresh concrete such as slump, compaction factor and strength properties of hardened concrete including Compression strength, Split tensile strength and Flexural strength for various percentage replacement of cement by lime stone powder.***

Keyword: Lime Stone Powder, Calcite Polymorph, Carbonisation.

I. INTRODUCTION

In ancient days lime was used as a binding material for construction in all over the world. Concrete is a composite material composed of fine aggregate and coarse aggregate bonded together with a fluid cement that hardens over times. The word concrete comes from the Latin word "Concretus" (meaning compact or condensed). Concrete is one of the widely used construction material all over the world and it is behind only water as the planet most consumed resource.

Also concrete structures has became a huge concern on this 21st century due to its wide spread use and emission of huge amount of CO2 gas everyday and causes Global Warming. To minimize the green house effect let us see about the ancient limecrete as a replacement of conventional concrete. It plays a vital role in the field of construction industries. Hence it emits a huge amount of Carbondioxide every year. This emission of CO2 gas is the major reason for the increase in green house effect. To minimize this effects many scientists spent numerous years in this research.

Lime concrete, produced by this mix, makes a good base for load bearing walls, columns, or laying under floors because it has a degree of flexibility that regular concrete does not. It also has a certain waterproof property to it that prevent subsoil dampness in floors and walls. Additionally, limecrete can be made easily and cheaply while still providing a durable material that resists weathering and wear and tear.

Keyword: Concretus, Limecrete, Global Warming, Weathering.

II. LITERATURE REVIEW

Bonavetti,V etal This paper describes the effect of duration of initial curing on the mechanical properties (compressive strength, tensile strength, and modulus of elasticity) and the chloride penetration of concretes containing limestone blended cements. Three concrete mixtures (water/cementitious=0.5) containing a portland and two limestone blended cements were subjected to three different initial curing regimens (full, wet, and air curing).

Results show that mechanical properties of concrete containing limestone blended cement are less affected by the cessation of moist curing at early ages. This is attributed to the hydration acceleration owing to limestone presence and the increase of fineness in the clinker fraction of the blended cement. A prolonged initial moist curing reduces this advantage of limestone blended cements and the dilution effect produced by limestone addition impairs the potential mechanical properties. For concretes cured for an initial 7 days, there was no substantial difference in mechanical properties and chloride penetration resistance of cements with and without limestone filler.

M.Heikal etal. Fillers are specially selected, natural or artificial inorganic materials, which improve the physico-chemical and mechanical properties of the cement such as workability or water retention. They can be inert or have slightly hydraulic, latent hydraulic or pozzolanic properties. They cause no appreciable increase of the water demand of the cement, in addition to not impairing the resistance of the concrete or mortar to deterioration in any way or reducing the corrosion protection of reinforcement.

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Study on the Strength of Glass Fiber Reinforcement Concrete with Fragmentary Replacement of Cement with Fly Ash

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Abstract: *Concrete is one of the most widely used construction material in today's world. Cement being one of the essential constituent of the concrete. Environmental issues are also playing a vital role in today's world, the production of cement one of the major constituent of concrete leads to release the of significant amount of carbon dioxide a greenhouse gas contributing 7% of greenhouse gas emission to the earth atmosphere, beside deforestation and burning of fossil fuels. Safe disposal of glass waste generated in day to day life due to limited life span and after use it is either stock piled or sent to land fill is also a challenging task. There is now a significant world-wide interest to solve the environmental problem caused by industrial waste and other material by including such material in the manufacture of concrete. Effort have been made in concrete industry to use waste glass in concrete production not only provide significant environmental benefits but also enhances performances of concrete when used at optimum amounts. Efforts have been made in the concrete industry to use fly ash & waste glass as partial replacement of cement, fine & coarse aggregates. Recently the research has shown that the waste glass can be effectively used in concrete as several alternatives for the constituent of concrete under proper fraction and grade. Waste glass when ground to a very fine powder show pozzolanic properties as it contains high SiO2 and therefore to some extent can replaced cement in concrete and contributes strength development. In this study, glass fibers in different volume fraction with 20%, 30% and 40% replacement of cement by fly ash has been to study the effect on compressive strength, split tensile strength, of concrete and compared it to the conventional concrete. The overall test result shows glass fiber could be utilized in concrete. The result indicates that the maximum strength of concrete occurs at around 20% glass powder. Beyond 20% glass fiber the strength of concrete reduces and is lower than that of the control.*

Keywords: *Glass fiber, Concrete, Fly ash, Compressive Strength, Tensile Strength.*

