

IoT Based Automatic Vehicle Accident Detection And Rescue System

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Abstract- The objective of this paper is to identify the accident near to the traffic area. In this paper two sections have been developed for the vehicle safety and automation system. The paper is to monitor the accidents which occur on the highways using IOT. The purpose is to report the monitoring section whenever accident occurs on the highways and providing fastest helpline. Accidents which occur on the highways can be monitored using microcontroller, accident identifier circuit and IOT. The accident information along with location will be sent to the user and the ambulance service when accident occurs. Paper also monitors and provides the safety guidelines to passenger at the vehicle. The information of occurrence of the accident will be transmitted to the user and the police patrol room with the exact location of the vehicle. Paper enhances with the panic switch for the passenger at vehicle which makes the safest journey for all users. This type of system has a variety of applications and can be used for other purposes such as guiding completely autonomous vehicles.

Keywords- Microcontroller Atmega328, accelerometer, Gps, Radio frequency, Fire sensor, Tilt sensor

I. INTRODUCTION

Driving is very sensitive task which needs to be done one and More than 70% of the people in India use public transport for travel out of which mostly used in travel vehicle it is through buses. Past years survey shows that bus accidents contribute more in total accidents happened on road. Some of major reasons for these accidents are inadequate road infrastructure compared to traffic density, rash driving and unsafe overtaking. Several attempts have been made by public transport system authority and also by road transport department of state government to educate and aware drivers to drive vehicles safe but that did not helped much to prevent the accidents happening every year. There are some systems already available to control speed of bus like-speed governor but that increases the travelling time and in some cases drivers overload the engines to gain speed which cause reduction in uptime and performance of the vehicle. Some solutions have been designed which detects rash driving and gives intimation

using some or other kind of wireless media but most of them failed due to reliability issues and most of them are just indicative systems and not preventive. There is need of self control system which detects overtaking intention of driver, guide driver for safe overtaking condition and based on drivers response takes necessary action.

II. RELATED WORK

The intense interest of vehicles has additionally expanded the traffic perils and the street mishaps. The general population life is under high hazard. If there should arise an occurrence of mishap, long reaction time to go to the unfortunate casualty may prompts increment number of death. As indicated by the overview in 2017, around the aggregate of 2,076 individuals kicked the bucket in street mishaps. The interest of the vehicles has expanded the street mishaps. Because of the absence of crisis offices in our nation, we are presenting the programmed ready gadget for vehicle mishaps. A programmed alert gadget for vehicle mishaps is presented in here. The proposed structure is a framework which can identify mishaps in essentially less time and sends the fundamental data to medical aid focus inside a couple of moments covering topographical directions, the time and point in which a vehicle mishap had happened. This alarm message is sent to the save group in a brief span, which will help in sparing the profitable lives. Switch is likewise given so as to end the sending of a message in uncommon situation where there is no loss, this can spare the valuable time of the medicinal safeguard group. The proposed framework distinguishes the mishap and sends the data in less time to close by medical aid focus. The street mishap in many creating nations is described by human fueled vehicle without embracing traffic isolation assets. This made extraordinary concern designers and organizers. The street mishaps are anticipated to cause the main demise except if move is made. 'Mishaps are caused not characteristic', so surmised measures are produced. The uncontrolled occasion of an individual outcomes in close to home damage The most elevated level of all passings because of street auto collisions .It influences the accident as well as expands the hazard associated with it. With this undertaking, an application is made along side vehicle. An

IoT Based Smart Irrigation System For Barren Land

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Abstract- The Auto irrigation system uses a soil moisture sensor to detect the moisture level and various crops control like moisture, temperature and humidity. When the moisture content of the soil is reduced then the sensor sends the detected value to the microcontroller. Then the water pump is automatically turned ON according to the moisture level and included IoT based starter. The main aim of this paper is to reduce the human work in the agricultural field. This entire system is controlled by the PIC microcontroller. Urban water supply pipe network leakage accident is an additional problem that exists among the water supply industries all over the world. The leakage in the pipe network not only causes waste of water resources but also brings water scarcity risks to the entire living community over the area. So, monitoring leakage in the water supply system is a very important aspect of water work nowadays. Especially in drought and water scarcity areas water is more precious and to be used wisely. This paper also includes an intelligent pipeline leak detection system. The proposed system collects pipe flow data with an ultrasonic flow meter. This proposed system provides a friendly user interface in an Android App, allowing the users to monitor real-time pipeline flow data. It also has an alarm so that users will know whether there has leakage in the pipeline network.

Keywords- PIC microcontroller, IoT, moisture, temperature, leakage detection

I. INTRODUCTION

Agriculture is one of the basic needs of every human in this world. India is an agriculturally based country 70% of the Indians are either directly or indirectly involved in agricultural works. Indian economy depends on the production of agricultural products. The growing countries like India are occupied with a large population with insufficient food supply and food production. This is due to various factors like urbanization, colonization and industrialization. The people started moving towards cosmopolitan cities besides their native villages. This stops the development of Agricultural Technologies. The factors like scarcity of water, construction of buildings in agricultural lands are the major factors that act

as a threat to cultivable lands. As a citizen of India, we have to give remedies for the farmers in making healthy crops with high-yielding varieties. With this instinct, the project has been designed which will give the solution to rectify the deficiency such as moisture, water level, humidity and temperature which are integrated with IoT.

II. RELATED WORKS

[1] Mohamed Rawidean Mohd Kassim (2020). Internet of Things (IoT) technologies has created tsunamis almost in every industry across the world. IoT technologies and devices will sense, collect, store and communicate data to various components in an application such as smart agriculture. The smart agriculture revolution refers to the use, integration and deployment of the latest technologies such as the Internet of Things (IoT) in agriculture, intending to improve and increase the quantity and quality of crop harvest. This paper proposes an IoT application in agriculture. IoT based agricultural applications, open-source agricultural software, issues and challenges are discussed in detail. Furthermore, this paper provides an overview of how IoT technologies are going to change the agricultural sector and help the farmers to manage their farms more effectively and at the same time increase their revenues. Finally, it is expected that IoT technologies will help the agricultural sector and farmers to meet the food demand by 2050.

[2] Kiranmai Pernapati(2018). Only 0.01 % of water is available on the earth's surface, of the overall existence of water. So, water is a rare resource and irrigation systems also facing problems with water scarcity. Therefore it's necessary to have a smart irrigation system where the water is precisely used. The main imperfection of a normal irrigation system is wasting the water during filling in a reservoir and one more reason is over watering to plant. It is the main scenario where the shortage of water will arrive. The important factor in a smart irrigation system is monitoring the soil moisture of plants. Depending on this one can assure whether the plant is having sufficient water for its growth or not. In normal irrigation systems, the formers control the irrigating land manually. These techniques take a longer duration and waste

Smart Wheelchair Using Iot For Physically Challenged People

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Abstract- In general wheel chair in hospitality that injured person has to move his/her wheelchair by using free hand by using sensor. In our system we move the the wheelchair using our head movement by placing a sensor behind the back of our head. In some cases they used to feel heavier by facing slope areas, in such places we provide a panic switch which is connected to IOT of their guardian, if they feel unsafe or panicked they kindly press the panic switch, then a message will reach their guardian.

Keywords: Arduino uno ATMEGA 328P, Motor driver, WIFI module, ultrasonic sensor, Accelerometer, Panic Switch, Motor driver, DC gear motors, Relays.

I. INTRODUCTION

The Arduino based wheelchair was to present a reliable means for human-computer interfacing based on hand gestures made in three dimensions, which could be interpreted and adequately used in controlling a remote robot's movement. we discuss the development of a novel architecture of an [1] intelligent wheelchair working on wireless hand gesture control and not by the usual method of keypad for the physically handicapped people. Unlike others before it, was also has a distress call system to alert the concerned people or family in times of necessity for the person, by the the person himself/herself from an alert switch or when there is any sudden detection of edge or staircase during backward motion, thus saving the chair from accidents. The locomotion of the wheelchair is controlled by a MCU (microcontroller). [1] The arduino is used for control the all moves and locoioin. The physically handicapped people will have the option of controlling the system through hand gesture wirelessly from ranges up to several meters and will have the independence of using the wheelchair without the help of any other people.

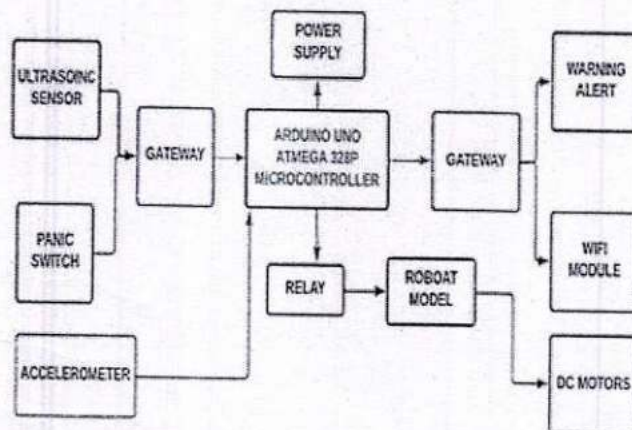
II. RELATED WORKS

Mudbi-UI Alarm Sajid, Md Firoz Mahmud, Rahaman, developed "Design of An Intelligent Wheelchair for Handicap People Conducting by Body Movement" 02 November 2020. The increasing development of the biomedical system

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and smart technology has a major impact on smart devices. A smart wheelchair is one of them to be improved with the blessings of this modern technology. In this paper, a smart wheelchair topology is proposed which is operated by a hand movement device and a smartphone. It comes with a lot of advanced features for people with disabilities who cannot walk or travel without the help of others. It is a hand-held wheelchair in which the gyro sensor and accelerometer are used and the Bluetooth phone control module is used to make it automatic. Users will wear a gesture system in their hands, and by moving the hand, the wheelchair will move forward, backward, left, and right. Arduino Mega and Arduino Nano are used as controllers. In this paper, the minimum threshold angle is compared with a microcontroller-based wheelchair where this proposed wheelchair started working with 5° fewer angles for forwarding and backward movement and 3° fewer angles for the left and right movement. Moreover, the linearity of this proposed wheelchair is -0.7, 0.045 & -0.03 when the sensitivity is 0.6102, 0.5214 & 0.55 for X, Y, Z axis respectively. The Sonar sensor is used here to prevent a safe movement. Using this design dimension and configuration, a prototype was eventually built and evaluated at various stages for performance evaluation.

III. SYSTEM DESIGN



The Arduino based wheelchair was to present a reliable means for human-computer interfacing based on hand

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Human Life Safety System With Electrical Information By Using IOT

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Abstract- An electric shock is the effect of an electric current through the body. The minimum current a human can feel is thought to be about 1 milliamper (mA). The effect can range from minor tingling to muscle spasms, tissue damage, fibrillation of the heart, loss of consciousness, and even death. In general we use electrical things in our home applications. Sometimes high voltage electric shock may pass in the wiring line. The safety watch is designed for sensing our body pulse rate by using a heart beat sensor. Information is transferred to the receiver kit and sends the notification to the near EB chief electrician by using IOT. An IOT based control system will introduce the early warning and control technique for the electric shock.

Keywords- PIC16F887A, Energy Meter, GSM Module, ESP8266, MAX232, LCD Display.

I. INTRODUCTION

A device providing for discharging static electricity between a person and an a grounded object to prevent unpleasant static shock to the person includes an insulated housing supporting a first contact arranged for manual engagement, a second contact for contacting the grounded object and a conductor of high resistance there between for allowing transmission of current at a rate which is sufficiently low to avoid shock. An electric shock preventer provides electrical shock protection for humans, which consist of shock sensing element and transceiver module. A current sensing circuit includes a power transistor, a sensing transistor configured to copy a current flowing through the power transistor at a predetermined ratio, a current sensing resistor configured to detect a voltage from the current copied by the sensing transistor, an input resistor configured to convert an input voltage to a current, a cross self biasing cascade block configured to adjust currents at both ends of the input resistor, and a common gate transistor and a reference resistor configured to convert a current output of the input resistor to a final sense voltage. The RF Transceiver uses RF modules for high-speed data transmission in the digital-RF architecture works at speeds up to 433MHZ. Protection under normal conditions is provided by basic protective provisions

(protection against the direct contact in the fourth edition), and protection under single fault conditions is provided by fault protective provisions (protection against the indirect contact). The following protective measures are generally permitted: protection by automatic disconnection of supply, double or reinforced insulation (Class II equipment), electrical separation, and extra low voltage (safety extra low voltage and protective extra low voltage).

II. RELATED WORKS

The main supply is coming from the EB to the energy meter. It is used to measure the amount of energy will be utilized. Basically, the rotating iron type of energy meter is suitable for measuring, energy utilization measurement is dependent upon the number of disc rotations. After that the meter MCB (miniature circuit breaker) is connected. The MCB act as a one kind of protective device, any fault occurs in the system the MCB will be tripped off. The whole structure of the system is connecting through MCB .And output of the MCB is connected to the load .In Electrical system there are basically three kinds of loads used They Are resistive, inductive and capacitive loads. These kinds of loads are used for requirements. Any fault detected in the supply line the MCB will be tripped off and isolating the load from the main supply through the energy meter.According to Giuseppe parise[1].A Summary of IEC Protection Against Electric Shock the protection practice against electric shock points to solve the contact "collision" by the active measure of automatic disconnection limiting the time duration. Analyzing the components of electric hazard as waves evolving in time, the fault opens a time window of risk, and the protection has to close it. According to Trevor W. Dawson, Krysa Caputa, Maria A.Stuchly, and R. Kavet [2].Electric Fields in the Human Body Resulting From 60-Hz Contact Currents Contact currents in anatomically realistic models of an adult and a child have been computed using accurate and previously validated numerical methods. Induced electric field and current-density quantities are provided for specific organs and body segments, normalized to a common 0.1-Ma current-to-ground. According to Theodore Bernstein[3].The Standard for Electrical Safety in the Workplace, NFPA 70E, and relevant

DEVELOPMENT OF ADVANCED AND SECURED ATM MACHINE SURVEILLANCE SYSTEM

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ABSTRACT

The Robbery on ATM machines are increasing now a days. This project deals to prevention such theft from robbers. To overcome the drawback found in existing technology in our society a novel technology has been introduced. Whenever robbery occurs, the Vibration sensor senses vibration produced from ATM machine. The vibration sensor is sensed by the sound intensity or pressure produced from the machine when it range increased above its 40dB. This system uses PIC controller based embedded system to process real time data collected using the vibration sensor. Once the vibration is sensed, the buzzer starts to sound and mild electricity flow over the machine. DC Motor is employed for closing the door of ATM. Sparking pump system is used here to make the robbers to faint for a while. RTC used to capture the robbery occur time and send the robbery occur time with the message to the nearby police station and corresponding bank through the GSM. LCD display board used here is to show the output of the message continuously. This

helps to prevent the robbery and the person involving in robbery can be caught easily.

1. INTRODUCTION

Today banking sector is one of the most important parts of a human day to day life. Banking facilities grow faster so people used these facilities for their economies activities. ATM (Automatic Teller Machine) is one of a facility which is provided by the bank to the customer. ATM machine comes in India

In 1968 which is invented by John Shepherd Barron. ATMs are located in different places and the customers can make basic transactions without the help of bank staff, due to this use of the ATM machine increase widely. The rapid growth in Automatic Teller machines (ATM) has made life easy for the day to day man, but it is not so for operators who manage it. The crime which is happening in ATM becomes a serious issue so ATM security also a serious issue. Currently, The ATM protection is used to allocate security against burglary. Though protection is provided for ATM machine, cases of burglary are spreading. Nowadays

Radio Frequency Based Location Data Transmission System in Remote Areas Without Mobile Network Communication

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Abstract- As the technology is growing immensely in recent years, but still now the remote locations has lack of mobile network connectivity. Individuals are going to investigated the remote and neglected areas. Distant regions are far away from urban areas and where the vast majority reside. Individuals can't convey to others because of absence of network connectivity. Along these lines, the reasons for the proposed framework is to foster a GPS gadget that can get to longitude and latitude continuously without the requirement for a web association. The proposed paper comprises of two modules. The primary module as a sending gadget, that has GPS and NRF specialized gadget communicate its present area with the microcontroller to the recipient gadget (second module). The subsequent module is where the data sent from the primary module gadget gets GPS reconciliation through RF correspondence and showcases the outcome. This framework will be continuous reason area without the requirement for a web association with send information in first module.

Keywords- nRF24L01 PA/LNA, Android App, Node MCU, IoT.

I. INTRODUCTION

In everyday life, the travel industry is rising vigorously. Individuals go to remote and neglected areas consistently and they can't track down their unique careful area. In the present circumstance, following people groups are done through the manual technique is beyond the realm of possibilities in fast time. To tackle the issue, we build an original remote Global Positioning System (GPS) gadget that can access and show boundaries like time, longitude, latitude progressively without the need of a functioning web association. In this venture, we use Global Positioning System gadget and nRF24L01 PA/LNA module as a first module. The Global Positioning System gadget is communicate with a framework through Local wireless communication. The nRF24L01 PA/LNA module will send encrypted data to collected gadget (receiver device) like GPS latitude, longitude.

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And furthermore, we can sent "HELP" order through Vice Versa technique. When the information are sent from module 1 the green LED is blinking each data transmission. The Receiver device is a showcase gadget, which can either be a cell phone or some other presentation gadget like Liquid Crystal Display(LCD) show to get the Global Positioning System organizes through Radio Frequency correspondence and show the outcome. The framework is expected to be a universally useful finder without requiring web association with get information from Transmitter. Whenever the transmitter is sending a signal it is observed through IoT. The information subsequent to being gathered at is transferred to cloud.

II. SYSTEM DESIGN

This is a NRF based, area information transmission framework without network correspondence. nRF24L01+ PA/LNA is a handset module. In sending side, the Global Positioning System(GPS) gadget coordinated inside the framework imparted through nearby remote correspondence. nRF24L01 PA/LNA module is place in a little convenient pack that will send scrambled information like Global Positioning System Latitude, Longitude. And furthermore, we have added a crisis button to sent "HELP" order, and information can likewise be sent in the Vice Versa Strategy.

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Industrial Transformer Monitoring And Controlling Using IoT

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Abstract- A Transformer network wireless monitoring system is developed to monitor parameters like load current, over voltage, oil level and temperature. It consist of a microcontroller based circuit with solid state components for handling sensors, power back-up, data communication module based on IOT protocol. Sensors are including current sensor, voltage sensor, oil level sensor and temperature sensor. The system is installed at the transformer site and by measuring above parameters it will help the utilities to optimally utilize transformers and identify problems before any failure. 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, oil level by using current sensor, voltage sensor, oil level sensor and temperature sensor. The sensors are used to monitoring the various parameters in transformer with the help of microcontroller.