I. NTRODUCTION

A. General

Cementious materials in the form of mortars or concretes are used as construction material since they are cheap, durable and have adequate compressive strength and stiffness for structural use. Due to its very low tensile strength and low ductility it cannot be used directly for structures. Concrete is probably the most widely used man made construction material in the world. Also any type and shape of the component of the structural member can be fabricated when the concrete is green either in factory or at the place of casting. Fibers prevent micro cracks from widening. Addition of fibers makes components ductile and tough. Conventional concrete cracks easily. When concrete is reinforced with random dispersed fibers, we get favorable behavior for repeated loads. Advanced cement based materials and improved concrete construction techniques provide opportunities for the design of structures to resist severe load resulting from earthquakes, impact, fatigue, and blast environments. In case of structure of odd shapes it is very difficult to ascertain the proper placement of reinforcements however, this problem does not arise in case of fiber reinforced concrete and also the progress of work can be achieved at much faster rate.

FRC is very ductile and particularly well suited for structures which required to exhibit:

1) Shrinkage control of concrete:
2) High thermal resistance
3) Resistance to impact, blast and shock loads and high fatigue
4) Resistance to seismic hazards
5) The degree of improvement
6) Very high flexural, shear and tensile strength.

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A TECHNICAL SURVEY ON IDENTIFICATION AND DIAGNOSIS OF DISEASES USING DEEP LEARNING

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ABSTRACT

This article provides a comprehensive review of recent developments in deep learning, including both its theoretical underpinnings and its innovative practical applications. This article provides a historical overview of the significant uses of deep learning algorithms. Comparing the deep learning approach with more traditional algorithms, this article highlights the method's advantages and benefits. This includes the deep learning approach's layer-based hierarchy and nonlinear operations. The state-of-the-art review also gives a high-level explanation of deep learning's advantages and growth in popularity. With deep learning, meaningful hierarchical linkages within the data can be discovered algorithmically without the need for painstaking hand-crafting of features, which is especially useful in the era of medical big data. We discuss the state-of-the-art in medical picture segmentation, localization, detection, and registration, as well as its most important applications.

KEYWORDS: Artificial intelligence, Convolutional neural network (CNN), Deep learning,

1.INTRODUCTION

1.1 The Evolution of Deep Learning

It may come as a surprise to learn that Deep Learning has actually been there since the 1940s, when it was first introduced, yet most of us associate it with the 21st century. Most of us don't know about the Deep Learning research and development that took place in the 20th century because the methods employed at the time were not widely adopted due to their many flaws and because the field has been renamed several times since then. To do groundbreaking original research in any discipline, one must first be familiar with the background, development, and seminal contributions that have contributed to the field's current prominence.

1.2 Deep Learning

The third wave appeared in 2006, breaking through the previous two slumps. In order to educate Deep Belief Networks, Geoffrey Hinton adopted the strategy of Greedy Layer-wise Training. The simplest version of a DBN is a collection of hidden layers, each of which may contain a different set of latent variables. Layers are connected, but the variables within each layer are not. DBN is often referred to as constrained Boltzmann machines when referring to their simplest implementation. In the fields of learning models represent a novel learning paradigm.

1.2.1 Applications of Deep Learning

Abstract layer analysis and hierarchical approaches are prerequisites for deep learning. It has a wide variety of practical uses, though. To simplify, deep learning can be thought of as a technique for enhancing the quality of outcomes and minimising the time spent on various computations. Pure digital image processing, healthcare, and biometrics are the following fields of use.

1.2.2 Deep Learning Methods

Classic Neural Networks

Multilayer perceptrons, in which neurons are connected to the continuous layer, are a defining feature of the Classical Neural Network, also known as Fully Connected Neural Networks. In 1958, American psychologist Fran Rosenblatt created it. A key part of this process is translating the model into basic binary data. The three components of this model are:

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VIABLE DETECTION OF FRACTURES IN SUPERFICIAL BONES USING HIGH GAIN VIVALDI ANTENNA

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ABSTRACT:

In medical application, antenna play a vital role in data transmission .Bone fracture occurs when a force exerted against a bone is stronger than the bone can bear. This disturbs the structure and strength of the bone, and leads to pain, loss of function and sometimes bleeding and injury around the site.Vivaldi antenna is used for the implementation of detecting the fracture in superficial bones. The proposed antenna is designed using Roger as substrate in the frequency range 8.30 to 9.45 GHz with high gain and efficiency. This antennais selected as it a ultra wideband simple feedback structure and easy fabrication . Here Roger is used as substrate because it has low dielectric constant and dielectric loss making them suitable for high frequency applications. Results show that the system can detect and locate bone transverse fractures as small as 1 mm width and 13 mm deep, even when the bone is wrapped by 2 mm thick skin.

Keywords:
Bones Fracture, dielectric materials, vivaldi antenna.

INTRODUCTION:

The detection and monitoring of fractures in bones can be performed by using several medical imaging techniques, such as X-rays scan, Computed Tomographic (CT) scan and Magnetic Resonance Imaging (MRI) scan. In general, the X-ray is the first screening test performed when the patient arrives at the hospital. Due to the high cost, CT and MRI are indicated only in cases where X-rays do not provide the necessary detail [1]. MRI provides better contrast between cortical bone, bone marrow, muscle, and soft tissues in the body, yetit is the most expensive and slower technique [2]. X-rays and CT scan are ionizing, therefore potentially pose some degree of health risk. The risk of falling and suffering fractures is very common in children and elderly people.

Compact antennas are a component of wearable devices. Antennas are created with consideration for bandwidth needs, performance, polarization effects, design, and application.
They can be created in a wide variety of geometrical sizes and shapes.

A Vivaldi antenna or Vivaldi aerial or tapered slot antenna is a co-planar broadband- antenna, which can be made from a solid piece of sheet metal, a printed circuit board, or froma dielectric plate metalized on one or both sides.

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TEXT EXTRACTION FROM IDENTITY DOCUMENTS USING OPTICAL CHARACTER RECOGNITION

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Abstract : Nowadays, automated data extraction can provide a huge increase in efficiency and accuracy in all kinds of commercial enterprise processes. Feeding business enterprise facts structures with information coming from files frequently calls for guide records access, which may be a tedious and mistake-prone procedure. Consequently, automating information access can store a variety of times and tempos. The execution of business organization procedures allows employees to focus on core and more treasured aspects of their each day's sports activities. Such files are frequently digitized as photos before being converted to textual content format. This work addresses the text popularity mission for identity documents. The text recognition approach we found in this work is based mostly on transfer learning and scene text popularity (STR) networks. In this assignment, we explored a way to extract text from a single or more than one snapshot.

Index Terms - **Introduction, Literature survey, software, Modules, Algorithm, Experimental results**

I. INTRODUCTION

Optical character recognition (OCR) is the process which permits a system to become aware of, without human intervention, the scripts or alphabets written into the customers verbal conversation. Optical man or woman recognition has grown to be one of the most flourishing applications of knowledge in the fields of sample detection and synthetic intelligence. In our survey, we studied the diverse OCR techniques. In this paper, we solve and observe the hypothetical and numerical fashions of an optical man or woman's identification. Optical individual identification or category (OCR) and magnetic individual reputation (MCR) techniques are normally utilized for the recognition of patterns or alphabets. In the standard, the alphabets are in an expansion of pixel pix, and they can be both handwritten or stamped, in any series, shape and many others. Instead, in OCR, the alphabets are stamped with magnetic ink, and the studying gadget categorizes the alphabets on the premise of the unique magnetic discipline fashioned by every alphabet. Both OCR and Optimized OCR find usage in banking and unique exchange appliances. Earlier research on optical person detection or reputation has shown that in handwritten textual content, the script approach has no barriers. Handwritten correspondence is complicated to be familiar with due to the numerous human handwriting styles and the disparity in perspective, size, and form of calligraphy. A collection of tactics for optical man or woman identification are mentioned here all the way through their achievement.Optical man or woman's reputation is one of the most enthralling and traumatic areas of pattern reputation, with a diffusion of realistic applications. The instances departed from permit us to distinguish that OCR understanding has been constructed by means of lots of researchers over a long period of time, consisting unreservedly of an excellent global human research network. In such an imperceptible dialogue, human beings have made efforts, with "antagonism and collaboration," to increase the research effort. In this manner, worldwide symposiums and inductions are being planned to stimulate improvement in the area. As an example, the worldwide induction on Frontiers in Handwriting Detection and the global dialogue on article psychoanalysis and popularity determination play an explanation task in the intellectual and rely-of-fact area.

II. LITERATURE SURVEY

TITLE : An Automatic Reader of Identity Documents

AUTHORS : Filippo Attivissimo, Member, IEEE, Nicola Giaquinto, Member, IEEE, Marco Scarpetta, Student Member, IEEE and Maurizio Spadavecchia Member, IEEE

Documents Identity automatically analyze and confirm is an attractive creation for these days in company industry, thinking about the truth that this venture stays with the aid of using and massive completed manually, essential to misuse monetary and time. In this it is patterned of a individual automatic analyzing machine of documents identity is hand out. The machine has been belief to pull out details of the number one Italian documents identity from pix of applicable quality, just like the ones commonly need to virtual subscribers of numerous services. The record is initially restricted withinside the snaps, and then categorized; eventually, text recognition is executed. The synthetic dataset was used for both neural network training and regular overall machine performance evaluation. Synthetic datasets avoid the privacy concerns associated with using real snapshots of real documents, instead allowing them to be used for future machine development. In a common scenario, Internet subscription agreements (cell phone services, banks, etc.) require characters to be sent via scanned ID records. His one scenario for contract validity is that the data in the record is the same as the data provided in the subscriber's usage resource in the subscription form, and the record does