Keywords- Transformer, PIC16F887A, Wifi module (ESP8266), LCD display, Arduino Uno (Atmega 328p).

I. INTRODUCTION

Transformer is a very important and critical component which acts as a link between the generation, distribution and consumer end of a power network [1]. System programmed with some predefined instructions to check abnormal conditions. If there is any abnormality on the system, details are automatically updated in the internet through serial communication [2]. If there is any abnormality on the system, the GSM module will send SMS (Short Message Service) messages to designated mobile telephones containing information about the abnormality according to the aforesaid predefined instructions [3]. A sensor or a network of sensors are used to sense the physical parameters or the respective environment. These processed sensor output are then send to the main server or cloud with the help of various network devices [4]. Health monitoring of electrical equipment using IOT may help to replace the equipment before failure and continuity of the power will not be disturbed [5]. If there is any abnormality on the system, the GSM module will send SMS (Short Message Service)

messages to designated mobile telephones containing information about the abnormality according to the aforesaid predefined instructions [6]. Deregulation in power industry accelerates competition among various power companies [7]. PIC microcontroller of series 16F877A is used in the proposed model. The various parameter that are monitored in this system are fed to the microcontroller is fed to various ports [8]. Protection of the power system is an important aspect to protect electrical components against the faults to increase their lifetime, postpone unwanted replacement cost of damaged ones and assure continuity of supply to serve the growing demand [9].

The distance between the generator and the load might be several miles, the scale of the commerce of massive force over a long distance has emerged due to the low cost of electric force [10]. Because of the popular extension for client-side power, the request for client-side power has raised the alarm [11]. A transformer is very important in substation and power system. The data assets and provision of transformer is an very important aspect in electric network as huge number distribution transformers are distributed a huge area [12].

II. RELATED WORKS

V.A.PATIL, et al., 2017 "Transformer Monitoring and Controlling with GSM Based System" If we look back towards our daily routine we can conclude that electricity is the inseparable part of our life and transformers plays a role of electricity carrier to us from generation stations [13].

Divyank Srivastava, M., et al., Published in 2018 "Health monitoring of electrical equipment using IOT" may help to replace the equipment before failure and continuity of the power will not be disturbed [14].

T. Anil Kumar, et al., 2017 "Development of IOT has (Internet of Things) framework for condition monitoring and controlling of larger number of distribution [15].

Pic Controller Based Load Response For Wind And Solar Integration To Improve Power System Reliability

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Abstract- Sunlight-based vitality and wind vitality are the two sustainable power sources most basic being used. Wind vitality has turned into the slightest costly sustainable power source innovation in the presence and has created the enthusiasm of researchers and teachers over the world. Photovoltaic cells change over the vitality from daylight into DC electricity. PVs offer included focal points over other sustainable power sources in that they radiate no commotion and require no support. Hybridizing sunlight-based and wind control sources give a reasonable type of intensity power generation. The wind and sunlight-based vitality frameworks are exceptionally questionable because of their unusual nature. The solution reported in this dissertation primarily investigates the reliability constrained planning and operations of electric power systems including renewable sources of energy by accounting for uncertainty.

Keywords- Hybridization, Photovoltaic cell, Wind turbine, Power sustainable.

I. INTRODUCTION

Electrical power is transmitted and supplied through connection points with specified and quoted capacities. In some cases, especially in Gaza, the electrical demand is more than the supply limit, this obliges the distribution companies to schedule the power supply over different periods varying from four to ten hours a day. This status represents a real problem for residents and all other sectors. This problem is available for over ten years, and no indications for its end during the next years are available due to the continuously unchanged political situation. However, installing PV systems on residential houses and other private or common utilities with relatively low daily energy consumption represents an effective solution for a wide range of such consumers which represents a considerable part of the total electric power consumption in Gaza. The PV power system can provide a continuous power supply during grid blackouts, and it can inject the excess produced power into the electrical grid during the day periods. However, grid-connected PV systems cannot continue supplying electrical power during grid blackout hours

due to the islanding mode of the inverter which is an essential main feature for each grid-connected inverter to satisfy the safety issues. Therefore, the electrical power generated from the PV system during blackout hours will be lost if no storage battery is available in the PV system. This leads to a considerable energy loss and will result in increasing the payback period of the PV systems. This paper aims to present a solution for such a problem by introducing an unconventional PV system that includes storage batteries, charge regulator, grid-connected inverter, bidirectional AC/DC converter, and control system to secure for continuous power supply. This system is designed to enable exploiting fully the hours of grid availability not only in supplying the load but also in charging the battery. On the other hand, it will exploit fully the PV-generated power in charging the battery, supplying the load, and injecting the excess energy into the grid. The novelty of the proposed PV system, in comparison with other conventional PV systems, is that it can operate in stand-alone and grid-connected modes without reducing the safety measures required for the islanding mode. The proposed system has been until now not built-in Palestine, and publications on such a system were not found due to its particularity in operating in stand-alone and grid-connected modes in a city of time-wise irregular daily grid interruptions for several hours. On the other hand, unlike the conventional grid-connected PV systems, which operate mostly at a DC voltage in the range of 400-600 V, the proposed system operates at a much lower DC voltage amounting to 48 V which is safer and facilitates reducing the number of necessary battery cells to only 24 cells.

II. RELATED WORKS

Increasing the pool of responsive resources is beneficial for wind and solar since they add variability and uncertainty to the power system at the same time that they displace generation that itself can respond [1]. Unbalanced loads with different types including constant power, constant current, and constant impedance are modeled at the system buses [2]. The presented method has been tested and compared with different IEEE test feeders 'results.

Design of Photovoltaic Based Dvr For Power Quality Improvement Using IOT

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Abstract- Voltage sags result in unwanted operation stops and large economic losses in industrial applications. A dynamic voltage restorer (DVR) is a power-electronics-based device conceived to protect high-power installations against these events. However, the design of a DVR control system is not straightforward and it has some peculiarities. First of all, a DVR includes a resonant (LC) connection filter with a lightly damped resonance. Secondly, the control system of a DVR should work properly regardless of the type of load, which can be linear or non-linear, to be protected. In order to improve the utilization rate and power quality of distributed new energy power generation technology and, to solve the voltage fluctuation problem in the operation of the distributed photovoltaic storage and grid-connected system. This project proposes a control strategy based on DVR (dynamic voltage restorer) for operation of distributed photovoltaic storage and grid-connected. The remaining photovoltaic output energy is stored in energy storage via active bridge to reduce the waste of photovoltaic power.

To compensate the output voltage fluctuation of photovoltaic grid-connected inverter, the DVR was connected to the energy storage. And PI controller parameters of the DVR are optimized by ANFIS algorithm, realize the recovery of output voltage fluctuation of the photovoltaic grid-connected inverter. The advantages of the proposed control strategy are demonstrated using simulations, and the results show that the proposed strategy can ensure the quality of PV output voltage in the photovoltaic storage and grid connected. PV based DVR system is comprised of PV System with low and high-power DC-DC boost converter, PWM voltage source inverter, series injection transformer and semiconductor switches. Simulation results proved the capability of the proposed DVR in mitigating the voltage sag, swell and outage in a low voltage distribution system.

Keywords- C PIC16F676, ESP8266, Photovoltaic cell, PWM Drive.

I. INTRODUCTION

Most downtimes in industry are due to voltage sags. Unfortunately, it is difficult to immunize equipment against these voltage events and, if the sag lasts for a long time, equipment shutdown is inevitable. Uninterruptible power supplies (UPSs) are often used for protecting sensitive loads against voltage sags. UPSs are widely applied to protect low-power loads such as computers or small electronic loads. They replace the grid when a voltage sag takes place and, when the voltage level recovers, loads are gently reconnected to the grid. However, a UPS has to deliver all the power consumed by the protected loads during a sag. This means that a UPS requires large batteries to protect loads against long-duration voltage sags and, consequently, its application is greatly restricted by the size and cost of batteries. A dynamic voltage restorer (DVR) is conceived to protect sensitive loads against voltage sags and swells.

This device is connected in series with an electrical distribution line and, typically, it consists of a voltage source converter (VSC), a DC capacitor, a coupling transformer, batteries, and an AC filter. When voltage sag takes place, a DVR injects the required voltage in series with the feeding line and the load voltage remains unchanged. The main advantage of DVRs is that only a portion of the power consumed by the load is supplied from the batteries. This means that batteries can be made much smaller than in a typical UPS and cost can be reduced. These reductions in battery size and cost make DVRs very attractive for high-power applications where a UPS may be infeasible. A series-connected power-electronics device that was able to restore the voltage of a load under distorted grid conditions. AC-DC converter was used to maintain the DC voltage constant so that no additional energy storage elements were required. The main task of a DVR is to control the load voltage. Therefore, a control scheme is commonly adopted. DVRs are sometimes controlled by using open-loop techniques. Stability is guaranteed with this control technique if the plant is stable (always the case for a DVR).

Smart Foldable Blind Stick for Visually Impaired Person

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Abstract—One of the biggest problems faced by the visually impaired is navigating from place to place, be it indoors or outdoors. Further, the adverse conditions of the roads make it even more difficult for them to walk outdoors. They have to be alert at all times to avoid consequences like colliding with stable or moving obstacles, ascending or descending staircases, or slipping down wet terrain. Also, at times they may be in distress and might want to send an alert message to their relatives or friends about their whereabouts. These problems of blind people can be addressed with the intervention of technology. Several sensors can be used to detect anomalies like obstacles, staircases, and wet terrains respectively. Also, this solution provides a way to send a message about the whereabouts of the user to the concerned people. Adding to the above, a software application is designed to help the acquaintances of the blind to manage the stick's configuration ex: add or delete phone numbers to which alert messages have to be sent. Misplacing the stick indoors can also be a substantial issue. This solution also addresses this problem.

I. INTRODUCTION

According to the World Health Organization, there are nearly 285 million people with some form of visual impairment out of which 86% of people have low vision and 14% of people are blind. Vision is one of the most important senses for humans to survive. Vision helps to connect with the surroundings. People deprived of vision rely on other dependencies like a simple walking cane or other people. In familiar places like the interiors of a house, they memorize the site directions, and obstacles on their way and navigate according to them. However, it is not always safe for the blind to rely on their memory to move from one place to another. Especially when they are outdoors. Not all the time's blind people are offered help from others and hence there is a need for a device, such as a stick, which can assist the visually impaired people in all forms of life.

The main characteristics for the stick to be useful to every visually impaired person are for it to be efficient and cost-effective. The obstacles such as people, vehicles, stones

in the outdoors, and stairs, walls, and furniture the indoors hinder the way of the blind. The blind stick developed, alerts the user about various obstacles through a vocal sound from a speaker on the stick. The stick can also detect wet and damp surfaces and raise a vibratory alert to the user.

To a person who is visually impaired, a mobile phone doesn't effectively serve the purpose to send a panic message whenever the person ends up at a location unknown to him. A simple button on the stick will do the job of sending a message to the acquaintances of the blind person. A software application is designed to let acquaintances change, add, or delete their phone numbers. The user can also set up the phone numbers with the help of the supplier, who has admin access to change the phone numbers. To assist the user if a stick is misplaced, a remote with the button is provided, which when pressed, makes a buzzer sound on the stick.

II. RELATED WORK

[1] "Low-Cost Smart Navigation System for the Blind" by S BarathiKanna, T R Ganesh Kumar, C Niranjana, S Prasanth, J Rolant Gini, M.E Harikumar the proposed solution works on the Internet of Things realm where the blind can "communicate" with the environment. This prototype is equipped with an ESP8266, a power source for the development board and coin motors along with a smartphone application, thereby making it accessible for even the working class visually impaired. [2] "Ultrasonic Sensor-Based Smart Blind Stick" by Naiwrita Dey, Ankita Paul, Pritha Ghosh, Chandrama Mukherjee, Rahul De, Sohini Dey. An ultrasonic sensor module, HC-SR04 is used for obstacle detection in the path of the blind person and a buzzer is used to make the person alert. The proposed system is implemented using PIC microcontroller 16F877A. Blind persons can use this walking stick for safe navigation. It can detect obstacle obstacles within a 35 cm range of distance. [3] "Smart Stick for the Blind and Visually Impaired People" by Mukesh Prasad Agarwal, Atma Ram Gupta. It is a device that guides the user by sensing obstacles within the range of the stick. It will identify all obstacles in the path with the help of various sensors installed in it. The microcontroller will retrieve data

Bluetooth Car Control For Physical Challenged Person And Accident Prevention Using Arduino

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Abstract- The project aims is to design an android interface, Arduino bot and write program in to the arduino microprocessor. Arduino car contains Arduino microcontroller with basic mobility features. Arduino program contains instructions mediating between android controller and Arduino car. An appropriate program in the arduino microprocessor interact with the android controller has to be created. The program has been successfully compiled through arduino IDE to the arduino microprocessor & loaded in to it after proper checking of logic to decrease any loss/damage of hardware. We have to create an android application that will provide user an interface to interact with the arduino powered car. The interface is easy to use and provide feedback from the arduino microprocessor through the Bluetooth after giving instruction to arduino for various actions through interface via Bluetooth module. The front and rear of the car are equipped with an ultrasonic sensor, which will detect the object. And also additionally used the Gas sensor and Fire sensor. The android application is to create with the help of android studio that provide us with more capability & stability. After doing all of this we have test this project thoroughly and find the maximum no. of error & wrong logic in the microprocessor program. After doing this only we can say that we have been able to create as per our goal described.

Keywords: Arduino Nano, HC-05 Bluetooth Module, Motor Driver Module L298N, Grippy Wheels, Jumper Wires, Ultrasonic sensor, Fire sensor, Gas sensor.

I. INTRODUCTION

This is an Arduino based, Bluetooth controlled car. It is controlled by a smart phone application. Bluetooth controlled car is controlled by using Android mobile phone instead of any other method like buttons, gesture etc. Here only needs to touch button in android phone to control the car in forward, backward, left and right directions. So here android phone is used as transmitting device and Bluetooth module placed in car is used as receiver. Android phone will transmit command using its in-built Bluetooth to car so that it can move in the required direction like moving Forward, reverse, turning left, turning left, turning right and stop.

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Additionally the ultrasonic is measuring if there are obstacles in the direction straight on (the servo engine is turned off in this mode) The front and rear of the are equipped with an ultrasonic sensor, which will detect the object. And also used the gas sensor and fire sensor for safety purpose. Gas sensors (also known as gas detectors) are electronic devices that detect and identify different types of gasses. They are commonly used to detect toxic or explosive gasses and measure gas concentration. fire detector works by detecting smoke and/or heat. These devices respond to the presence of smoke or extremely high temperatures that are present with a fire. After the device has been activated, it will send a signal to the alarm system to perform the programmed response for that zone.

II. RELATED WORKS

[1] M Saravanan developed "Arduino Based Voice Controlled Robot Vehicle" (October 2020) The main goal of this device is to create a robot vehicle that can be powered by a person's voice order. These systems are commonly referred to as Speech Controlled Automation Systems (SCAS). The abovementioned device is a prototype of our design. The concept is to build a robot that will be controlled by voice commands. It has a lot of functionality that can be useful. The specified task is carried out in this design using an android application and a microcontroller. Bluetooth technology facilitates communication between the software and the robot. The module will receive the commands that are sent over the channel. The aim of a voice-controlled robotic vehicle (VCRV) is for it to listen to and respond to the user's commands. Srinivas Devarakonda et al. proposed a vehicularbased mobile system approach for analyzing the characteristics of air in real time. They presented two models: one which can be tied up in public transports and the other one is a personal sensing equipment. They also claimed that both the prototypes are workable, cost effective and also they are able to foretell the potential impacts on health postulated by the air quality.

[2] H. Jagadish Kumar wrote "Voice Controlled Car using Arduino and Bluetooth Module" (December 2019). The objective of this report is to build a voice-activated car that reacts speech commands. Enhancements in the areas of

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IoT Enabled Floatable Boat For Robot With Waterbody Quality Monitoring And Chemical Neutralization System

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Abstract- The conventional method of testing water quality involves collecting samples of water manually and then using laboratory methods to test and analyse the collected samples. But this method is time consuming, involves wastage of man power, and uneconomical. The water quality measuring system that we have implemented checks the quality of water in real time through various sensors. The microcontroller transfers the data collected by the sensors to the smart phone/PC using Wi-Fi connection. This system can keep a strict check on the pollution of the water resources and thus ensures to provide safe drinking water. The current developments in the field of sensor networks are critical for environmental applications. Internet of Things (IOT) allows connections among various devices with the ability to exchange and gather data. IoT also extends its capability to environmental issues in addition to automation industry by using industry 4.0. As water is one of the basic needs of human survival, it is required to incorporate some mechanism to monitor water quality time to time. Around 40% of deaths are caused due to contaminated water in the world.

Hence, there is a necessity to ensure supply of purified drinking water for the people both in cities and villages. Water Quality Monitoring (WQM) is a cost-effective and efficient system designed to monitor drinking water quality which makes use of Internet of Things (IoT) technology. In this paper, the proposed system consists of several sensors to measure various parameters such as pH value, the turbidity in the water, level of water in the tank, temperature and humidity of the surrounding atmosphere. And also, the Microcontroller Unit (MCU) interfaced with these sensors and further processing is performed at Personal Computer (PC). The obtained data is sent to the cloud by using IoT based Think Speak application to monitor the quality of the water.

Keywords- Arduino, Turbidity Sensors, PH Sensor, Luminance Sensors, Battery.

I. INTRODUCTION

Water is essential for life on earth. Yet, numerous countries are facing shortages of freshwater. This alarming issue strongly motivated them to utilize other available resources instead. For example, Gulf countries are acquiring freshwater from the sea through a tedious desalination process. Increased costal industrialization and resulting water pollution, however, is making this process even more challenging. Other countries are processing rainwater to obtain freshwater. However, lately climate change is affecting rainfalls, which is putting into jeopardy this option. Countries where freshwater is more accessible are unfortunately not safe from water related issues. Water pollution has been reported for years as a growing concern. For example, the America Clean Water Foundation established the water monitoring day (called the Earth Echo Water Challenge). Its main agenda is to spread public awareness regarding water pollution. Both the United States Environmental Protection Agency (USEPA) and World Health Organization (WHO) are constantly providing updates and recommendations on how to cope with the newly detected water contaminants and diseases. On the top of pollution and studies pointing out to global-warming's impact on water resources, the World Water Council (WWC) is predicting a global population increase by 40% to 50% over the next 50 years. This significant growth, in conjunction with urbanization and industrialization, may greatly increase the overall water demand. All aforementioned pointers are indicating a potential global water crisis coming. In the eve of such a water crisis, freshwater is commonly turning into an industrial product. Under the municipality control in urban areas, it is often stored in over-head/underground tanks, sometimes for extended period prior to consumption. Continuous monitoring of water quality is thus necessary, to classify water for its suitable application and prevent waste. For example, water that is not good for drinking can be used for cleaning purposes.