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AN IoT ENABLED SMART SPEED CONTROL SYSTEM FOR VEHICLES

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Abstract : Road accidents are the most common horrific tragedies in society. An increase in speed may also increase the likelihood of accidents resulting in injuries and the possibility of property damage. Controlling the car's speed has thus been a major issue to take into account. By using IoT-based technologies, we hope to provide a simple design that can control the motor' speed and be installed in areas like schools, hospitals, and sharp turns to prevent injuries from occurring. The Arduino Uno R3 board, which is a microcontroller-based platform, is used to build this automatic speed control system. Here, the microcontroller is set in a way that the speed limit is integrated with the transmitter unit, which uses an antenna to transmit the alerts, and is acquired through the receiver integrated into the car. The notifications are sent and received using a radio frequency (RF) module in addition to a microcontroller. There are various RF module types, including RF transmitters and receivers. An RF transmitter is placed adjacent to the restricted areas, and an RF receiver is placed inside the car. The microcontroller is then used to compare and control the speed of the car. Additionally, we will transmit the changing voice notice from this location via the single voice board, and GSM is used to provide voice and data services. The Vehicle Registered range and the information about the car will be shown inside the LCD Display for improvement.

Keywords: *Arduino Uno R3, RF Transmitter, RF Receiver, Motor , GSM Module.*

I. INTRODUCTION

The Indian Law Commission has an advisory to restrict the rate at crucial zones, to lessen the street injuries and to make a non violent surroundings for the human beings. The existing methodologies can't capable of lessen the injuries nevertheless now, Because of the rash riding of a few drivers. Hence pace manage is in want to be applied in all of the vehicles. Here is the brand new concept of ours to put in an automatic pace manage gadget withinside the cars specifically withinside the limited areas. Here setup tool as a transmitter in which the a couple of gadgets are blended to reveal the rate of the car while the car enters above the prescribed pace and controls it via way of means of setting a receiver on the cars, primarily based totally at the indicators transmitted the pace of the car get decreased via way of means of interfacing a microcontroller. The modern pace of the car is sensed via way of means of the dc motor and the output of it became given to the microcontroller in which it compares the rate with the prescribed restrict and the rate is managed routinely. The generation used on this gadget to talk between transmitter and receiver , which covers up to 10-100m inside its range. This is relatively cheaper than others. Therefore this gadget controls and video display units the universal cars in its included area. By enforcing this gadget the injuries are decreased on this fast-shifting world. In the advanced and growing countries, human beings finds inconvenience with the street injuries, jamming of cars due to the drivers who dislike to obey the legal guidelines on the limited region, in which the rate must be restrained as prescribed in that region via way of means of the use of an automatic pace manage gadget to restrict the rate routinely the use of IoT Technology.

II. LITERATURE REVIEW

Vehicle speed control in accident prone zone "Ganesh Babu R.,Manirathnam K., Shyam Sundar S.,Siva R.V. and Yougesh R." Time is the essence of our lives today, so it is human tendency for everyone to try to complete a task in less time.For example, a vehicle needs to accelerate. Also, drivers in certain areas may not follow the rules and regulations of traffic control authorities. This occurs because control of vehicle speed is in the hands of the driver and excessive vehicle speed exists. Vehicle overspeeding is a big problem as the number of accidents is much higher. In order to solve these problems, we improved the existing system a little and proposed vehicle speed control by image processing. When a no-go zone is detected, the vehicle speed is gradually reduced. For this purpose, a small camera of the street scene is recorded on video, and the CNN algorithm in the system is used to detect and identify traffic signs/speed limits/school zones/hospital zones, slow down the vehicle, Buzz to warn the driver. LCD advertising.

Automatic speed control system for vehicles using color and hall sensors."Rashmi R K1, Poonam Avinash Gulwane2 , Rahul Kudgi3 , Anaan Shaikh4, Vaishnavi Laxmanrao Gadewar 5."A cruise control system is one of the most important necessities in today's world. According to the World Health Organization, an estimated 1.25 million people died in road traffic accidents worldwide in 2010. So every 25 seconds he dies one person. This is due to lack of speed control and violation of traffic rules. This loss can be prevented by improved measures related to traffic regulation, vehicle safety and careless driving. Existing technology is not efficient, so improved systems are needed to control vehicle speed. We propose an advanced vehicle speed control system using color sensors and hall sensors. This methodology explains that certain roads should be painted in certain colors. B. Red, Green, or Blue. Also, each color is assigned a specific speed. Color sensors are mounted on the underside of the vehicle and Hall effect

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TITLE: SMART WATER CONTROL AND MONITORING SYSTEM WITH IOT ENABLED

AUTHORS: DR.D.ARULANANTHAM[1], RAGURAM S V[2], SRIDHAR S[3], MADAVAN K[4], BHAVANVIDHYATHI T[5]

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Date: 27-NOVEMBER-2022: Google Meet: meet.google.com/amq-xvmh-xed

TITLE: PLC BASED MULTI CHANNEL TEMPERATURE MONITORING & CONTROLLING SYSTEM

AUTHORS: PRAVEEN SANTHOSHKUMAR G[1], DINESH P[2], GUNASEKARAN P[3], KAVINPRASATH T S[4], KAVINKUMAR S[5]

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Date:27-NOVEMBER-2022::Google Meet: meet.google.com/amq-xvmh-xed

TITLE: IOT TECHNOLOGY BASED NEW GENERATION SECURED ATM USING BIOMETRIC AND OTP

AUTHORS: D. ANANDKUMAR[1], KIRUBANITHI S[2], BALAMURUGAN K[3], BUVANESH S[4], DHARANESH AE[5]

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Design and Fabrication of Fire Extinguishing Drone Using CO_2 Ball and Sprayer

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Abstract: *Now, fighting a fire in rugged mountain terrains or high building windows fire is difficult and dangerous for firefighters. High buildings containing floors at height, and reaching the position for deployment of external firefighting equipment and rescue operations may not be easy it takes some time, and fire will spread easily during that period. Meanwhile reaching farms located in rugged mountains, and terrains with firefighting vehicles are often impossible because of rugged road conditions and traffic. From this perspective view, to meet the need for a fast way to extinguish the fire in an area to be approached by using drone technology and to give safety for the public and firefighters. The fire extinguishing technique is detailed in this paper. The system is structured with six frames. Hexacopter (with release mechanism), Fire extinguishing ball, collision avoidance system. Hexacopter will carry a specific payload and be capable of throwing an extinguishing in an area that is chosen by the operator. This system has been implemented, constructed, and tested in a practical session. The results demonstrate the feasibility of drones in extinguishing fire in its initial stages, dropping a CO2 ball, and can fly back to firefighters for the next round.*

Keywords: *Drone 1, Hexacopter 2, Co2 ball 3, Fire extinguisher 4, Sprayer 5.*

I. INTRODUCTION

Drones are very useful for firefighters in their field. It is used by firefighters to identify the spot where the fire was caught and is also useful for searching the safer building after the fire was extinguished. The effectiveness of drones is rapidly catching on, as agencies around the world begin to adopt this technology .to protect and save lives and properties, and extinguishing fires are the main goals of firefighters .until recently trucks, ladders, and hoses such low or insufficient technologies are in use at many of places .but now firefighting drones are replacing this old tech Machines as compared to the earlier methods. Drones are more help full to overcoming fire .due to urbanization, traffic, taller buildings, and new dangerous substances being used in construction, firefighters are looking at drone technologies to help them in achieving their goals.

II. LITERATURE SURVEY

Ali Magdi Sayed Soliman Suleyman Cinar Cagan, et.all... [1]. This study aims to encourage the idea of utilizing unmanned aerial vehicles in the fire- fighting applications. The main advantage of UAVs is their ability to work in rugged places and dangerous environments like fixed-wing vehicles, rotary-wing vehicles typically have the feature of flying slowly or hovering, taking off or landing vertically. For doing the task of dropping fire- extinguishing balls, rotary-wing UAVs are the proper vehicles to be used. Abdel Ilah N. Alshbatat Raj [2] The system is structured with five units: Hexacopter unmanned aerial vehicle (UAV), landmine detector, hands-free flight controller, emergency flight controller, and the main onboard flight controller. The drone is equipped with a landmine detector, an emergency flight controller, and the main onboard flight controller. Abdel ilahalshbatat, et, all.[3] The system was implemented and tested using an Arduino Nano board. The board was programmed and checked with the original circuitry kit. Experimental results have shown that the proposed control strategy provides an efficient collision avoidance scheme for an unknown environment. Agoston Rastas [4] This paper focuses mainly on operational and tactical drone applications in disaster management. A drone can be used for fire detection, intervention monitoring, and also for post-fire monitoring for special rescue teams, the drone application can help much in a rapid location selection, where enough place remained to survive for victims during an earthquake. Anibal Ollerton., Luis Merino, [5] Summarizes different control techniques including both control architectures and control methods. Computer vision for aerial robotics is briefly considered. Bas Vergouw, Huub Nagel, Geert Bondt and Bart Custers [6]. The different types of drones can be differentiated in terms of the type (fixed wing multirotor, etc.), the degree of autonomy, the size and weight, and the power source. These specifications are important, for example for the drone's cruising range, the maximum flight duration, and the loading capacity.