EXISTING SYSTEM

3.4.4

MCA

ERP SOFTWARE FOR TRADERS

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ABSTRACT:

The ERP or Enterprise Resource Planning system is a software solution that allows you to manage several aspects of your business from one location. Different modules for different parts of the business could be created, all containing forms to a) record data and b) create trades. This research paper primarily focuses on traders as well as how they profit from ERPnext and also the features that have been implemented. There is nothing in previous study articles about traders' use of ERPnext. A person who buys and sells items is referred to as a trader. Currently, bank integration and GST integration are used to save effort for traders, and they really use GST to analyze prospective buyers' addresses, resulting in trustworthy and valuable buyers of the business.

Even the system operates at a faster rate than before. To execute the software properly, any operating system can be used. The programme is being built in an incremental manner. The software is designed and developed using HTML, CSS, JavaScript, and Python. The data is stored in Mariadb, which is also used as a database. Because this software is web-based, authorized users can access it from anywhere in the globe.

Key words : GST Integration, Bank Integration

1. INTRODUCTION:

Due to the introduction of various small firms, the retail business has become one of the highly efficient and rapidly growing industries. It generates more than ten percent of the country's GDP and

employs about eight percent of the workforce. Buying and selling goods and services for money or money's worth is referred to as trade. The goods are manufactured by the manufacturer, then sold to the wholesaler, then to the retailer, and



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Efficient Classification Of Brain Tumors Images Using Neural Network Technique

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Abstract:

Using biopsy, brain tumors classification is performed, which is not normally conducted before definitive brain surgery. The technology improvement and machine learning helps radiologists for diagnostics of tumor without invasive measures. Convolutional neural network (CNN) is the machine-learning algorithm which 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 tumor which arise from the brain tissues other than the nerve cells and the blood vessels. But, meningiomas arise from membranes that cover brain and surround central nervous system, whereas pituitary tumors are the lumps that sit inside skull. 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, newly developed CNN architecture are being used as an effective decision-support tool for radiologists in diagnostics. Python is used for development of the project.

Keywords: Deep Learning, Neural Network, Brain Tumor, MRI Images.

I. INTRODUCTION

Cancer is the secondary leading cause of death world wide, according to the World Health Organization (WHO) [1]. Early detection of it can prevent death, but this is not possible all time. Unlike cancer, tumor also could be benign, malign or pre-carcinoma.

Benign tumors vary from malign in that, benign normally don't spread to another organs and tissues and are surgically removed [2]. Some of the brain tumors are meningiomas, gliomas, and pituitary tumors.

From 2012, Perelman School of Medicine at 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 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, and often contain images which shows two tumor levels, low and high level glioma tumor, acquired in axial plane [10].

The biggest problem in classifying and segmenting MRI images (using some neural networks) is in the images count in database. Moreover, MRI images might be acquired in various planes, so the option of using the entire available planes can enlarge that database.

As this could affect the classification output by overfitting generally, the requirement of pre-processing before feeding images into the neural network is necessary. But, one of the known advantages of CNN is that pre-processing and feature engineering need not be performed.

II. LITERATURE REVIEW

In the paper (1) WORLD HEALTH ORGANIZATION GLOBAL banded about the crucial data of cancer. They are

- Cancer is a leading cause of death worldwide, counting for nearly 10 million deaths in 2020, or nearly one in six deaths.
- The most common cancers are bone, lung, colon and rectum and prostate cancers.



DEEP LEARNING PREDICTION OF ADVERSE DRUG REACTION ANALYSIS USING ARTIFICIAL NEURAL NETWORK MODEL

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Abstract.

In medical domain, Adverse Drug Reaction (ADR) analysis is a crucial process for doctors and medical scientists. Adverse drug reaction measures the injury occurred due to usage of a drug. The growing concern to the ADRs has stimulated the progress of statistical, data mining methods to find the Adverse Drug Reactions. This project proposed a hybrid model of data mining and machine learning to classify different Adverse Reactions and foretell the outcome intensity. It used the Proportionality Reporting Ratio (PRR) along with Chi-Square test equations to find out the different relationships between drug and symptoms called the drug-ADR association. In addition, support vector machine method is applied to classify the data set records into either normal or adverse drug. Moreover, our project aims in finding the percent of adversity of the drug reaction. Based on the number of occurrences, where a specific drug P, causes a specific Adverse Reaction, R, the various terms are measured for PRR and Chi Square. In addition KNN and SVM classification is made on drug records to classify them based on data set columns. Neural network based classification is the proposed system to classify drug reaction based on data set columns.

Keywords: Adverse Drug Reaction, Proportionality Reporting Ratio, Chi Square, Neural Network.

I. INTRODUCTION

This project used the Proportionality Reporting Ratio (PRR) along with the precision point estimator test called the Chi-Square test to find out the different relationships between drug and symptoms called the drug-ADR association. This output is used as an input to machine learning algorithms such as Random Forest and Support Vector Machine (SVM) to predict the intensity of the

outcomes of ADR. The aforementioned challenges motivated a series of works that apply data mining and machine learning approaches to come up with various solutions using different datasets to suit according to the researcher's needs. Google recently worked on a Twitter dataset to detect ADEs from posts on Twitter using a merged form of Artificial Neural Network (ANN).

ANN uses a binary classifier to represent outcome result. Another researcher proposed the Predictive Pharmacosafety Networks (PPNs) for detecting unknown ADEs. The existing drug safety information is used from a well-known data set of drug safety in 2005 to train a logistic regression model to detect unknown ADEs. In 2012, a research used the 'THIN' database to create a model using the feature matrix and feature selection to identify ADRs for a specific drug called "Pravastatin".

In the world of medical science and drugs, Adverse Drug Reaction (ADR) has always been an important field of research. Adverse drug reaction means the injury from the use of a drug. These injuries can extend from minor injuries like skin rash to major life-threatening reactions.

Confusion occurs mostly between ADR and Side Effect where ADR is the reaction caused by the drug used at normal doses for particular symptoms. Point to be noted: a wrongful overdose of drugs is not considered as an ADR case.

Every Year more than 200 thousand deaths are reported because of ADRs. Though ADR can be identified very easily after the occurrence, predicting ADR has always been a huge challenge for researchers. Worldwide, around 4.9% of hospital admissions are the result of ADRs and this number is as high as 41.3% in some areas. In Sweden, ADRs are the seventh most common cause of death. Even though drugs are thoroughly tested clinically before they are



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Phishing Page and Malicious URL Detection via Support Vector Machine using Page Layout Feature

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Abstract— The web technology has come the corner gravestone of a wide range of platforms, similar as mobile services and smart Internet-of- effects (IoT) systems. In several surroundings, stoner data is aggregated for a pall grounded platform, where web operations are used as a key interface to pierce and configure stoner data. Securing the web interface requires results to deal with pitfalls from both specialized vulnerabilities and social factors. The bushwhackers use web runners visually mimicking licit websites, similar as banking and government services, to collect druggies' sensitive information. Being phishing defense mechanisms grounded on URLs or runner contents are frequently finessed by bushwhackers. The World Wide Web has come the most essential criterion for information communication and knowledge dispersion. It helps to distribute information timely, fleetly and fluently. Identity theft and identity fraud are appertained as two sides of cyber crime in which hackers and vicious stoner s gain the particular data of being licit druggies to attempt fraud or deception provocation for fiscal gain. E-Mails are used as phishing tools in which licit looking emails are transferred making the genuine druggies identity with licit content with vicious URLs. SpamE-Mails emerges or transforms as Phishing matters. Spoofed Matters plays a vital part in which the hackers pretends to be a licit sender posing to be from a licit association which divulges the stoner to give his particular credentials. The content may escape from Content grounded pollutants or the dispatch may be without any body of the communication except vicious URL in it. This paper identifies vicious URLs in dispatch through reduced point set system. In addition, phishing runners are plant out grounded on CSS attributes values.

Keywords— *Data Mining, Phishing Mails, Anti-SPAM Filtering, Phishing Classification*

I. INTRODUCTION

Data mining is the process of rooting patterns from data. Data mining is seen as an decreasingly important tool by ultramodern business to transfigure data into an instructional advantage. It's presently used in a wide range

of profiling practices, similar as marketing, surveillance, fraud discovery, and scientific discovery.

The affiliated terms data dredging, data fishing and data poking relate to the use of data mining ways to test portions of the larger population data set that are (or may be) too small for dependable statistical consequences to be made about the validity of any patterns discovered (see also data-poking bias). These ways can still, be used in the creation of new hypotheses to test against the larger data populations.

The homemade birth of patterns from data has passed for centuries. Beforehand styles of relating patterns in data include Bayes'theorem (1700s) and retrogression analysis (1800s). The proliferation, ubiquity and adding power of computer technology has increased data collection and storehouse. As data sets have grown in size and complexity, direct hands-on data analysis has decreasingly been stoked with circular, automatic data processing. This has been backed by other discoveries in computer wisdom, similar as neural networks, clustering, inheritable algorithms (1950s), decision trees (1960s) and support vector machines (1980s).

A primary reason for using data mining is to help in the analysis of collections of compliances of geste. Similar data are vulnerable to collinearity because of unknown interrelations. An necessary fact of data mining is that the (sub-) set (s) of data being analysed may not be representative of the whole sphere, and thus may not contain exemplifications of certain critical connections and behaviours that live across other corridor of the sphere. To address this kind of issue, the analysis may be stoked using trial- grounded and other approaches, similar as Choice Modelling for mortal-generated data. In these situations, essential correlations can be moreover controlled for, or removed altogether, during the construction of the experimental design.

There have been some sweats to define norms for data mining, for illustration the 1999 European Cross Industry Standard Process for Data Mining (CRISP-DM1.0) and the 2004 Java Data Mining standard (JDM1.0). These are evolving norms; latterly performances of these norms are under development. Independent of these standardization sweats, freely available open- source software systems like the R Project, Weka, KNIME, RapidMiner and others have come an informal standard for defining data-mining



Efficient Auditing Scheme for Secure Data Storage in Fog to Cloud Computing

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ABSTRACT

Fog-to-cloud computing has now become a new cutting-edge technique along with the rapid popularity of Internet of Things (IoT). Unlike traditional cloud computing, fog-to-cloud computing needs more entities to participate in, including mobile sinks and fog nodes except for cloud service provider (CSP). Hence, the integrity auditing in fog-to-cloud storage will also be different from that of traditional cloud storage. In the recent work of Tian et al., they took the first step to design public auditing system for fog-to-cloud computing.

However, their scheme becomes very inefficient since they use intricate public key cryptographic techniques, including bilinear mapping, proof of knowledge etc. In this paper, we design a general and more efficient auditing system based on MAC and HMAC, both of which are popular private key cryptographic techniques. By implementing MAC and HMAC, we give a concrete instantiation of our auditing system. Finally, the theoretical analysis and experiment results show that our proposed system has more efficiency in terms of communication and computational costs

INTRODUCTION

The expression "distributed computing" is a hot popular expression in the IT world. At the back this extravagant wonderful saying there lies a right photo of the impending of processing for together in specialized viewpoint and social point of view. Still the expression "Distributed

computing" is later yet the arrangement of incorporate calculation and capacity in spread server farms keep up with by outsider organizations isn't new one aside from it returned in way in 1990s close to with circulated processing approach like organization registering. Distributed computing is normal at give IT as a support




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IDENTIFICATION OF COVID-19 FUTURE FORECASTING

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ABSTRACT

The Spread of COVID-19 in the whole world has endangered the mankind. The resources of irrefutably the greatest economies are stressed due to the immense infectivity and infectiousness of this affliction. The capacity of ML models to appraise the amount of impending patients affected by COVID-19 which is at this point considered as a potential risk to humankind. In particular, five standard gauging models, specifically LR, LASSO, SVM, ES, have been used in this survey to check the sabotaging factors of COVID-19. Three sorts of assumptions are made by all of the models, similar to the amount of as of late tainted cases, the amount of passing, and the amount of recoveries But in the can't anticipate the exact result for the patients. To overcome the issue, proposed procedure using the long transient memory (LSTM) predict the amount of COVID-19 cases in next 10 days ahead and effect of preventive appraisals like social disconnection and lockdown on the spread of COVID-19.

INTRODUCTION

OVERVIEW OF COVID-19

Covid, the pandemic that is spreading all over the planet, has uncovered the shortcoming of human culture to outrageous overwhelming ailments and the difficulty of handling this issue in a globally interconnected complex system. Covid affected more than 100 countries in a scope of weeks. As a result, the whole human race should collaborate to overcome the disease as well as reasonably brains to return to work and creation as shown by the genuine situation

of each area and complete geographical risk assessment. Many tries have been coordinated to find a proper and fast approach to recognizing polluted patients in a starting stage. Ensuing to making chest CT compasses of 21 patients spoiled with COVID19 in China, Guan et al observed that CT check assessment included two-sided pneumonic parenchymal ground-glass and consolidative aspiratory opacities, on occasion with a changed morphology and a periphery lung movement. Consequently, COVID-19 end can be addressed as an image division issue to eliminate the



Live Social Distance Detection Using Deep Learning Model

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Abstract: To prevent the spreading of COVID, the only way is social distancing. Nowadays, AI teams create social distancing tools using the computer vision concepts. This project proposed a methodology to find social distance with the help of deep learning to evaluation the distance between people for mitigating the impact of corona virus pandemic. The detection tool was developed to notify people to keep safe safety distance among each other through evaluation of a video input feed. The video frame from 'mp4' file was given as input, and object detection pre-trained model based on YOLOv3 algorithm was applied for pedestrian detection. Then, video frame was converted into top-down view to measure distance from 2D plane. The distance among people was estimated and any noncompliant pair of people in display is indicated with red frame and red line. The proposed method was validated on pre-recorded video for pedestrians walking on street. The output result verified that proposed method is able to determine social distancing measures between people group in the video. The developed technique may be further developed as detection tool in real time application. The project is designed using Python 3.5 with opencv python 4.2.

Keywords— Social Distance Monitoring, Covid 19, Human Object Detection.

I. INTRODUCTION

In Social Distancing Sensor, the weights of the YOLO v3 Object Discovery Algorithm and the COCO dataset are used which are fluently available online. Also, the main library being used will be the OpenCV along with the Deep Neural Network (DNN) module.

When the new coronavirus (Covid-19) epidemic emerges, the spread of the contagion has left public upkeep anxiety if they don't have any effective cure. The World Health Organization (WHO) has declared Covid-19 as a epidemic due to the increase in the number of cases reported around

the world. To contain the epidemic, numerous countries have enforced a lockdown where the government executed that the citizens to stay at home during this critical period. The public health bodies similar as the Centers for Disease Control and Prevention (CDC) had to make it clear that the most effective way to decelerate down the spread of Covid-19 is by avoiding close contact with other people. To flatten the wind on the Covid-19 epidemic, the citizens around the world are rehearsing physical distancing. To apply social distancing, group conditioning and congregations similar as trip, meetings, gatherings, shops, soliciting had been banned during the counterblockade period. The people are encouraged to use phone and dispatch to manage and conduct events as much as possible to minimize the person-to-person contact.

To further contain the spread of the contagion, people are also informed to perform hygiene measures similar as constantly washing hands, wearing mask and avoiding close contact with people who are ill. Still, there's a difference between knowing what to do to reduce the transmission of the contagion and putting them into practice. The world has not yet completely recover from this epidemic and the vaccine that can effectively treat Covid-19 is yet to be discovered. Still, to reduce the impact of the epidemic on the country's frugality, several governments have allowed a limited number of profitable conditioning to be proceeded once the number of new cases of Covid-10 has dropped below a certain position.

As these countries cautiously resuming their profitable conditioning, enterprises have surfaced regarding plant safety in the newpost-Covid-19 terrain. To reduce the possibility of infection, it's advised that people should avoid any person-to-person contact similar as shaking hands and they should maintain a distance of at least 1 cadence from each other. In Malaysia, the Ministry of Health Malaysia (MOHM) has recommended several complaint forestallment measures for workplaces, individualities, and families at



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AUTOMATIC MOVEABLE ARM ROBOT USING ARDUINO

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Abstract

Nowadays, technology is evolving in the same directions as human wants are fast expanding. Every day, the effort done to address those needs makes life easier, and these research are mostly focused on robotic arms. Robot arms can interact with other people or follow pre-programmed commands. Industry and medical are currently the most developed fields of robot arms in all fields. The robot arm, which was designed and built as part of the project, can move in four directions using five servo motors. Many thanks to the holder, you can take the desired material from one place and carry it to another place, and also mix it with the material it receives. While doing this, robot control is provided by connecting to the android application via Bluetooth module connected to Arduino Mega 2560 microcontroller.

1.INTRODUCTION

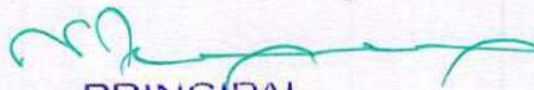
Technology is growing fast these days. Technology is evolving as human society grows, and we use it every day. It helps to reduce human demand and increase efficiency and productivity.

Often in industrial production this automation is additionally used to create

sophisticated equipment. Everyday medical equipment such as X-ray machines, radiography, refrigerators, automobiles. Of all these effects, the robot arm is one. It is widely used for industrial purposes.

A robotic hand can be compared to a human hand. It features a free rotating joint rotation and a translational joint displacement for hand movement. This hand movement is usually driven by an electric drive (motor) or a pneumatic and hydraulic system (pistons). These actuators are controlled by a microcontroller (CPU), are usually programmable and are designed to perform a series of tasks. Most of these robotic weapons are designed for industrial purposes for fast and reliable performance, enabling mass production. This thesis is a theoretical thesis. In addition, the necessary research is done to evaluate the best solution to the problem that is part of the thesis. The project covers the following objectives. Comparing the available components from the market




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MARKET BASKET ANALYSIS

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Abstract. Market Basket Analysis or MBA is a field of modelling ways grounded upon the proposition that if you buy a certain group of particulars, you're further (or lower) likely to buy another group of particulars. MBA includes determination and vaticination client's geste grounded on expenditure pattern of former guests. MBA is applied not only for retail industries but also for a great number of other industries. There are studies which point to MBA and contribute to adding inflows in hospices operation by offering more seductive fresh services for new and regular guests. MBA grounded on multidimensional log it model was used to conduct a study Request handbasket analysis is to make a choice of purchasing, sailing or power of stocks in an equity request. Data booby-trapping ways insure high perfection of vaticination of stock price movement. In this thesis using MBA for perfecting styles of arranging products on store shelves was linked. Analysis of the most frequent guests' deals was performed. In this design, Request handbasket vaticination, i.e., supplying the client a shopping list for the coming purchase according to her current requirements, is one of these services. Current approaches aren't able of landing at the same time the different factors impacting the client's decision process-co-occurrence, sequentiality, periodicity and recurrency of the bought particulars. To this end, this design defines a pattern Temporal Annotated Recurring Sequence (Seamen) suitable to capture contemporaneously and adaptively all these factors. We define the system to prize TARS and develop a predictor for coming handbasket named TBP (TARS Based Predictor) that, on top of TARS, is suitable to understand the position of the client's stocks and recommend the set of utmost necessary particulars. By espousing the TBP the supermarket chains could crop acclimatized suggestions for each individual client which in turn could effectively speed up their shopping sessions.