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Design And Analysis Of Helical Spring In Two-Wheeler Shock Absorber By Changing Its Geometric Parameters And Material

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Abstract- *Transportation is one of the crucial things that the growth of mankind depends on. We use many modes of transportation systems. But the roads are mostly dominated by two-wheelers. Suspension systems play a major role while riding the two-wheeler. It's designed to smooth out or damp shock impulse and road bumps. It gives a smooth and comfortable ride. The defects and malfunctions of the shock absorber led to riding discomfort and loss of control. Our country's terrain, road conditions, and climate change test the shock absorber to its extreme. That is why we proposed our project.This Design and analysis process is to compare various materials and geometric parameters under different load cases with existing material and design to get an optimized design and Material for the spring. Change in geometric parameters like spring index, wire diameter, and the number of turns to get better results. The designing is to be done in Solid works and Analysis is to be done in Ansys workbench is used for accurate results and output.*

Keywords- Helical spring, Shock absorber, Two-wheeler,Solid works, Ansys

I. INTRODUCTION

The act of sporting people, merchandise, and animals from one area to another is known as transportation. Motors, buses, trucks, spacecraft, helicopters, ships, airplanes, and other automobiles have been invented to replace in advance ways of transportation as time handed. Transportation is an unavoidable part of lifestyles, and without it, any kind of mobility from one factor to some other will become not possible. Scooters and other non-geared two-wheelers are lightweight cars that can move fast on nicely-maintained roads beneath great driving situations. A vehicle of this length and space is generally thought to be 1/2 the dimensions and space of a compact car. Saves time inquisitors - using a -wheeler in congested locations reduces travel time notably.

The suspension of a bike contributes to the car's managing and braking, as well as offering protection and luxury by setting apart the car's passengers from street noise, bumps, and vibrations. While surprise absorbers are meant to dampen spring oscillations, additionally they serve to control immoderate suspension movement. Helical compression springs are usually utilized in mild cars and locomotives around the sector for suspension. Motorbike shock absorbers are pressured under fuel strain, the fluid is injected, and the fluid and gasoline stress are saved aside with the usage of a piston. This aspect is either immediately constant to the top of the shock absorber or held in a separate reservoir.

This pressurization prevents the fluid from cavitating, that's beneficial for greater balanced surprise absorption. A shock absorber additionally called a damper, is a mechanical or hydraulic device that absorbs and dampens surprise waves. That is performed by way of converting the shock's kinetic power into any other sort of power, which is in the end dispersed. Dashpots are the most commonplace form of surprise absorber. Shock absorbers in a vehicle lower the effect of going over choppy terrain, resulting in progressed ride pleasant and vehicle management. Whilst surprise absorbers are meant to hose down spring oscillations, they also serve to manipulate excessive suspension movement.

Shock absorbers take in extra power from the springs via using oil and gasoline valves. Shocks are every so often used to trade spring charges, but this is not the proper approach. Wheel leap damping might also necessitate best-tuning shocks to provide the greatest resistance. Coil springs or leaf springs are widely hired in spring-based surprise absorbers, at the same time as torsion bars also are utilized in torsional shocks. Perfect springs, then again, don't surprise absorbers because they simply store electricity and do now not discharge or absorb it.

Hydraulic shock absorbers, as well as springs or torsion bars, are regularly used in cars. The hydraulic piston that absorbs and dissipates vibration is explicitly referred to as a "shock absorber".

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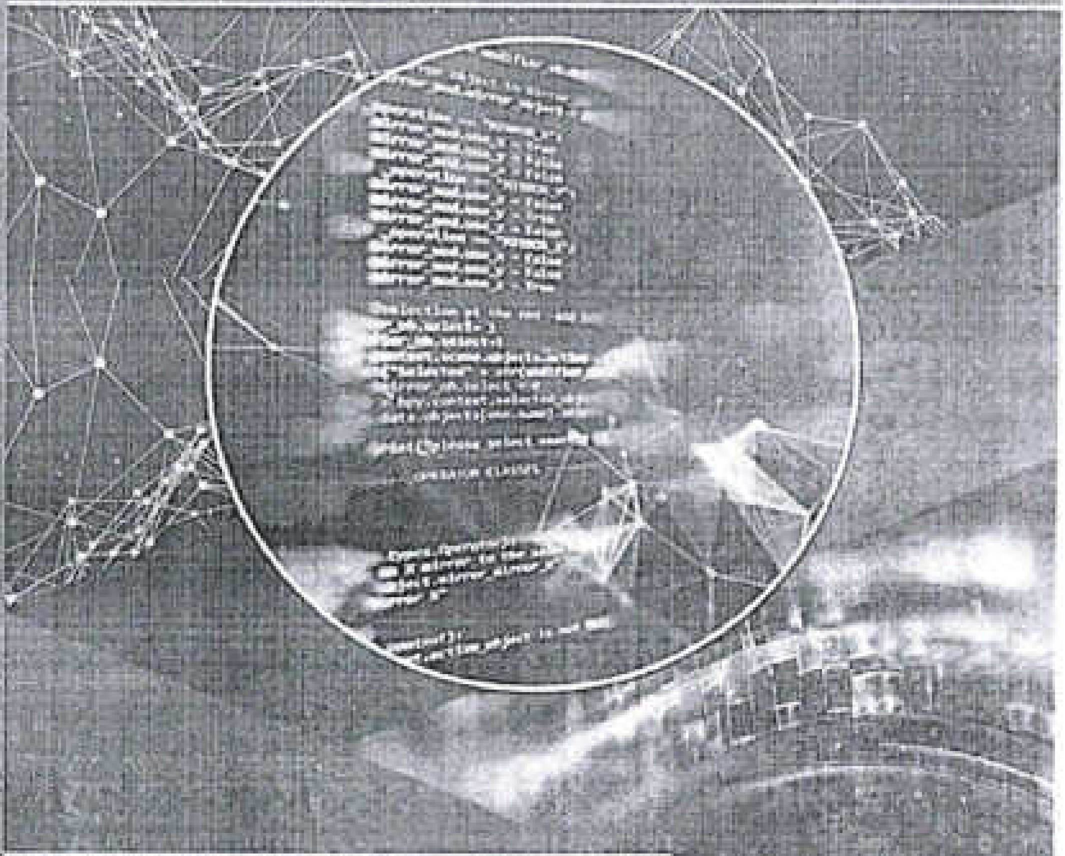

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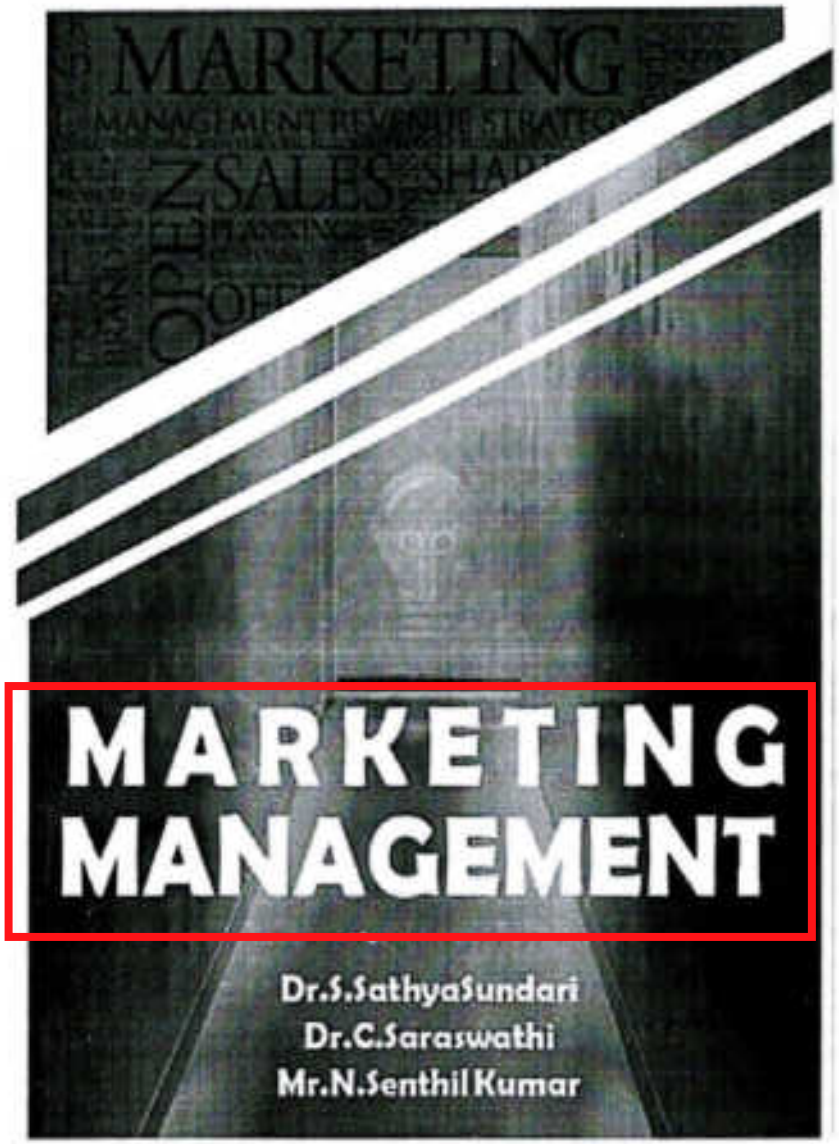