Keywords: Data Mining, Market Basket Analysis, Temporal Annotated Recurring Sequence.

I. INTRODUCTION

Detecting purchase habits and their elaboration in time is a pivotal challenge for effective marketing programs and engagement strategies. In this environment, one of the most promising installations retail requests can

offer to their guests is basket analysis, i.e., the automated soothsaying of the coming basket analysis that a client will buy. An effective basket recommender can act as a shopping list memorial suggesting the particulars that the client could presumably need.

A successful consummation of this operation requires an in- depth knowledge of an existent's shopping geste (1). The purchasing patterns of individualities evolve in time and can witness changes due to both environmental reasons, like seasonality of products or retail programs, and particular reasons, like diet changes or shift in particular preferences.

Therefore, a satisfactory result to basket analysis must be adaptive to the elaboration of a client's geste, the rush of her purchase patterns, and their periodic changes. This design proposes the Temporal Annotated Recurring Sequences (Seamen), adaptive patterns which model an existent's purchasing geste by four main characteristics.

First, TARS consider theco-occurrence a client totally purchases a set of particulars together. Secondly, Seamen model the sequentiality of purchases, i.e., the fact that a client totally purchases a set of particulars after another bone. Third, Seamen consider periodicity a client can totally make a successional purchase only in specific ages of the time, because of environmental factors or particular reasons. Fourth, TARS consider the recurrency of a successional purchase during each period, i.e., how constantly that successional purchase appears during a client's period of the time.

Modeling these four aspects -co-occurrence, sequentiality, periodicity and recurrency - is abecedarian to descry an existent's shopping geste and its elaboration in time. On one hand, unborn requirements depend on the requirements formerly satisfied what a client will buy depends on what she formerly bought.

On the other hand, the requirements of a client depend on her specific habits, i.e., recreating purchases she makes over and over. Far from being static, shopping habits are affected by both endogenous and particular factors. For this reason, periodicity is a pivotal specific of an adaptive model for basket analysis. This design exploits



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SIGNIFICANT PERMISSION IDENTIFICATION FOR ANDRIOD MALWARE DETECTION

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Abstract: The global pervasiveness of smartphones has prompted the development of millions of free and commercially available applications. These applications allow users to perform various activities, such as communicating, gaming, and completing financial and educational tasks. These commonly used devices often store sensitive private information and, consequently, have been increasingly targeted by harmful malicious software. The alarming growth rate of malicious apps has become a serious issue that sets back the prosperous mobile ecosystem. A recent report indicates that a new malicious app for Android is introduced every 10 s. Android allows users to install applications from unverified sources such as third-party app stores and file-sharing websites. The malware infection issue has been so serious that a recent report indicates that 97% of all mobile malware target Android devices to combat this serious malware campaign, we need a scalable malware detection approach that can effectively and efficiently identify malware apps. Numerous malware detection tools have been developed, including system-level and network level approaches. However, scaling the detection for a large bundle of apps remains a challenging task. This project introduces Significant Permission Identification (SigPID), a malware detection system based on permission usage analysis to cope with the rapid increase in the number of Android malware. Instead of extracting and analyzing all Android permissions, this project develop three levels of pruning by mining the permission data to identify the most significant permissions that can be effective in distinguishing between benign and malicious apps. SigPID then utilizes machine-learning-based classification methods to classify different families of malware and benign apps. This project identifies dangerous permission list, benign permission list and reduce non-sensitive permissions and apply SVM classification on the new data set. The project is designed using R Studio. The coding language used is R.

I. INTRODUCTION

The first element of SIGPID is the MLDP process to identify significant warrants to exclude the need of considering all available warrants in Android. No app requests all the warrants, and the bones that an app requests are listed in the Android operation package (APK) as part of manifest.xml. When we need to dissect a large number of apps (e.g., several hundred thousand), the total number of warrants requested by all apps can be overwhelmingly large, performing in long analysis time. This high analysis outflow can negatively affect the malware discovery effectiveness as it reduces critic productivity. We propose three situations of data pruning styles to filter out warrants that contribute little to the malware discovery effectiveness.

Therefore, they can be safely removed without negatively affecting malware discovery delicacy. The 3-step procedure is shown in Fig. 2.

The autho also describes each position in the pruning process.

1) Authorization Ranking With Negative Rate Each authorization describes a particular operation that an app is allowed to perform.

For case, authorization INTERNET indicates whether the app has access to the Internet. Different types of benign apps and vicious apps may request a variety of warrants corresponding to their functional requirements. For vicious apps, it is hypothecated that their requirements may have common subsets and it need not to dissect all the warrants to make an effective malware discovery system.

As a result, on one hand, our focus is more on the warrants that produce high- threat attack shells and are



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REDUCED ENERGY CONSUMPTION OF DATA TRANSMISSION FOR TCP DOWNLOAD/UPLOADS

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Abstract. Energy consumption caused by wireless data transmission on smart phones is increasing rapidly with the growing popularity of applications that require network connectivity. This results in shrinking battery life, as the development of battery technology is unable to keep up with the energy demand of applications. While waiting for breakthroughs in battery technology, we can try and make the networked applications more energy-efficient. Wireless data transmission consumes a significant part of the overall energy consumption of smart phones, due to the popularity of Internet applications. This project investigates the energy consumption characteristics of data transmission over Wi-Fi, focusing on the effect of Internet flow characteristics and network environment. The author presents deterministic models that describe the energy consumption of Wi-Fi data transmission with traffic burstiness, network performance metrics like throughput and retransmission rate, and parameters of the power saving mechanisms in use. These models are practical because their inputs are easily available on mobile platforms without modifying low-level software or hardware components. This project demonstrates the practice of model-based energy profiling on Maemo, Symbian, and Android phones, and evaluate the accuracy with physical power measurement of applications including file transfer, web browsing, video streaming, and instant messaging. Their experimental results show that our models are of adequate accuracy for energy profiling and are easy to apply.

I. INTRODUCTION

This manual is intended for embedded systems engineers and support professionals who are not familiar with wireless networking from a theoretical or implementation point of view. The components, organization, and operation of Wi-Fi networks will be

presented. There is an emphasis on security issues and the available security protocols. Wi-Fi is the transmission of radio signals. Wireless Rabbits offer the embedded systems engineer many benefits in a wide range of applications. Figure 1 illustrates the Rabbit's hole in a sensor monitoring application.

The dramatic recent developments in IoT are mainly driven by the tremendous need and benefits that can be gained from connecting our physical world to the Internet. It is expected that there will be 50 billion (and by some estimates, more) IoT interconnected devices in the coming years [1]. This growth in the number of connected devices opens the doors to new applications, for example in agriculture, transportation, manufacturing, smart homes, smart healthcare, and M2M communications. Many challenges such as energy efficiency, reliability, security, interoperability and scalability have to be overcome before the planned growth in the number and functionalities of IoT can be realized. Given the expected number of devices, one of the most important challenges is energy efficiency and hence greening the associated networks, which grabbed attention in both the academic and industrial domains. Cloud computing is investigated as one of the solutions to the energy efficiency challenge in networks and data centers. However, with the large data generated by the connected IoT objects (expected to generate 2.3 trillion gigabytes of data every day by year 2020), new cloud computing with IoT poses trending challenges which need to be addressed. Among these challenges is the hunger for more processing capabilities, high communication bandwidth, security, and latency requirements. A number of solutions were suggested to address these issues. The work started with distributed content placement, thus bringing content closer to users,



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SEPERABLE AND REVISIBLE DATA HIDING USING TRIPLE ENCRYPTION STANDARD IN CLOUD COMPUTING

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Abstract: Wireless multimedia dispatches have developed fleetly with adding wireless access bandwidth and popular intelligent bias. In the decade, a number of studies have been conducted to design robust and effective schemes for delivering multimedia content over error-prone wireless networks. In discrepancy, veritably many of those studies have concentrated on the security aspect of similar transmission. There have been adding demands for the security of wireless multimedia Operations in recent times. Wireless networks when compared to traditional wired networks, are more likely prone to vicious attacks. Current security styles include physical layer and operation layer security technologies singly and independently. Generally, physical layer information is dynamic in wireless networks, and operation layer information is related to wireless multimedia content delivery; both have significant impact on security performance. This study proposes a common frame combining both the physical and operation layer security technologies. Specifically, by exercising the security capacity and signal processing technologies at the physical layer and the authentication and watermarking strategies at the operation layer, the available network coffers can be employed efficiently. Moreover, scalable multimedia security services could be maximized within given multimedia delivery deadlines. So, in particular, this common scheme could be enforced fluently with low communication above, which facilitates the deployment in large-scale wireless multimedia systems.

Keywords: Watermark Algorithm, Least Significant Bit, Image Processing, Content Delivery.

1. INTRODUCTION

In recent times, with the rise of cloud-computing and software-as-a-service, storehouse of cloud has come a exploration hotspot in the field of information storehouse.

Compruned with traditional storehouse bias, pall storehouse is further than just a piece of tackle, but a system conforming of multiple corridor similar as network bias, storehouse bias, waiters, operation software, public access interfaces, access networks, and customer programs. Druggies who need storehouse services no longer need to set up their own data centers, just apply to the force- side platform for storehouse services, therefore avoiding spare construction of the storehouse platform. Still, considering security and usability, numerous companies and individualities are reticent to entrust their sensitive data to third- party service providers. Although the providers can guarantee data continuity, they still cannot completely guarantee data confidentiality when faced with vicious workers.

Recent reports indicate that utmost of pall services is still suddenly of crucial capabilities to ensure compliance. They warrant translucency in government oversight and security mechanisms to cover data. In general, if data is stored in one cloud garçon, the only way to ensure confidentiality is to cipher the data on the customer, upload it to the pall, and decipher it as it's downloaded. Unfortunately, this system requires a large number of keys



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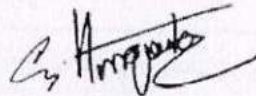
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Abstract. The primary effort in learning coal detail is observing coal features. This project developed a coal classification system which allows researchers to do a search by classification even when they don't know coal name by simply observing their characteristics. The system consists of coal-features, finds the features according to input features, and returns selected clusters. Nowadays, coal classification utilizes machine vision to grab and analyze color, shape, size and surface texture. However, the newly proposed extraction margin method only carries out roughly and there is a difference between the margin of the extracted shape, polygon, and the shape margin of the original image still. This project groups i.e., clusters the coal using image area size, pixel color values similarity, based on image's brightness values and coal shapes. In addition, the study aims in finding the gangue in coal. Based on the pixels count of gangue colors, total gangue percent in the coal is calculated and displayed. This assists in evaluating coal quality. If future, researchers were to expand to other features, coal gangue quantity, etc., even those that are hard to quantify, can also be quantified. ANN is used to classify the coal dataset.

Keywords: Coal Classification, Centroid Contour, Deep Learning, Object Recognition.

I. INTRODUCTION

Today, coal is the most required energy source for modern society. Its has a complex recovery process, and it can be mixed with considerable amount of Silicon Dioxide SiO_2 as coal gangue. The coal gangue's main components are both Al_2O_3 and SiO_2 , which are sulfur rich and great quantities of heavy metals like cadmium, arsenic, chromium, copper, etc. Burning coal gangue results in emission of hazardous substances which cause environmental pollution.

In addition, when comparing with coal, the combustion value of coal gangue is lower, which can minimize the total energy for coal mixed with coal gangue. Therefore, sorting coal gangue from its main coal is an extremely important link and it has two traditional sorting formula/methods: a) human sorting and b) wet cleaning methods.

A sieving machine sorts pure/raw coal into coal equal to or greater than 100 mm and also less than 100 mm; a new transportation system is used to transport the coal from underground to basement ground; and coal \leq or \geq 100 mm is transported to sorting workshop where skilled workers can sort coal gangue from its coal according to gray values and texture differences. In addition to these above traditional methods, representative research methods cover radar detection, ray casting, color separation, mechanical vibration, etc., which has good detection methods/properties, but has high requirements also for runtime environments and can impact human health.

With the computer technology development, ImageNet is also combined with convolutional neural networks (CNNs), and deep learning developed rapidly.

Compared with old traditional sorting methods, latest object detection algorithms learn from sample images using a CNN, which extract features of coal and coal gangue and has most significant advantages, like high identification speed and high precision.

Recognizing coal from coal gangue is an important working part of the coal industry and is mainly conducted using human sorting at present. Consequently, considerable man power is required, which adds a risk burden to companies and results in poor efficiency. As a main and important branch of artificial intelligence, deep learning has widely applied in many fields, main in machine vision/voice recognition, its performance is improved greatly compared with performances of traditional learning methods, and it has good a transfer learning ability also.

This project proposed an improved ANN algorithm as classic deep learning method for intelligent and highly accurate recognition for coal and coal gangue. Compared to YOLO algorithms, ANN has a better anchor value using cluster analysis application to different data sets, a good anti-interference ability to minimize the impacts from mine dust/shock and acquires more richer detailed information by adding number of layers of the feature pyramid.

a) Auto-inspecting and grading system for machine vision for extracting and analyzing size, color, shape, and surface texture. The proposed extraction margin method can be carried out roughly and there is still a variation between both margin of the extracted shape, polygon, and margin of the shape of the original image. Therefore, for improving the method to capture the coal outline, this project proposes a Centroid-Contour distance for capturing outline of the coal features and the distance from center point to each margin point to more accurately quantify coal features of original image.

As a result, that captured image can be consistent with original coal image. Since image recognition technology to quantify three dimensional features, is difficult, and accuracy of the quantified value can not be verified, accuracy of the feature search query is definitely impacted and so cannot be performed. Therefore, this project applied Association Rule method to those coal features that cannot be accurately quantified.

The associating similarity method with association rule analysis effectively improves fault-tolerance and accuracy of overall systematic coal search query. This study tried to develop a new coal classification system with high tolerance and accuracy, as well as prove that Association Rule will be effectually complement the shortcomings of the inability for quantifying features and further improve fault-tolerance and accuracy of the search query system. The system's advantage is that it allows users to easily find gangue information too. Furthermore,



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Photovoltaic Systems

Artificial Intelligence–Based Fault
Diagnosis and Predictive Maintenance

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IMPROVE WORKFLOW SCHEDULING TECHNIQUE USING SEMO IN CLOUD COMPUTING

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Abstract. In the cloud environment, the workflows have been frequently used to model large-scale problems in areas such as bioinformatics, astronomy, physics and arithmetic process. Such a resource obtains a task from the cloud providers that has ever-growing data and computing requirements and therefore demand a high-performance computing environment in order to be executed in a reasonable amount of time. These workflows are commonly modeled as a set of tasks interconnected via data or computing dependencies. Cloud computing is the latest distributed computing paradigm and it offers tremendous opportunities to solve large-scale problems. However, it presents various challenges that need to be addressed in order to be efficiently utilized for workflow applications. Although the workflow scheduling problem has been widely studied, there are very few initiatives tailored for cloud environments. Furthermore, the existing works fail to either meet the user's Quality of Service (QoS) requirements or to incorporate some basic principles of cloud computing such as the elasticity and heterogeneity of the computing resources. This project proposes a resource provisioning and scheduling strategy for scientific workflows on Infrastructure as a Service (IaaS) and Platform as services clouds (PaaS). This project presents an algorithm based on the Superior Element Multitude Optimization (SEMO), which aims to minimize the overall workflow execution cost while meeting deadline constraints. The main scope of the project is used to analyze best available resource in the cloud environment depend upon the total execution time and total execution cost which is compare between one process to another process. If the provider satisfies the time least time, then the process becomes to termination.

Keywords: Cloud Computing, Resource Provisioning, Particle Swarm Optimization.

I. INTRODUCTION

Cloud computing is internet- grounded computing in which large groups of remote waiters are networked to allow sharing of data-processing tasks, centralized data storehouse, and online access to computer services or coffers. Shadows can be classified as public, private or mongrel. Cloud computing is a type of calculating that relies on participating computing coffers rather than having original waiters or particular bias to handle operations.

Virtualization is the main processing in Cloud computing. Virtualization software allows aphysical computing device to be electronically separated into one or further "virtual" bias, each of which can befluently used and managed to perform calculating tasks. Cloud computing adopts generalities from Service acquainted Architecture (SOA) that can help the stoner break these problems into services that can be integrated to give a result.

Cloud computing provides all of its coffers as services, and makes use of the well- established norms and stylish practices gained in the sphere of SOA to allow global and very easier access for cloud services in a standardized way. Cloud computing is a kind of grid computing; it has evolved by addressing the QoS (quality of service) and trustability problems. Cloud computing gives the tools as well as technologies to make data/ cipher intensive parallel operations with affordable prices when compared with traditional resemblant computing ways.

EYE PUPIL MOVEMENT BASED ON CURSOR CONTROL MECHANISM USING IMAGE PROCESSING

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Abstract. The project introduces a technique for human computer interface with the help of pupils of eye. Normally, keyboard and mouse are used to make the interaction between the system and the user for input devices. The project presents a hand free interaction device for the people who have certain medical issue or kind of disability. This technique is planned to change the conventional computer screen pointing devices for the people who have certain disability. The application controls the computer's cursor with the users' eye movement. The users are allowed to use the application with the help of users' eyesight and control the cursor movement as per the users'direction. Aim of this application is to introduce a low cost based system for the people who have the disability and connect them with the real world. The project involves finding pupil location from the given source image. In addition it finds whether blink activity is occurred in successive images. The project also improves the robustness against the lighting conditions in the input images.

Keywords: Image Processing, Amyotrophic Lateral Sclerosis, Electrooculographic Potential, Pupil Detection.

I. INTRODUCTION

As we know that the advances in the computer system increases day by day veritably fleetly and extensively. Every day a new technology is introduced in the request. There are so numerous technology and operations are available in the request for the accessible life style of the stoner, but the person with the physical disabilities aren't suitable to pierce these operations same as the other stoner.

For that purpose then we're trying to introduce a fashion that's available for the stoner who has certain disability or some medical issue. As we know that currently there's tremendous proliferation in the road accident and the people lost their body corridor in those accidents in similar cases the people aren't suitable to pierce the device like computer or laptops. This may creates a hedge between the stoner and the system.

To lower down the hedge or the disturbance is a demanding task currently. There are so numerous ways available in the request to make the interface with the system similar as voice controlled device; facial recognition fashion, Head movement fashion but every fashion has its own advantages and disadvantages.

Piecemeal from the entire eye shadowing system is the stylish volition to make the communication between the system and the stoner. In eye shadowing system druggies are allowed to use their pupil of eye to move the cursor on the screen where the direction of the eye indicates.

Then we're trying to introduce a low cost grounded operation for the hindered people to use their certain body corridor and make the interface with the system and the stoner and connect them to the real world. There are five modules to apply the eye tracking system. The following are the objects of the study

- To find eye area in the given images.
- To find white pixels area (left, right, over and down of pupil) in the given image.
- To make the eye tracking system one of the stylish operation for hindered persons.
- To check for blink exertion in consecutive images.
- To make the cursor move automatically or run an operation grounded on pupil movement or blink action.

II. LITERATURE REVIEW

In this paper [1], the authors developed a system that used a camera to visually track the tip of the nose or the tip of a finger or some other selected feature of the body and moves the mouse pointer on the screen accordingly. People without disabilities quickly learn to use the system to spell out messages or play games. People with severe cerebral palsy have tried the system with some



TIME SERIES ANALYSIS AND FORECASTING OF AIR POLLUTION PARTICULATE MATTER USING SARIMA AND SVM APPROACH

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Abstract: Air pollution is one of the major environmental challenges in a smart megacity terrain. Real-time monitoring of pollution data enables the metropolitans to dissect the current business situation of the megacity and take their opinions consequently. Deployment of Big data Analytical Tool grounded detectors has vastly changed the dynamics of prognosticating air quality. The quality of the atmospheric terrain is an important condition for the long-term survival of humans on earth. A clean suitable atmospheric terrain is needed for the healthy development of mortal beings. Current development of country's frugality, transportation and assiduity with the enhancement of urbanization, environmental pollution problems have gradationally come prominent, but this is contrary to people's vision of pursuing a high-quality life. Now the problem of haze, photochemical problems in the air, and global warming is formerly a crucial issue of global concern. Being exploration has used different machine literacy tools for pollution vaticination; still, relative analysis of these ways is frequently needed to have a better understanding of their processing time for multiple datasets. This design performed the pollution vaticination using sarima retrogression fashion and also SVM bracket approach with a relative study to dissect the stylish model for directly prognosticating the air quality. SVM bracket is performed for pollution estimation using multiple available data sets. The design is designed using R Studio. The rendering language used is R3.4.4.

Keywords: Data Mining, Air Pollution, Time Series Analysis, Sarima Model.

I. INTRODUCTION

The quality of the atmospheric terrain is an important condition for the long-term survival of humans on earth. A clean suitable atmospheric terrain is needed for the healthy development of mortal beings (1). Still, with the fast development of country's frugality and assiduity

and nonstop increase in position of urbanization, air is seriously defiled. Increased air pollution affects the people physical health, and increases threat of respiratory infections, heart complaint, and lung cancer.

Because of frequent environmental pollution accidents and severe bank pollution incidents across the country, government and public are veritably concerned about this air pollution. 2016 WHO report said that seven million people worldwide die each time as the exposure result to medium (out-of-door inner) air pollution.

Utmost susceptible to air pollution are people who are senior, veritably youthful, with pre-existing respiratory conditions or low socioeconomic status. Particulate matter (PM), ozone (O3), nitrogen dioxide (NO2), and sulfur dioxide (SO2) are the adulterants with the strongest substantiation of health goods.

Particulate matter is one of the atmospheric adulterants caused by burning coal as an energy source or from bus-mobile exhaust. Due to the appearance of PM, the conformation of different chemical composition, flyspeck size distribution, and other physical and chemical parcels are veritably different in the atmosphere, and their behavioral impact causing different natural goods on mortal health.

Thus, it's important important for every country and metropolitan metropolises to keep control and cover the PM2.5 in atmosphere to maintain good health and safe terrain. This study proposes an approach for vaticination of unborn soothsaying of air quality of metropolitan megacity. According to the Air Quality Life Index (AQLI), Pakistan was ranked the 5th most weakened country in the world in 2016. The National Environmental Quality Norms for Ambient Air cover sulfur dioxide (SO2), nitrogen dioxide



A LION OPTIMIZATION BASED K-PROTOTYPE CLUSTERING ALGORITHM FOR MIXED DATA

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Abstract. Data Mining is used to gather information from huge set of data. Clustering is a grouping task for a set of objects. Clustering algorithms are divided by several types including hierarchical clustering algorithms,partitioning clustering and density based. The partitioning clustering includes K-Means clustering, K-Modes Clustering and CLARA algorithm. The K-Means clustering is only used for numeric data which has original optima. The K-Modes extends to the K-Means when the sphere is categorical. One of the most important algorithms for clustering heterogeneous type of data is the K- Prototype algorithm. This algorithm is veritably salutary for clustering large data sets. One of the simple optimization methods is Lion Optimization, that could be applied effectively for enhancing clustering results. It's useful for handling mixed data set. This leads a good optimization to calculate the centroid with K- Prototype clustering method. To overcome the problem in this clustering, Lion optimization Algorithm can be used. The proposed algorithm is enforced on standard standard dataset taken from UCI Machine Learning Repository. The Lion Optimization grounded K-Prototype clustering algorithm yields a better result when compared with the K- Prototype clustering.

Keywords: Kmeans Clustering, Lion Optimization, Data Mining, Machine Learning.

I. INTRODUCTION

Data mining is the analysis step in “ knowledge discovery in databases” or KDD. It's the process of sorting through large data sets to identify patterns and establish connections to break problems through data analysis. The data mining task issemi-automatic/ automatic analysis of data with large amounts for rooting preliminarily unknown, intriguing patterns similar as groups of data records (in cluster analysis), dependences (in association rule mining and successional pattern mining) and unusual records (in anomaly discovery).

There are two orders of data mining are Descriptive The descriptive orders include bracket,

retrogression, time series. The order includes clustering, summarization, association rules, sequence discovery.

Data mining is generally classified as association, bracket, clustering, and vaticination (4). Within data mining, bracket/ vaticination are two kinds of data analysis used to wring models to describe Essential data module or to anticipate unborn data trends. The bracket system has two corridor the first part is learning practice, in which training data will be anatomized. The learned type or classifier shall be characterizing in the shape of bracket regulations.

The other position of bracket practice, in which test information to calculate roughly the fineness of bracket style or classifier. However, the regulations can be useful to bracket of new data, If the fineness is respectable. In fact, bracket system is supervised literacy, which is class position or analysis target is formerly known. As a result, the bracket form which is represented through rules structures will be constructed in the bracket system.

In this case, the created model will be representing the precious information and is use for forthcoming planning. Bracket is one kind of logical modeling. Further particularly, bracket is a conception for conveying rearmost objects to predefined type or classes from a collection of labeled records, construct the prototype similar as a decision trees and estimates markers for forthcoming not labeled records. Colorful bracket ways are KNN, K-Prototype; K- Captain are analysis and handed a comprehensive assessment for different bracket approaches in data mining.

CLUSTERING

Clustering is anun-supervised literacy. A cluster is a collection of objects which are analogous between them and are different to the objects belonging to other clusters. Clustering is also used to reduce the dimensionality of the



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AN EFFECTIVE ALERTING SYSTEM OF SEWAGE MONITORING TO SECURE HUMANS BY IDENTIFYING THE TOXIC GASES

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Abstract. The project is entitled, "An effective alerting system of sewage monitoring to secure humans by identifying the toxic gases". In many developing countries, the sewage cleaners still clean without knowing or understanding the presence of poisonous gases, which compromise their lives due to their exposure to the dangerous gases. This project detects harmful gases which may get emitted via sewage.

A mobile phone or computer is used to display air quality data. The sewerage system is underground in the majority of the cities, and it is the responsibility of municipal corporations to keep cities clean, healthy, and safe. This work is aimed at detecting toxic gases and altering the system by designing a microcontroller. When the air quality deteriorates beyond a certain limit and when a sufficient amount of harmful gases is present, like carbon monoxide, hydrogen sulfide, ammonia, methane, esters, sulfur dioxide and nitrogen oxides, it will be sensed with best Air quality sensor MQ135, microcontroller automatically alters the system. When the gas concentration level rises, the buzzer alarm is activated immediately, and also an alert message (SMS) is sent via GSM to the authorized person and the corporation person. Think speak is an additional platform that can be used to visualize data in the cloud. The advantage of this project's associated alerting system over IoT technology is its ability to provide quick response times and precise detection of a potential emergency. The reading values of the gas sensor will be driven out by an Arduino module without the assistance of human hands. (**Keywords** : Arduino, Air quality sensor MQ135, GSM, Think speak)

LINTRODUCTION

An accumulation of deathful gases obtained by the disposal of domestic wastes or industrial wastes. Sewer gases can include hydrogen sulfide, ammonia, methane, carbon monoxide, sulfur dioxide, and nitrogen oxides. Sewer gases can cause health problems. There are still cases where the hazardous gases emitted by sewage endanger the lives of workers in developing countries like India where the sewage has to be cleaned by unskilled labor. Furthermore, such a harmful gases, a highly concentrated exposure of gases which, may even lead to their death. Thus an efficient method to detect the presence of such harmful gases becomes a necessity.

The main objectives are:

- The closed sewages emit harmful gases.
- Untrained sewer cleaners still clean the sewers, putting their lives at risk due to the release of harmful gases.
- To identify the safety limits of these gases and calculate the level by using air quality sensor.
- Concentration of these toxic gases present in the air is identified accurately using cloud(Thinkspeak).
- Monitor and detect the harmful gas emission from sewage and provide vital information through GSM, information consists of what kind of health effects may rise to human.



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ATTENDANCE MANAGEMENT SYSTEM BY USING FACE RECOGNITION

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Abstract -Face recognition is the identification of humans by the unique characteristics of their Faces. Face recognition technology is the least intrusive and fastest bio- metric technology. It works with the most obvious individual identifier the human face. This research aims at providing a system to automatically record the students' attendance during lecture hours in a hall or room using facial recognition technology instead of the traditional manual methods. The objective behind this research is to thoroughly study the field if pattern recognition (facial recognition) which is very important and is used in various applications like identification and detection. Nowadays we are facing a pandemic, there is a situation where people are not ready to wear face masks, or they do not wear them properly, so, in this research, we are introducing an automatic mask detection system using image processing and soft computing techniques to tackle this problem. In the midst of the pandemic, covering our faces with a mask has become a new normal, as face masks are active in preventing the spread of the virus. Other precautionary measures are also advocated by the government apart from covering faces, to ensure protection and hygiene. In addition, because of the limited supply of masks in the industry, millions of people are learning to make their face masks. On the opposite, identifying faces with masks on any surveillance devices would be demanding while ensuring less access control in buildings. Face coverage with masks is a problem for algorithms and success in face detection. Currently, the authorities have to manually ask people to wear masks even then they tend to fool the authorities, to avoid that we are proposing a face Machine learning-based model of recognition. In the field of computer vision, not wear a mask, they are given an alert and they would have to wear a mask

INTRODUCTION

The technology aims in imparting a tremendous knowledge oriented technical

innovations these days. Deep Learning is one among the interesting domain that enables the machine to train itself by providing some datasets as input and



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PREDICTION OF ENVIRONMENTAL POLLUTION USING NEURAL NETWORK

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Abstract. In general environmental pollution is one of the most considerable one as challenges in a smart megacity terrain. In denitrifying of pollution data enables the metropolitans to dissect the current business situation of the megacity and take their opinions consequently. Deployment of Big data Analytical Tool grounded detectors has vastly changed the dynamics of prognosticating air quality.

This project performed the pollution prediction using sarima regression technique and also classification using neural network approach with a comparative study to analyze the best model for accurately predicting the air quality with reference to data size and processing time. Current research has used different machine learning tools for pollution prediction; however, comparative analysis of these techniques is often required to have a better understanding of their processing time for multiple datasets.

In analyzing the standard of atmospheric terrain is an important condition for the much longer survival of living people on environment. A pure suitable atmospheric terrain is needed for the healthy development of mortal beings. Now the problem of haze, photochemical problems in the air, and global warming is formerly a crucial issue of global concern. Current implementations of country's frugality, transportation and assiduity with the enhancement of urbanization, environmental pollution problems have gradationally come prominent, but this is contrary to people's vision of pursuing a high- quality life. The project is designed using R Studio. The coding language used is R 3.4.4.

Keywords: Data Mining, Air Pollution, Time Series Analysis, Sarima Model.

I. INTRODUCTION

Air quality evaluation is an important way to monitor and control air pollution. The characteristics of air supply affects its suitability for a specific use. A few air pollutants, called criteria air pollutants, are common throughout the United States. These pollutants can injure health, harm the environment and cause property damage. The current criteria pollutants are:

- Carbon Monoxide (CO)

- Lead (Pb)
- Nitrogen Dioxide (NO₂)
- Ozone (O₃)
- Particulate matter (PM)
- Sulfur Dioxide (SO₂).

The Air Quality System (AQS) contains ambient air pollution data collected by EPA, state, local, and tribal air pollution control agencies from over thousands of monitors. AQS also contains meteorological data, descriptive information about each monitoring station (including its geographic location and its operator), and data quality assurance/quality control information. AQS data is used to assess air quality, assist in Attainment/Non-Attainment designations, evaluate State Implementation Plans for Non-Attainment Areas, perform modeling for permit review analysis, and other air quality management functions. AQS information is also used to prepare reports for Congress as mandated by the Clean Air Act

• Air Quality Standards

Office of air quality planning and standards (OAQPS) manages EPA programs to improve air quality in areas where the current quality is unacceptable and to prevent deterioration in areas where the air is relatively free of contamination. To accomplish this task, OAQPS establishes the National Ambient Air Quality Standard (NAAQS) for each of the criteria pollutants. There are two types of standards - primary and secondary.

- **Primary standards:** They protect against adverse health effects;
- **Secondary standards:** They protect against welfare effects, such as damage to farm crops and vegetation and damage to buildings.

Because different pollutants have different effects, the NAAQS standards are also different as shown in Table 2. Some pollutants have standards for both long-term and short-term averaging times. The short-term standards are designed to protect against acute, or short-term, health effects, while the long-term standards were established to protect against chronic health effects.



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SOFTWARE VULNERABILITY CLASSIFICATION MODEL USING NEURAL NETWORK

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Abstract. Security risks are caused mainly due to software vulnerabilities. If any vulnerability is exploited due to a malicious attack, it will greatly compromise the system's safety. It may even create catastrophic losses. So, automatic classification methods are enviable for effective management of vulnerability in software, thereby improving security performance of the system. It will reduce the risk of system being attacked and spoiled. In this study, a new model has been proposed named automatic vulnerability classification model (IGTF-DNN) Information Gain based on Term Frequency - Deep Neural Network. The model is built using information gain (IG) which is based on frequency-inverse document frequency (TF-IDF), and deep neural network (DNN): TF-IDF is used for calculating frequency/weight of words prepared from vulnerability description; Information Gain is used to select features for gathering optimal set of feature words. Then deep neural network model is used to construct an automatic vulnerability classifier to achieve effective vulnerability classification. The National Vulnerability Database of the United States has been used to test proposed model's effectiveness. Compared to KNN, the TFI-DNN model has achieved better performance in evaluation indexes which includes precision and recall measures.

Keywords: Software Engineering, Software Vulnerability, Deep Neural Network, Information Gain.

I. INTRODUCTION

Due to information technology's fast development, its impacts to industries by application of the Internet and computers are powerful. Not only, they brought convenience, but also huge risks and hidden dangers at the same time. The digitalization level of industries' improvement makes information security problems to become increasingly outstanding. Vulnerabilities are software/hardware defects and problems of system being illegitimately exploitable made by people who are unauthorized nature. As soon as vulnerability of information system is exploited by suspicious attack, the information system's security will be at great risk. It may even create inestimable consequences. In 2017, Windows system vulnerabilities are exploited by hackers to expose 100,000 organizations around the world to Bitcoin

ransomware. Again in the same year, Microsoft released a total of 372 vulnerability patches for Office.

Hackers make use of office vulnerabilities to conduct Advanced Persistent Threat (APT) attacks, spread ransomware, botnets and so on. Nowadays, the count and variety of vulnerabilities are gradually increasing, so that the analysis and management of software vulnerabilities are becoming more important.

If the vulnerability can be classified and managed with effectiveness, it may not only enhance the efficiency of vulnerability recovery and management, but also diminish the risk of systems being attacked and collapsed, which is crucially important for security performance of systems. As software security vulnerabilities play a major role in cyber-security assault, more and more researches on vulnerability classification are conducted by applicable security researchers.

The earlier vulnerability classification method RISOS [1], is aimed at the operating system of computer, mainly segments the OS vulnerabilities into 7 categories from the attack perspective, and elaborates how to exploit vulnerabilities instead of triggering the vulnerabilities' situation. The PA vulnerability classification method in [2] not only studies the operating system vulnerabilities, but also classifies the vulnerabilities already present in the application.

Andy Gray vulnerability classification method [3] introduced a vulnerability classification system consisting often categories according to the various analysis needs of vulnerability. As the complexity of vulnerabilities increases, limitations of traditional artificial vulnerability classification methods become clearer.

Therefore, researchers give more attention to vulnerabilities' automatic classification. Recently, a large number of machine learning methods have been reported in text classification field [4]. Classifying data by vulnerability description is a kind of text classification.

Therefore, the automatic classification of vulnerabilities problems can be solved using machine learning methods. Shua at al. [5] applied the SVM classification method based on LDA model in vulnerability classification domain.

The SVM based upon topic model makes full use of number of distributed vulnerabilities for classification. The experiment results indicated that SVM has attained good results in vulnerability grouping.



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HEART DISEASE IDENTIFICATION USING MACHINE LEARNING METHODOLOGIES

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Abstract— In day-to-day life, there are numerous factors which affect a mortal heart. Numerous problems are being at a rapid-fire pace and new heart conditions are fleetly being identified. In moment's world of stress Heart, being an essential organ in a mortal body which pumps blood through the body for the blood rotation is essential and its health is to be conserved for a healthy living. The main provocation of doing this design is to present a heart complaint vaticination model for the vaticination of circumstance of heart complaint. Further, this exploration work is aimed towards relating the stylish bracket algorithm for relating the possibility of heart complaint in a case. The identification of the possibility of heart complaint in a person is complicated task for medical interpreters because it requires times of experience and violent medical tests to be conducted. In this work, three data mining bracket algorithms like KNN bracket, SVM bracket, Naïve Bayes and Random Forest are addressed and used to develop a vaticination system in order to dissect and prognosticate the possibility of heart complaint. The main idea of this significant exploration work is to identify the algorithms suitable for providing maximum accuracy when classification of normal and abnormal person is carried out. Therefore prevention of the loss of lives at an earlier stage is being possible. It is sure that Random Forest algorithm performs better when compared to other algorithms for heart complaint prediction. The design is designed using R Language3.4.4 with R Studio.