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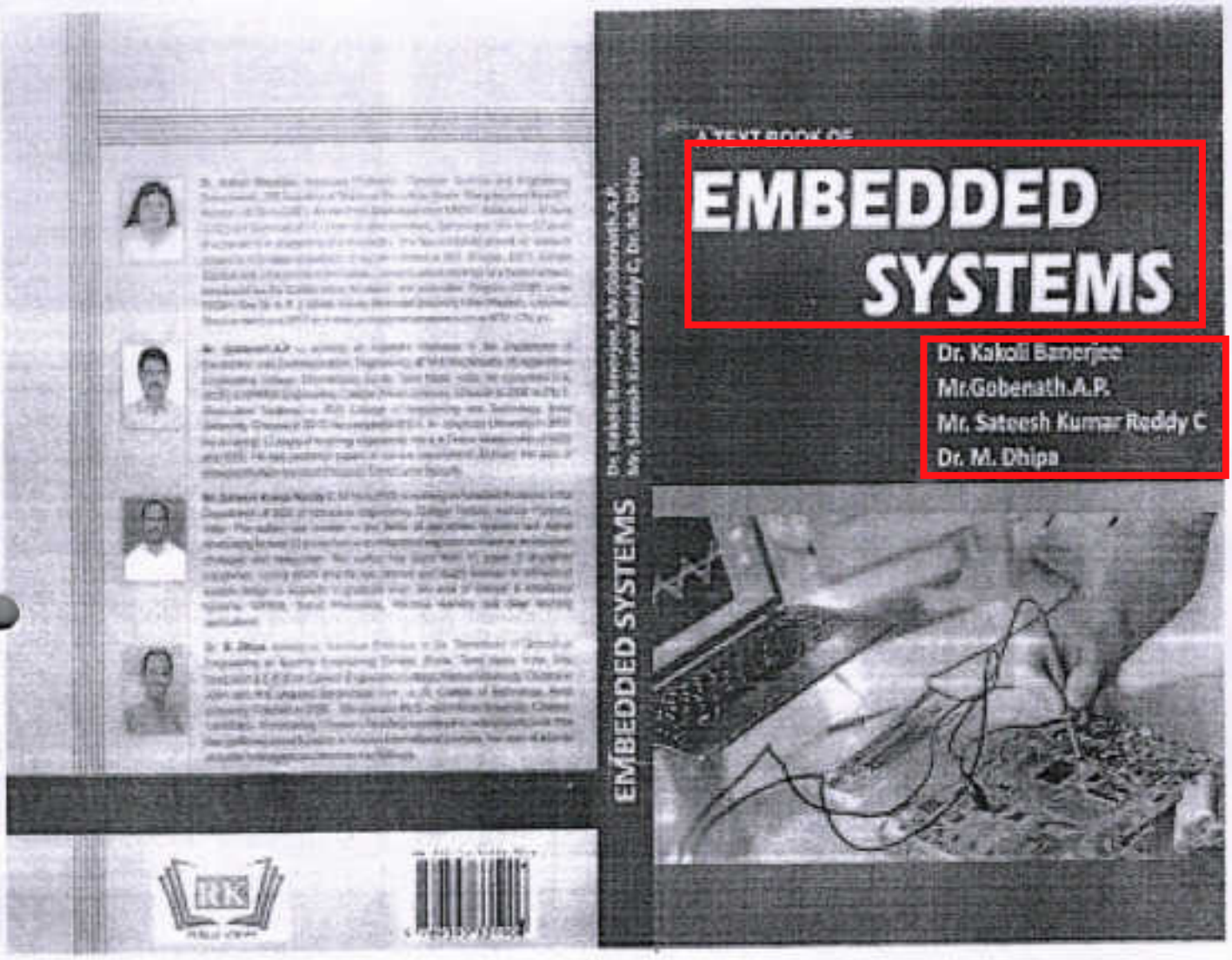

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