Keywords— Data mining, Prediction model Classification algorithms, Feature selection, Heart disease prediction

I. INTRODUCTION

There may also be several inheritable factors through which a type of heart complaint is passed down from generations. According to the World Health Organization, every time more than 12 million deaths are being worldwide due to the colorful types of heart conditions which is also known by the term cardiovascular complaint.

The term Heart complaint includes numerous conditions that are different and specifically affect the heart and the highways of a mortal being. Indeed youthful aged

people around their 20-30 times of lifetime are getting affected by heart conditions.

The increase in the possibility of heart complaint among youthful may be due to the bad eating habits, lack of sleep, restless nature, depression and multitudinous other factors similar as rotundity, poor diet, family history, high blood pressure, high blood cholesterol, idle geste, family history, smoking and hypertension. The opinion of the heart conditions is a veritably important and is itself the most complicated task in the medical field.

All the mentioned factors are taken into consideration when assaying and understanding the cases by the croaker through homemade check-ups at regular intervals of time. The symptoms of heart complaint greatly depend upon which of the discomfort felt by an existent. Some symptoms aren't generally linked by the common people. Still, common symptoms include casket pain, breathlessness, and heart pulsations. The casket pain common to numerous types of heart complaint is known as angina, or angina pectoris, and occurs when a part of the heart doesn't admit enough oxygen. Angina may be started by stressful events or physical exertion and typically lasts under 10 twinkles.

Heart attacks can also do as a result of different types of heart complaint. The signs of a heart attack are analogous to angina except that they can do during rest and tend to be more severe. The symptoms of a heart attack can occasionally act indigestion. Heartburn and a stomach pang can do, as well as a heavy feeling in the casket. Other symptoms of a heart attack include pain that travels through the body, for illustration from the casket to the arms, neck, back, tummy, or jaw, flightiness and dizzy sensations, gushing sweating, nausea and vomiting. Heart failure is also an outgrowth of heart complaint, and breathlessness can do when the heart becomes too weak to circulate blood.

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,



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A PROFICIENT PRIVACY PROTECTION METHOD FOR CLOUD COMPUTING

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Abstract. With the rapid development of Cloud computing, further Cloud services are into our daily life, and therefore security protection of Cloud services, especially data privacy protection, becomes more important. Still to perform privacy protection causes huge outflow. Therefore it's a critical issue to perform the most suitable protection to decline performance consumption while give privacy protection. In this design, the Complete Sequestration Protection Scheme (CSPS) is proposed to give the applicable privacy protection which is satisfying the stoner- demand privacy demand and maintaining system performance contemporaneously. At first, the privacy position is anatomized by druggies those bear and quantify security degree and performance of 3DES and AES encryption algorithms. Also, an applicable security composition is deduced by the results of analysis and quantified data. Eventually, the simulation results show that the CSPS not only fulfills the stoner- demand privacy but also maintains the Cloud system performance in different Cloud surroundings.

Keywords: Cloud Computing, Cryptography, Symmetric Encryption, Third Party Auditing.

I. INTRODUCTION

Cloud computing is rising as the most suitable paradigm for individualities and associations to pierce affordable, scalable, ubiquitous, and on- demand computing coffers, operations, and data storehouse services. Cloud storehouse systems, similar as Dropbox, Google Drive, Apple's iCloud, Microsoft OneDrive, etc., enable druggies to ever store a large volume of data that can be penetrated and participated among druggies, anyhow of time and position constraints. With the growing fashionability of Cloud computing, the number of enterprises and individualities shifting toward the use of Cloud has increased fleetly.

As a result, a vast quantum of important particular information and critical association data, similar as particular health records, government documents, and

company finance data, etc., are transmitted across the Internet and stored in Cloud waiters. Still, outsourcing sensitive data suffers from critical security pitfalls, sequestration, and access control problems.

These are common enterprises of associations and individualities using Cloud services. When data possessors resettle their sensitive data to the pall, they lose an element of control over their data. Cloud druggies have no guarantee about the way these sensitive data will be treated and defended by Cloud providers.

Although the Cloud provides druggies with the convenience of data access across multiple bias, by using Cloud services, stoner data are vulnerable to a verity of vicious attacks and pitfalls. Security incidents do constantly. Indeed worse, Cloud service provider may blunder stoner data to unauthorized realities for illegal profit.

One doable result to overcome these problems is to use cryptography. All sensitive data have to be translated by data possessors previous to storing them into the potentially untrustworthy pall. The strength of the encryption scheme is largely dependent on the strength of the crucial operation fashion used. The security of the encryption scheme lies on the secretiveness of the keys that are known only to the druggies authorized to read their separate data, and not only on the secretiveness of the encryption algorithm used.

Given the quantum of data being stored and participated in Cloud and the adding number of data druggies, designing a cryptographic scheme for Cloud storehouse that meets the conditions of security, effectiveness, ease of use, and inflexibility is a grueling task. Traditional encryption operations, generally, suffer from limited usability due to the homemade result handed by operations. Data possessors must cipher their data manually prior to uploading to the pall. Also, druggies have to manually induce, manage, and store the encryption keys.



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DETECTION AND CLASSIFICATION OF FRUIT DISEASES USING IMAGE PROCESSING

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Abstract :

Fruit conditions are most considerable bone in the agrarian assiduity worldwide. In this design, an image processing approach is proposed for relating passion fruit conditions grounded on convolutional neural network. According to the CNN algorithm, fruit image details are taken by the being packages from the frontal end used in this design. Still, it can take a many moments. So, this proposed system can be used to identify fruit conditions snappily and automatically. This proposed approach is composed of the following main way that getting input image, Image Preprocessing, Relating affected places, punctuate those affected places, Vindicating training set, showing result. Many types of fruit conditions, videlicet bitter spoilage, sooty blotch and fine mildew images were used for this approach. This approach was tested according to fruit complaint type and its' stages, similar as fresh and affected. The algorithm was used for detecting the complaint of the fruit. Images were handed for training, similar as bitter spoilage images, sooty blotch images and fine mildew 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 point birth and Support corrosion system was used for creating the model. According to this approach, fruit conditions can be linked in the average delicacy of 79% and its' stage can be linked in average delicacy 66%.

I. INTRODUCTION

The classical approach for discovery and identification of fruit conditions is grounded on the naked eye observation by the experts. In some developing countries, consulting experts are precious and time consuming due to the distant locales of their vacuity. Automatic discovery of fruit conditions is essential to automatically descry the symptoms of conditions as early as they appear on the growing fruits. Fruit conditions can beget major losses in yield and quality appeared in harvesting. To know what control factors to take coming time to avoid losses, it's pivotal to fete what's being observed.

For illustration, some common conditions of apple fruits are apple spoilage and apple blotch. Apple rot infections produce slightly sunken,

indirect brown or black spots that may be covered by a red halo. Apple blotch is a fungal complaint and appears on the face of the fruit as dark, irregular or lobed edges. Visual examination of apples is formerly automated in the assiduity by machine vision with respect to size and color.

Still, discovery of blights is still problematic due to natural variability of skin color in different types of fruits, high friction of disfigurement types, and presence of conditions. The studies of fruit can be determined by apparent patterns of specific fruit and it's critical to cover health and descry complaint within a fruit. Through proper operation action similar as fungicides, pesticides and chemical operations one can promote control of conditions which interns ameliorate quality.



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MULTI-STRATEGY SENTIMENT ANALYSIS OF CONSUMER REVIEWS WITH PARTIAL PHRASE MATCHING

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Abstract:

Sentiment analysis is useful in commercial intelligence application environment and recommender systems, because it is a very convenient channel for the two ends of the supply to communicate. In the sentiment analysis, many strategies and techniques were used, such as machine learning, polarity lexicons, natural language processing, and psychometric scales, which determine different types of sentiment analysis, such as assumptions made, method reveals, and validation dataset. Since Internet has become an excellent source of consumer reviews, the area of sentiment analysis (also called sentiment extraction, opinion mining, opinion extraction, and sentiment mining) has seen a large increase in academic interest over the last few years. Sentiment analysis mines opinions at word, sentence, and document levels, and gives sentiment polarities and strengths of articles. As known, the opinions of consumers are expressed in sentiment phrases. Traditional machine learning techniques can not represent the opinion of articles very well. This project proposes a multi-strategy sentiment analysis method with semantic similarity to solve the problem with partial phrase matching. Naïve Bayes classification is also applied to find the probability of data distribution in various category of data set. The project is designed using R Studio 1.0. The coding language used is R 3.4.4.

Keywords: Sentiment Analysis, Naïve Bayes Classification, Multiple Strategy, Machine Learning.

I. INTRODUCTION

Sentiment analysis is contextual mining of text which identifies and extracts subjective information in source material, and helping a business to understand the social sentiment of their brand, product or service while monitoring online conversations. However, analysis of social media streams is usually restricted to just basic sentiment analysis and count based metrics. This is akin to just scratching the surface and missing out on those high value insights that are waiting to be discovered. So what should a brand do to capture that low hanging fruit?

With the recent advances in deep learning, the ability of algorithms to analyse text has improved considerably. Creative use of advanced artificial intelligence techniques can be an effective tool for doing in-depth research. We believe it is important to classify incoming customer conversation about a brand based on following lines:

1. Key aspects of a brand's product and service that customers care about.
2. Users' underlying intentions and reactions concerning those aspects.

These basic concepts when used in combination become a very important tool for analyzing millions of brand conversations with human level accuracy. Sentiment Analysis is the most common text classification tool that analyses an incoming message and tells whether the underlying sentiment is positive, negative or neutral. Intent analysis steps up the game by analyzing the user's intention behind a message and identifying whether it relates an opinion, news, marketing, complaint, suggestion, appreciation or query.

The Internet is currently not only an important source of information, but also a platform of expressing views and sharing experiences. In this network, we can easily collect reviews about products or services. Sentiment analysis is useful in commercial intelligence application environment and recommender systems [1], [2], because it is a very convenient channel for the two ends of the supply to communicate. In the sentiment analysis, many strategies and techniques were used, such as machine learning [3], polarity lexicons [4], natural language processing, and psychometric scales, which determine different types of sentiment analysis, such as assumptions made, method reveals, and validation datasets.

Currently, sentiment analysis is made at three consecutive levels: a) word, b) sentence, and c) document, in which sentence and document are usually used in most previous studies. The word, the fundamental, and



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DATA ANALYSIS OF CONSUMER COMPLAINTS IN BANKING INDUSTRY USING HYBRID CLUSTERING AND SENTIMENT ANALYSIS

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Abstract:

A consumer's complaints present bank or reporting agency with an opportunity to identify and rectify specific problems with their current product or service. The banks 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 banks 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 R Studio. 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 loan request details into one of the predefined applied loans.

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 bank 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



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ARMA BASED CROP YIELD PREDICTION USING TEMPERATURE AND RAINFALL PARAMETERS WITH GROUND WATER LEVEL CLASSIFICATION

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Abstract. Nowadays, wireless telecommunication networks are promising alternative for rainfall measuring instruments that complement previous monitoring devices. Due to big dataset of the rainfall and the telecommunication networks data, empirical computational methods represent less adequate of actual data. So, deep learning models are proposed for the analysis of big data and give more accurate presentation of real measurements. This project investigated rainfall monitoring results from experimental measurements. The main aim of this study is to provide a methodology for rainfall data classification based on neural network methods based on the historical rainfall data production data. Classification based on the previous years of rainfall can help farmers take necessary steps to measure crop production in the coming season. Understanding and assessing future crop production can help ensure food security and reduce impacts of climate change. In this work, ARMA (Auto Regressive Moving Average) method is used for proposed work. Past ten years of data set is taken for rainfall and ground water level for our country. The proposed work classifies the ground water level data set records using ARIMA model to predict the model for future test record data sets. The new model will help for analyzing ground water levels in past and so as to find the future levels.

Keywords: Crop Yield Prediction, ARMA Model, KNN Classification, Neural Network.

I. INTRODUCTION

Real-time precipitation observations show a significant role in various aspects of human life, such as agriculture, hydrometeorology, natural disaster warning and climate monitoring. At present, rainfall monitoring methods comprise weather radar, rain gauges, and weather satellites [1], [2].

Rain gauges (RG) are used as precise ground-based rainfall estimation instrument. But, they do not provide rainfall information with more spatial resolution owing to errors made by calibration or ground winds [3-5]. Weather radars address the shortcomings of RG and provide a wide range of precipitation. The associate editor coordinating the review of this manuscript and approving it for publication is Guido Valerio distribution information, but ground clutter frequently affects it, which produces less accurate ground-level observations.

In South Korean context, radar monitoring network operated by Korea Meteorological Administration has a comparatively high density and is mounted at positions appropriate for observations of peninsular part of that country. Still, it has incomplete representation in urban areas. Therefore, it is overbearing to develop real-time, accurate, and representative rainfall measurement techniques.

Recently, wireless telecommunication links have grown attention as a promising rainfall measurement method because the power of received signals, which is extremely delicate to rainfall in microwave and millimetric frequency bands, can be measured everywhere for communications.

Several studies have shown the potential application of terrestrial radio links for rainfall forecast in different parts of the world over several different carrier frequencies (5–50 GHz). Outstanding examples are the nationwide campaign in Germany and the Netherlands, which confirmed that commercial microwave links (CML) provides precipitation data which correspond well with gauge and weather radar rainfall data. Rainfall data taken from telecommunication signal are successfully applied for the simulations of river runoff in Germany for pre-alpine catchment area, and then for urban catchment pipe flow simulation in Czech Republic.





An Empirical Study on Job Satisfaction of Employees with Special Reference to Ponmani Industry, Erode

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Abstract: Job satisfaction refers to one's feelings towards one's job. If the employees expectations are fulfilled (or) the employees get higher than what he / she feels satisfied. If the job satisfaction increases organization commitment will increased. This results in the higher productivity. The main objectives of this paper are to assess the job satisfaction: to identify the effectiveness of job satisfaction and to find out the several factors like personal and organizational factors influencing job satisfaction: to identify the effectiveness of job satisfaction and to find out the several factors like personal and organizational factors influencing job satisfaction of employees. In this study, 125 no's of respondents have been taken as sample. Percentage analysis, weighted average, chi-square have been incorporated for research analysis. The study helped in revealing the level of satisfaction of employees with reference to the various factors provided in the organization. This study clearly shows that employees under organization are more or less satisfied with the job. The organization should consider on the salary, relationship of employees and supervisors, grievance handling and give more opportunity for the new employees.

I. INTRODUCTION

Job satisfaction has been made a top priority as satisfied employees tend to be more productive, creative and committed to their employers, and it is found that there is a direct correlation between staff satisfaction and their productive capacity. Logically a happy employee is a "better" employee, which is often defined as a "more productive" employee. Managers and workers alike pursue job satisfaction in the often naive belief that it leads directly and surely to that other workplace ideal – high performance. Job satisfaction describes how content an individual is with his or her job. There are a variety of factors that can influence a person's level of job satisfaction; some of these factors include the level of pay and benefits, the perceived fairness of the promotion system within a company, the quality of the working conditions, leadership and social relationships, and the job itself (the variety of tasks involved, the interest and challenge the job generates, and the clarity of the job description/requirements) and the existence of job security.

II. STATEMENT OF THE PROBLEM

The present study "An empirical study on job satisfaction employees" is focusing on the employee job satisfaction. Job Satisfaction is considered as a key issue by the industry. Where efforts are taken and programs are initiated. If an employee is not satisfied with the job there are chances for absenteeism, job turnover, lower productivity. committing of mistakes, diverting energy for different types of conflicts keeping this thing in view all organizations are trying to identify the areas where satisfaction to be improved to get out of the above dangers. In this connection a survey was conducted on behalf of Ponmani industry to identify the level of satisfaction in terms of Highly satisfied to highly dissatisfied on various job related factors.

III. OBJECTIVES OF THE STUDY

- To identify the satisfaction of employees towards work.
- To identify the factors that influence the job satisfaction of employees.
- To analyse the problems faced by the employees due to job dissatisfaction.


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A Study on Employees Job Satisfaction in Prabha Garments Private Limited, Tiruppur

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ABSTRACT: Job satisfaction is one of the important factors which have drawn attention of managers in the organization as well as academicians. Various studies have been conducted to find out the factors which determine job satisfaction and the way it influences productivity in the organization. Though there is no conclusive evidence that job satisfaction affects productivity directly since productivity depends on so many variables, it is still a prime concern for managers. Job satisfaction is the mental feeling of favorableness which an individual has about his job. It is often said that " A happy employee is a productive employee. " Job satisfaction is very important because most of the people spend a major portion of their life at their working place. Moreover, job satisfaction has its impact on the general life of the employees also, because a satisfied employee is a contented and happy human being. A highly satisfied worker has better physical and mental well-being.

I. INTRODUCTION TO THE STUDY

Job satisfaction describes how content an individual is with his or her job. It is relatively recent term since in previous centuries the job available to a particular person were often predetermined by the occupation of that persons level of job satisfaction. Some of these factors include the level of pay and benefits, the perceived promotion system within a company, the quality of the working conditions, leaderships and social relationships.

The term relates to the total relationship between an individual and the employer for which he is paid. Job satisfaction does mean absence of motivation at work. Research workers differently described the factors contributing o job satisfaction and job dissatisfaction.

Job satisfaction survey can give the most valuable information the perceptions and causes. For satisfaction/dissatisfaction among the employees attitude towards job satisfaction may be either positive or negative. This positive feeling can be re-in forced and negative feelings can be rectified. This survey can be treated as the most effective and efficient way, which makes the workers to express their inner and real feelings undoubtedly.

II. STATEMENT OF THE PROBLEM

Employees are the central forces of an industry and only with their efficiency, an organisation can move into success. Only with a group of satisfied employees the company can lead into success. For employees satisfaction the company must provide adequate welfare measures. By conducting a job satisfaction survey we can analyse whether the employees are satisfied or not and also whether they are motivated by the general, welfare, financial and other related factors.

III. OBJECTIVE OF THE STUDY

To examine satisfaction regarding the salary and other benefits of its employees.

To identify the factors which improves the satisfaction level of employees.

IV. SCOPE OF THE STUDY

- This study is helpful to the organization for identifying the area of dissatisfaction of the employees.
- It is helpful to identify the employees level of satisfaction towards welfare measure.


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An Empirical Study on Impact of Social Media Marketing on Consumer Buying Behavior with Reference to Erode District

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ABSTRACT: The growth of the technology and the internet has made people to communicate very easily and it has made people to interact with new ones. It also allows people to share information as media also. At this time marketers grabs this opportunity to make an impact on the consumer buying behavior. The goal of this study is to know how social media marketing makes an impact in the consumer buying behavior. For this purpose a survey has been made. A brief introduction about how social media has evolved also been provided. The earlier stages of the social media seems to be very creative. The process how these social media platforms attract consumer and how do they affect the consumer buying behavior is important. The study is yet to show how consumer behaves to various concepts in social media marketing.

I. INTRODUCTION TO THE STUDY

Digital marketing is an element of marketing that uses internet and the online digital technologies such as computers and mobile phones to promote products and services. Businesses and brands had an idea to use technology for marketing at the period of 1999-2000. The digital age had its growth rapidly and people also started using it in huge level. Digital marketing extends its contribution to non internet channels. The kinds of the digital marketing are as follows. Affiliate marketing, Display advertising, Email marketing, Search engine marketing, Social media marketing, Social networking services, In game advertising, Online public relations, Video advertising, Native advertising, Content marketing.

II. STATEMENT OF THE PROBLEM

Social media marketing has a great impact on the consumer buying behavior but we have to know how much the consumers were aware of these because there could be a occurrence of sharing negative information. It will be too late to realize what the actual content is all about. There are some of the trust issues with social media marketing. Here we are about to witness how the social media marketing impact consumer buying behavior.

III. OBJECTIVE OF THE STUDY

To analyze the impact of social media on consumer buying behavior.

IV. SCOPE OF THE STUDY

- The study helps to know the consumer's favored source of information for decision of buying a product.
- The study helps to identify which Social media factor contribute to consumer buying behavior.

V. LIMITATIONS OF THE STUDY

- Technical issues like unavailability of internet.
- It was difficult to know whether the respondents are filling the survey with proper presence of mind.

VI. REVIEW OF LITERATURE

Janna .M. Parker (2019) explains the role of social media marketing governance. Also presented questions to the persons in workplace to make a evidence for the study and their reactions on social media posts. They are mentioning



A Study on Customers Satisfaction towards TVS Motors with Special Reference to Erode

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ABSTRACT: TVS is one of India's largest diversified industrial conglomerates, with its principal headquarters in Madurai and international office in Chennai. TVS motor company is a multinational motorcycle company is the third largest company in India. In today's competitive world, market research plays a vital role to aid the company in understanding the customer expectation from the company. Customer satisfaction is an important of a company's relationship with their customers is effectively utilizing marketing and sales resources has been a priority for many organization. In this study an attempt has been made to analyze the satisfaction level of customers towards TVS two wheelers in Erode. A sample of 120 respondents has been selected using a simple random method questionnaire has been used to collect primary data from the respondents.

I. INTRODUCTION TO THE STUDY

Customer satisfactions refers to the perceived value or benefits that the customers seek when purchasing a good or availing a service. They are the result of the 'learning' process and can be formed very quickly because even first impressions matter a lot. Once established, these satisfactions can hold significant influence in decision-making processes and can be very hard to change.

Customer satisfaction has been widely debated as organizations increasingly attempt to measure it. Customer satisfaction can be experienced in a variety of situations and connected to both goods and services. It is a highly personal assessment that is greatly affected by customer expectations. Satisfaction also is based on the customer's experience of both contacts with the organization and personal outcomes.

II. STATEMENT OF THE PROBLEM

This research pertains to analyze the customer satisfaction towards TVS Motors in Erode town with 120 respondents only. The study of customer satisfaction helps to know about the customer view towards the TVS bike. In our study an attempt is made to evaluate the satisfaction of the TVS Motors. Hence, the researchers are interested to know the Customer satisfaction towards TVS Motors. The study is confined to Erode town for reason of academic viability as well as a purposive consideration in Erode.

III. OBJECTIVE OF THE STUDY

- To identify the satisfaction level of customers towards TVS Motors
- To identify the problem faced by the customer by using TVS Motors

IV. SCOPE OF THE STUDY

- To find the areas of improvement of the TVS Motors.
- To identify the customer satisfaction level towards the performance of TVS Motors..
- To identify the competitive position of various brands of two wheelers in customers mind.

A Study on Employee Absenteeism with Reference to Neptune Automation and Solution -Erode

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ABSTRACT: The article report entitles A Study Of Employee Absenteeism is intended to determine the workers condition, salary, facilities, attendance program, training programme, motivation techniques and promotions. The article consists of objectives, limitations, company profile, research methodolog ,findings, suggestions, and conclusions. The information needed for the research has been gathered from primary and secondary data. The response given by the workers of the company is analyzed and interpreted using different types of statistical tools which are percentage analysis, Chi square, weighted average method. To increase the productivity and increase growth of the organization. The sample size of the article is 120 from the population of 656. The questionnaire method as survey is used as a tool for collecting the primary data. The questionnaire has been designed by the researcher according to the objective of the study. Percentage analysis, Chi-square and weighted average are used as tools for data analysis.

I. INTRODUCTION

Absenteeism is one of the major threats to indian industry. Absenteeism is the failure of employees to reports for work when they are scheduled to work employees who are aways from work on recongnizedholidays , vacations, approved leaves of adsence, or approved leaves of absence would not be inculded . absenteeism is becoming a serious practice in labour oriented industries especially in those large industries where labourers are working in mass. It is a matter of prime concern for the supervisors and managers. They have to find the ways to overcome absenteeism.Absenteeism causing poor utilization of plant india is facing unemployment problem on one side and the other side abnormal asenteeism in industries if our absenteeism can be reduced.

II. STATEMENT OF THE PROBLEM

Absenteeism has become a major problem in almost all the industrial sectors. Excessive absenteeism constitutes a considerable cost to the industry even when the absent employee receives no pay. Because of disorganization of work, work schedules are upset and delayed, resulting in the management failure to meet delivery dates. When sick pay is authorized, the cost of absenteeism mounds up more rapidly.

III. OBJECTIVES OF THE STUDY

- To study the major factors which leads to absenteeism.
- To analyse the impact of absenteeism on work.

IV. SCOPE OF THE STUDY

The study is conducted to know the various levels and reasons for absence of employees in an organisation. By looking it, one can adopt corrective measures to decrease asenteeism in the organisation, leads to organisational growth. An absent employee means idle machines or unoccupied work space, with the consequent direct loss and an indirect

A Study on Stress Management for Employees in L&T Infotech at Chennai

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ABSTRACT: Stress is generally indicated as a deviation from normal functioning of body and mind. Stress can approach in an organization due to many reasons such as control over work, managerial style of manager etc. Stress in limited quantity is beneficial to organization and employee as well. It helps to achieve personal as well as goals of organization. But stress in excess quantity can cause harmful effects on the body, mind and psychology of employees. Stress can be measured by using psychological methods involving use of questionnaires. Physical measurement involve measuring of various physical constants of body such as blood pressure. Physiological measures include measurements of various hormonal levels etc. And the measures to relieve this stress include sports, music, dancing, hobbies etc. Excessive stress can be reduced by help of professional counselors. But the stress at workplace is an important issue must be dealt with to achieve progress. Day by day challenges for human is increasing in many different fields as if progress in turn creates new problems. Slowly the nature of working has been changed and still these changes are in progress. Because of these changes, number of illnesses has been increased, morality and human aspects are faded and new problems are occurred every day, so that we are facing job stress which called "illness of the century". As a measure to minimize stress, delegating some work, share burden with colleagues, leave and time off work with family and love ones, as well as reducing work overtime ranked highest as strategies for stress management. Findings of a number of studies on this aspect says that stress has a great impact on the professionals and

thereby affects the level of productivity. Thus it is recommended that professionals should exhibit self-control and good self-esteem; engage in continuous professional development on skills for better organization, integration of work within specified project constraints and delegation of assignment, authority and breaking work into manageable parts so as to be able to cope with stress.

1. INTRODUCTION

Each person responds to stress in a different way, but too much stress can lead to health problems. Stress is the body's natural defense against predators and danger. It flushes the body with hormones to prepare systems to evade or confront danger. This is known as the "fight-or-flight" mechanism. When we are faced with a challenge, part of our response is physical. The body activates resources to protect us by preparing us either to stay and fight or to get away as fast as possible. The body produces larger quantities of the chemical's cortisol, adrenaline, and noradrenaline. These trigger an increased heart rate, heightened muscle preparedness, sweating, and alertness. All these factors improve the ability to respond to a hazardous or challenging situation. Factors of the environment that trigger this reaction are called stressors. Examples include noises, aggressive behavior, a speeding car, scary moments in movies, or even going out on a first date. The more stressors we experience, the more stressed we tend to feel.

II. OBJECTIVES OF THE STUDY

- To study about the demographic and socio-economic factors of the employees.
- To identify factors causing stress to employers in LTI at Chennai.
- To analyse the impact of stress to an employers and work in LTI.
- To solve the suitable measures to overcome the problem.


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A Study on Employee Satisfaction towards Best Water Solution with Reference to Erode

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ABSTRACT: The majority of organizations are competing to survive in this volatile and fierce market environment. Satisfaction and performance of the employees are essential tools for the success of Best Water solution in the long run. On the one hand, measuring performance is critical to organization's management, as it highlights the evolution and achievement of the organization. On the other hand, there is a positive relationship between employee satisfaction and organizational effectiveness, reflected in numerous studies.

This paper aims to analyse the drivers of Employee satisfaction to high levels of organizational performance. The literature shows that factors such as empowerment and recognition increase Employee satisfaction. If the recognition of employees is increased, their Satisfaction to work will also improve, as well as their accomplishments and the organizational performance. Nevertheless, employee dissatisfactions caused by monotonous jobs and pressure from clients, might weaken the organizational performance. Therefore, jobs absenteeism rates may increase and employees might leave the organization to joint competitors that offer better work conditions and higher incentives. Not all individuals are the same, so each one should be motivated using different strategies. For example, one employee may be motivated by higher commission, while another might be motivated by Employee satisfaction or a better work environment.

I. INTRODUCTION

Employee satisfaction is one of the most researched variables in the area of workplace psychology, and has been associated with numerous psychosocial issues - the changing world of work organisational factors ranging from leadership to job design.

This article seeks to outline the key definitions relating to Employee satisfaction, the main theories associated with explaining Employee satisfaction, as well as the types of and issues surrounding the measurement of Employee satisfaction. While it is also important to explore what factors precede and are impacted by Employee satisfaction, this is covered in a separate article.

Water Solutions is a consortium of dedicated scientists, well known for their expertise in ground water sector for exploration, assessment, development and management, including artificial recharge and rain water harvesting in varied hydrogeological environs.

Their unparalleled expertise, in hydrogeological, geophysical and geochemical investigations (utilizing advance technologies and advance analytical tools such as Remote Sensing, GIS, Ground Water Modelling and geo-statistics) and their proficiency in water well drilling, has earned them recognition as stalwarts in ground water segment. Water Solutions possesses the capability of using modern scientific techniques and analytical tools, supported with latest computer software which is most appropriate for handling data for scientific investigations relating to ground water development and management.

Water quality is diminished during its travel from the treatment plant to the customer. Biofilm, corrosion, scale, metal leaching, and the formation of Disinfectant By-Products (DBPs) represent significant challenges to maintaining clean and healthy water. Chlorine, pH balance, softening, and phosphate-based corrosion inhibitors are not sufficient to protect both infrastructure and public health.

AlgaeWid.png

Algae Armor is a mineral-based solution applied to bodies of water such as lakes and ponds once a year to prevent the growth of algae. Algae Armor works by eliminating up to 95% of phosphates and 80% of nitrates found in water. Algae Armor is a natural, mineral-based answer to the algae that pollutes our water.

swiftwid.png

SwiftSource takes fresh water of any quality and converts it into potable drinking water. It is mobile and can be deployed in nearly any emergency situation where drinking water is unavailable. The machine would ideally be used



A Study on Employee Opinion about Primary Facilities for Safety at Salem Cooperative Sugar Mills Ltd with Reference to Mohanur, Namakkal

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ABSTRACT: A study on employee safety measures in the Mohanur Cooperation. Sugar Mills Limited. It has developed by the employee safety facilities are different. The topics which were discussed in this project that there is employee working environment for the Organization, job satisfaction safety for employee welfare and development of employee for the firm. The logic behind the welfare schemes is to make efficient, loyal, healthy, and satisfied employees for the organization. They are providing facilities for employees to desire the highly satisfied minimum of employee will be acceptance in the satisfied categories. The research selected a sample size of 150 employees in Mohanur. The employee's satisfaction in the research process in analysed by percentage analysis and chi square test. The purpose of this paper is to present the result of a survey on the safety of employee towards the various level of satisfied categories will be applied for the firm.

I. INTRODUCTION

Safety is the state of being "safe", the condition of being protected from harm or other non-desirable outcomes. Safety can also refer to the control of recognized hazards to achieve an acceptable level of risk.

SAFETY MEASURES REPRESENTATIVES

Workers are nominated or elected full time designated in writing by the employer after the employer and workers consulted one another and reached an agreement about who will be welfare and safety representatives. Employees must be aware of the situation and conditions in the workplace where they are designated. Agreement must also be reached on the period of office and functions of the welfare and safety representative and must be settled amongst the employer and the workers.

The occupational Safety Act, 1993, requires the employer to bring about and maintain, as far as reasonably practicable, a work environment that is safe and without risk to the welfare of the workers. The employer should ensure that the workplace is free from hazardous substances, such as benzene, chlorine and microorganisms, articles, equipment, processes, etc., that can cause injury, damage, or disease to the employees. When there are no preventive measures in the workplace, the employer must be informing workers of these dangers, how they may be prevented, and how to work safely, and provide other protective measures for a safe working environment in the organization.

However, it is not expected of the employer to take sole responsibility for welfare and safety. The Act is based on the principle that in case of any danger in the workplace that should be communicated among the workers and the employers. The workers and the employer must share the responsibility for welfare and safety in the workplace. Both employers and workers must pro-actively identify dangers and develop control measures to make a safe working environment.

In the case of other workplaces, one representative must be designated for every 50 workers or part thereof. For example, one representative must be designated in the case of 21 to 50 workers. Where 51 to 100 workers are employed only both the representatives must be designated.

Welfare and Safety Representatives be designated

Within four months after the commencement of the employer's business. An employer who runs a business for less than 4 months and have more than 20 workers need not have a designated representative. For example, seasonal workers are employed on farms, causing the number of workers to exceed 20 for a period less than four months, the designation of representatives is not at all necessary.



A Study on Employee Conflict towards Organizational Change in Podaran Foods Pvt. Ltd

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ABSTRACT: Every organization encounters conflicts on a daily basis. The conflicts cannot be avoided, but it is possible to manage them in a way that we recognize them on time. It is necessary to continuously track the organizational signals which point to their existence. If we do not react duly, this can lead to the situation that the conflict itself manages the organization. One of the more important determinants of productivity, efficiency and performance, and finally job contentment is also the conflict as an independent variable of organizational behavior. By systematic research of organizational behavior we want to make a positive influence on dependent variables, but first we have to understand and get a good insight into individual elements of organizational behavior. By this paper we want to brighten the meaning of conflict on the organization, the conflict process and possible conflict management styles. We will show the relationship between the level of conflict and the impact on the organizational performance. The here mentioned facts are also tested on the research of conflict management styles, which are used by the employees in the four monitored Slavonija-Baranja organizations, and we will also present their view on conflict and how much does the same have influence on successful course of business of their organization.

I. INTRODUCTION

Organizational conflict, or workplace conflict, is a state of discord caused by the actual or perceived opposition of needs, values and interests between people working together. Conflict takes many forms in organizations. There is the inevitable clash between formal authority and power and those individuals and groups affected. There are disputes over how revenues should be divided, how the work should be done, and how long and hard people should work. There are subtler forms of conflict involving rivalries, jealousies, personality clashes, role definitions, and struggles for power and favour. There is also conflict within individuals – between competing needs and demands – to which individuals respond in different ways.

COMPANY PROFILE

COMPANY NAME	Podaran foods India Pvt Ltd
SINCE	1969
MANAGING DIRECTOR	1) Mr.GopalSubramani (Managing director) 2) Suresh.R (Partner)
NO. OF DEPARTMENTS	9
NO. OF EMPLOYEES	230
NATURE OF BUSINESS	Cool Drinks Manufacturing


PRINCIPAL
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A Study on Employee Welfare Pertaining to Satisfaction in Akshera Paper Mills with Reference to Sathyamangalam

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ABSTRACT: This study is about Akshera Paper Mills located at Sathyamangalam manufacturing products like natural shade, golden yellow, subam shade, brown kraft paper sheet, brown kraft paper envelopes and kraft paper. It has more than 250 employees. The objective is to study the welfare facilities provided to the employees in Akshera Paper Mills and suggest suitable measures to overcome the flaws in it. The Questionnaire was prepared and filled from the employees of the organization to calculate the effectiveness and satisfactory level of welfare facilities. The various facilities like medical facility, housing, transport, motivation, leave, bonus, flexible working hour, creche, lighting, restroom facility etc. were analyzed and interpreted with the various statistical tools. The tool used to analyze the data is One Way ANOVA and Chi square test. Employees are more satisfied with the welfare measures provided to them. The employer and employee maintain a good relationship. Their grievances are immediately addressed and solved. Transport facility is not provided to the employees. Akshera Paper Mills though offer many employee welfare measures but it lags in canteen facility. They make rice in steam and so employees are provided with half cooked food which causes dissatisfaction towards the canteen facility. Akshera Paper Mills do not have creche facility also.

I. INTRODUCTION

Akshera Paper Mills was incorporated on 02 August 2005. It is a non-govt company registered at Registrar of Companies, Coimbatore. Its authorized share capital is Rs. 100,000 and its paid up capital is Rs. 100,000. It is involved in forestry, logging etc. Directors of Akshera Paper Private Limited are Ramesh Krishnan Krishnasamy and Ramesh Krishnan Uma Maheshwari. Welfare of employee and his family member is an effective advertising method of buying the gratitude and loyalty of employee. Employee welfare includes various services, benefits and facilities offered by the employer. The basic purpose of labor welfare is to enrich the life of employees and keep them happy and contented. Welfare facilities enable workers to have a richer and more satisfying life. The study concentrates on effectiveness of welfare programmes held in the Akshera Paper Mills.

Data had been collected by primary methods and secondary methods of data collection. The Questionnaire had been prepared and filled from the employees of the organization to calculate effectiveness and satisfactory level of welfare facilities. The various facilities like medical facility, housing, transport, motivation, leave, bonus, flexible working hour, creche, lighting, restroom facility were analyzed and interpreted with the statistical tools. With the objective of finding satisfactory level of employees with the welfare program held by the organization study revealed findings that, welfare facilities provided in the Organization were effective but to increase the satisfactory level of employees organization, may implement the suggestions like organization should set up welfare organization with a view to provide all types of facilities at one center and appointed welfare benefits continuously and effectively to all employees fairly.

A study of the welfare measures being provided to its employees was done. The problems faced by the employees regarding these spheres was observed with the help of questionnaire and an analysis of the same was carried out using one Way ANOVA and Chi square Test.

This paper is organized within the following sections II. Objectives Of The Study, III. Literature Survey Review, IV. Proposed method, V. Findings, VI. Suggestions, VII. Conclusion

II. OBJECTIVES OF THE STUDY

1. To study the welfare facilities provided to the employees in Akshera Paper Mills.
2. To study the effectiveness of the employee welfare facilities in Akshera Paper Mills.



A Study of Financial Performance Analysis with Reference to Neptune Automation and Solution, Erode

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ABSTRACT: This project report entitled to "A study on financial performance of NEPTUNE AUTOMATION ERODE, The main objective of the study is to analyse the financial position of the company. It the process of identifying the financial strength and weakness of the firm properly establishing relationship between the item of balance sheet and profit and loss account. The details regarding the history and finance details of the company were collected through discussion with the company officers. Secondary data are based on the annual reports of 2017-2021.

The various tools used for the study are ratio analysis. Charts and table are used for better understanding. Through ratio analysis the company could understand the Profitability, Liquidity, Leverage, Turnover positions of the company. The company is following high debt equity and also the company followed the credit enjoyed from its supplier has also nearly one year period of time. On the other hand cash turnover also not sufficient to healthy the business. The study recommends to reducing the dept capital and providing security to creditors and to increase the sales to reduce the loss of the company.

I. INTRODUCTION

Financial analysis is the process of identifying the financial strengths and weaknesses of the firm and establishing relationship between the items of the balance sheet and profit & loss account. Financial ratio analysis is the calculation and comparison of ratios, which are derived from the information in a company's financial statements.

The information in the statements is used by-

Trade creditors, to identify the firm's ability to meet their claims i.e. liquidity position of the company. Investors, to know about the present and future profitability of the company and its financial structure. Management, in every aspect of the financial analysis. It is the responsibility of the management to maintain sound financial condition in the company.

II. STATEMENT OF THE PROBLEM:

Financial performance Analysis is very much needed for findings out the efficiency of rising and utilization of funds in the organization by establishing strategic relationship between the components of balance sheet and profit & loss a/c statement and other operation data for better decision making and to maximize the profitability of the organization

OBJECTIVES:

- The main objective of present work is to make a study on the financial performance of organization.
- To assess the short term and long term solvency.
- To assess the liquidity and profitability position and trends.


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A Study on Employee Engagement with Reference to Neptune Automation and Solution, Erode

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ABSTRACT: Employee engagement has emerged as a popular organizational concept in recent years. It is the level of commitment and involvement an employee has toward their organization and its values and beliefs. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefits of the organization.

Employee engagement initiative performance with in the job for the benefit of the organization. Employee engagement initiative has a direct impact on the organizations productivity. All organization wants their employees to be engaged in their employees to be engaged in their work. Employee engagement is linked to customer's satisfaction which is linked to an organizations financial success.

Employment comes about when enough people care about doing a good job and care about what the organization is trying to achieve and how it goes about doing it. This caring attitude and behavior only comes about when people get satisfaction from the jobs they do believe that the organization supports them and work with an effective HR manager.

In this paper a literature review from various research findings and corporate practices are employed using using a description study technique. The impact of employee engagement on organization productivity It also presents the factors influencing the engagement and organizational outcomes.

I. INTRODUCTION

Everything you need to know about employee engagement.

Employee engagement is the extent that an employee believes in the mission, purpose and values of an organization and demonstrates that commitment through their actions as an employee and their attitude towards the employer and customers.

Employee engagement is high when the statements and conversations held reflect a natural enthusiasm for the company, its employees and the products or services provided.

1. STATEMENT OF PROBLEM

Employee engagement has become a major problem in almost all the industrial sector. The people miss work for the variety of reasons, many of which are legitimate. The sample employees selected for the present day limit to 108, because of constraints in teams of limited time. The present study focus on the employee engagement and its impact on productivity.

2. OBJECTIVE:

- To know the satisfaction level of employees which leads to employee retention.
- To suggest the suitable measures for employee engagement.


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Erode - 638 052.



A Study on Employee Safety and Welfare Measures with Special Reference to Arun Fabrics, Erode

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ABSTRACT: The present study is made an attempt to identify the employee welfare measures adopted in IT industry. The basic purpose of employee welfare is to enrich the life of employees and keep them happy. Employees spend at least half their time at work or getting to it, or leaving it. They know that they contribute to the organization when they are reasonably free from worry and they feel that when they are in trouble/problems, they are due to get something back from the organization. It raises the standard of living of workers by indirectly reducing the burden on their pocket. The welfare facilities were analyzed based on primary research on the sample of hundred employees by administering the questionnaire to them. Employee welfare includes various services, benefits, and facilities offered to employees by employers. Welfare schemes it create efficient, healthy, loyal and satisfied labor force for the organization.

I. EMPLOYEE WELFARE MEASURES

“Welfare is a broad concept referring to a state of living of an individual or a group, in a desirable relationship with the total environment, ecological, economic, and social welfare includes both the social and economic contents.

The industrial progress depends on a satisfied employee force, and the importance of employee welfare measures. After the placement of the employees, they should be given proper training and programmers’ to develop their efficiency so as to serve the organizations better. Welfare facilities are designed to take care of the well – being of the employees. They do not generally result only in monetary benefit. These welfare measures are provided by government Non – Government agencies and the employers.

II. DEFINITIONS OF ‘EMPLOYEE WELFARE’

The Oxford Dictionary defines employee Welfare as ‘Efforts to make life worth living for workmen’. The concept of ‘Employee welfare’ us flexible elastic and differs widely with time region, industry social values, customers’ degree of industrialization, the general development of the people and the political ideologies prevailing at a particular moments.

The International Employee Organization defined Employee Welfare as such services, facilities and amenities as may be established in or in the vicinity of undertakings to enable the persons employed in them to perform their work in healthy, congenial surroundings and provided with amenities conducive to good health and high morale”.

The Encyclopedia of Social Science defines Employee Welfare as “The voluntary efforts of the employers to establish, within the existing industrial system, working and sometimes, living and cultural conditions of the employees beyond what is required by law, the custom of the country and the conditions of the market”.

STATEMENT OF THE PROBLEM

- The present study is focusing on the employee safety and welfare is an important facet of industrial relations, the extra dimension, giving satisfaction to the worker in a way which evens a good wage cannot with the growth of industrialization and mechanization, it has acquired added importance.
- The workers in industry cannot cope with the pace of modern life with minimum sustenance amenities. He needs an added stimulus to keep body and soul together.
- Employers have also realized the importance of their role in providing these extra amenities. And yet, they are not always able to fulfill workers demands however reasonable they might be.
- They are primarily concerned with the viability of the enterprise. Employee welfare, though it has been proved to contribute to efficiency in production is expensive.



A Study on Employees Job Satisfaction with Special Reference to Poppys Knitwear (P) Ltd., Erode

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ABSTRACT: Job satisfaction is one of the important factors which have drawn attention of managers in the organization as well as academicians. Various studies have been conducted to find out the factors which determine job satisfaction and the way it influences productivity in the organization. Though there is no conclusive evidence that job satisfaction affects productivity directly since productivity depends on so many variables, it is still a prime concern for managers. Job satisfaction is the mental feeling of favorableness which an individual has about his job. It is often said that " A happy employee is a productive employee. " Job satisfaction is very important because most of the people spend a major portion of their life at their working place. Moreover, job satisfaction has its impact on the general life of the employees also, because a satisfied employee is a contented and happy human being. A highly satisfied worker has better physical and mental well-being. The study tries to evaluate how human resource factors affect the satisfaction level of employees in prabha garments privae limited.

I. INTRODUCTION TO THE STUDY

Employee satisfaction describes the overall outlook, relationship, and confidence that employees feel at work. When employees are positive about their work environment and believe that they can meet their most important needs at work, employee morale is positive or high. If employees are negative and unhappy about their workplace and feel unappreciated and as if they cannot satisfy their goals and needs, employee morale is negative or low. Belief in themselves and their organization, its mission, goals, defined path, daily decision, Employee morale is defined by the employee's outlook, optimism, self-concept, and assured and employee appreciation. Faith in self and faith in their organization are both important factor in positive employee morale.

Employee morale refers to an relationship of satisfaction with a desire to continue and strive for attaining the objective of a factory. Morale is purely emotional. It is an satisfaction level of an employee towards his job, his superior and his organization.

II. STATEMENT OF THE PROBLEM

Human Resource is the vital resources among all other organization resources without the effective organization development of an organization cannot achieve its goals. Protecting and maintaining the human resource by providing various welfare measures is the pivotal role of any management. Organization development plays a crucial role in the development of the organization. The employee's job satisfaction and motivation are also closely linked with the social welfare.

Employee commitment is essential to increase the productivity. If the job satisfaction increases it will increase the employee commitment, further it will lead to increase in the productivity. It is very essential to study about the job satisfaction.

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A Study on Workers Perception towards Welfare Measures Provided by Galvanx Technology

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ABSTRACT: The present study focus on employee welfare measures and what are the various statutory provisions and agencies protecting the welfare of employees. Employee welfare includes various services, benefits, and facilities offered to employees by employers. Welfare schemes it create efficient, healthy, loyal and satisfied labor force for the organization.

I. INTRODUCTION OF THE STUDY

Employees are the great assets of an organization. Proper welfare activities, effective training and required facilities to make them to feel comfortable in work place and make them to perform better in their work place. Employee welfare implies the setting up of minimum desirable standards and the provision of facilities like health, food, clothing housing, medical allowance, education, insurance, job security, such as to safeguard his health and protect him against occupational hazards. The workers should also be equipped with necessary training and a certain level of general education.

II. OBJECTIVES OF THE STUDY

1. To study the existing welfare facilities provided to the employees.
2. To study the satisfaction of workers towards the present welfare facilities.

III. SCOPE OF THE STUDY

1. The study analyses certain parameters like cleanliness around the work-place, removal of dust and wastage, adequate lighting, quality drinking water and food, good rest-rooms, adequate medical facilities, good toilet facilities, sufficient first aid boxes, adequate security instruments like mask, shoes, helmet etc.
2. This will be helpful to know about the various levels of welfare schemes and the organization's benefits extended to the employees.

IV. LIMITATIONS OF THE STUDY

1. The study was purely based on the information given by the employees and there are chances for giving wrong data.
2. Employees are very busy in their work so they gave answers very much in the questionnaire method.

V. LITERATURE REVIEW

Welfare of employees is defined as "efforts to make life worth living for workmen". The study based on impact of welfare measures of employees' performances with respect to the IT industry. The primary data for the study was collected through a questionnaire. New welfare measures are added to the existing ones from time to time. The employee welfare includes various services and facilities offered to employees by employers. The main purpose of employee's welfare is to develop personality of the workers to make a better workforce. This schemes it create efficient, healthy, loyal and satisfied employee force for the organization. By providing such facilities make their work life better and leads to good standard of living.



A Study on Employees Health and Welfare Facilities Provided in Arrow Garments Private Limited, Tiruppur

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ABSTRACT: The concept of employee welfare is vibrant. Its broad viewpoint and contents are inclined to change, depending on social and economic changes that occur in society. Employee welfare includes various services, benefits, and facilities offered to employees by employers. An organization has to provide welfare facilities to their employees to keep their motivation levels high. The study throws light on impact of welfare measures on the employees' performances with respect to the construction industry. The primary data for the study was collected through a questionnaire. Employees' welfare schemes are flexible and ever-changing. New welfare measures are added to the existing ones from time to time. Welfare measures may be introduced by the employers, government, employees or by any social or charitable agency. The purpose of employee's welfare is to develop personality of the workers to make a better workforce. Welfare schemes it create efficient, healthy, loyal and satisfied labor force for the organization. Providing such facilities make their work life better and leads to good standard of living. The present study focus on employees welfare measures and what are the various statutory provisions and agencies protecting the welfare of employees.

I. INTRODUCTION OF THE STUDY

"Welfare is a broad concept referring to a state of living of an individual or a group, in a desirable relationship with the total environment, ecological, economic, and social welfare includes both the social and economic contents. The industrial progress depends on a satisfied labor force, and the importance of Employee welfare measures. After the placement of the employees, they should be given proper training and programmers' to develop their efficiency so as to serve the organizations better. Welfare facilities are designed to take care of the well – being of the employees. They do not generally result only in monetary benefit. These welfare measures are provided by government Non – Government agencies and the employers.

OBJECTIVES OF THE STUDY

- To know about the Employees Health and Welfare facilities provided in Arrow Garments.
- To find out employees expectation regarding health and welfare measures to be implemented in future.
- To suggest more health and welfare measures to improve in Arrow Garments.

II. SCOPE OF THE STUDY

- The main scope of this study is to find out whether the company provides necessary welfare measures.
- To help the industry to known the various statutory and non-statutory welfare measures adopted by the companies.
- This study will help management to recognize that their employees get satisfied towards the welfare measures being provided.
- So that the management can improve their measures being implemented.



A Study on Employability Skills Development among the Professional Students through Training Programmes Conducted in College with Reference to Erode

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ABSTRACT: In today's era the employability skills were developed by conducting training programme in colleges for students. Since many students are struggling to find the employment. So, I did this research to understand and to find out why such a situation arises, and the effect or outcomes of the training programme given in colleges for students.

KEYWORDS: employability skills, training programme, skill

I. INTRODUCTION

Employability skills is important for those who are going to step into the work as a fresher. When people join in an organization they have to communicate with other employees, they should made decision for the critical situations and made solutions for the existing or new problems. The purpose of this study is to understand about the training given in the college and to know about the outcome of the training provided to the students.

II. OBJECTIVES

- 1) To study the training programme conducted in the college.
- 2) To identify and evaluate the training programme given by college develops the employability skills of students.
- 3) To study the extent to which employability training is helpful in selection process / placement opportunities.
- 4) To know about the outcome of training programme.
- 5) To investigate the factors influencing to develop employability skills.

III. SCOPE OF STUDY

- 1) This study helps to understand and finding the issues in the training programme given in the college.
- 2) It will help in suggesting suitable measures to overcome the complications and to provide better training programme by the college for the employability skills development for the students before their placement.

IV. LIMITATIONS OF THE STUDY

- 1) Some respondents not aware about the employability skills.
- 2) Students gave importance to the academic more than their skills.

V. REVIEW OF LITERATURE

Heavey and Morey (2003) "ENHANCING EMPLOYABILITY, RECOGNIZING DIVERSITY, LONDON: UNIVERSITY UK AND HIGHER EDUCATION CAREERS SERVICES UNIT". Highly the skill graduates need in order to manage their careers and those that will enable them to continue learning throughout the work lives.

Lonic Morley (2007) "THE X FACTOR: EMPLOYABILITY, ELITISM AND EQUITY IN GRADUATE



A Study of Working Capital Management at Neptune Automation Corporate Office, Erode

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ABSTRACT: Decisions with reference to capital involve managing relationships between a firm's short assets and liabilities to make sure a firm is in a position to continue its operations, and have sufficient money flows to satisfy each maturing short debts and Future operational expenses at lowest prices, increasing firm's gain. The capitals noticeably go along with the operative Cycle. A poring over of the operative cycle reveals that funds endowed within the operation area unit recycled back in to Money. The shorter the amount of operative cycle the larger are going to be the turnover of the funds endowed in varied Functions. The shorter amount of operative cycle shows higher potency of a firm. The potency of assets management are Often determined by the in operation cycle of the firm. This paper aims at analyzing the potency of assets management Through the connection between in operation cycle amount and profitableness of Neptune Automation and solution. To measure the capital Management potency, operative cycle has been calculated and therefore the relationship is formed with margin quantitative Relation.

I. INTRODUCTION

Working capital (abbreviated WC) is a financial metric which represents operating liquidity available to a business, organization or other entity, including governmental entity. Along with fixed assets such as plant and equipment, working capital is considered a part of operating capital. Gross working capital equals to current assets. Net Working If current assets are less than current liabilities

Working capital (WC) is calculated as current assets minus current liabilities. Current assets such as cash, account receivable, inventory, etc. And current liabilities such as creditor, expenses paid etc.

The liquidity position of the business is depend on the investment in current assets, the more the better Where as the role of fixed assets as far as liquidity is concerned, negligible.

Working capital management involved not only managing the different component of current assets but also managing the current liabilities. Working capital can be define in simple words as that part of total capital which is required and necessary for daily working of business.

The term working capital is also defined as excess of current assets over current liabilities. The concept of working capital is useful to know whether the current assets are sufficient or not to meet the current liabilities. It also indicates that whether solvency of the business.

There are two aspect of working capital and these are follows:

- 1) Gross working capital.
- 2) Net working capital.



A Study on Employee Retention Strategies with Special Reference to Hero Fashion, Tiruppur

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ABSTRACT: The research titled on “A Study on employees retention strategies with special reference with Hero Fashion-Tiruppur”. Employee retention is the systematic attempt to keep the modern-day employees with the aid of offering pleasant rules and to apprehend various expectations of the employees. The undertaking is not simplest to draw the talented employees and to maintain them. The objective of the look at is to analyze the organizational factors influencing the employees retention and to find individual elements leading personnel to leave the organization and to have a look at the vital conditions to hold the personnel. The examine has completed via descriptive research approach and the collection of primary information has executed through sampling technique. Questionnaire is used to gather primary data and conceptual review is used for secondary facts series via books, websites. The information is to be analyzed with percentage evaluation, chi square analysis and correlation. The company can enforce better running surroundings to the employees they could offer right task rotation to inspire them.

1. INTRODUCTION

Employee retention is a phenomenon in which personnel select to stay on with their current corporation and don't actively are seeking for other task potentialities. The contrary of retention is turnover, in which employees go away the company for a variety of reasons. Retention is described as the procedure by which a company guarantees that its personnel don't give up their jobs. Every company and enterprise has a various retention charge, which shows the percentage of employees who remained with the business enterprise for the duration of a set length.

II. OBJECTIVES OF THE STUDY

- To observe the employee retention strategies with regards to Hero fashion Tiruppur
- To locate the character elements main employees to depart the agency.
- To take a look at the organizational factors influencing retention techniques of the organization
- To have a look at the important conditions to retain the personnel

III. SCOPE OF THE STUDY

- The study is to decide the factors influencing retention of personnel in the organization.
- These researches additionally decide the nature of keeping personnel as a way to make the employees to experience consolation.
- To inspire the employees to retain to work in the same business enterprise with full hobby and subsequently provide the consequences to the enterprise it desired

A Study on Human Resources Policies and Its Implementation in Coral Knit Wear, Tiruppur

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ABSTRACT: The HR policies and procedures are the backbone of an organization. HR policies provide the details to the employees in and make them recognize the culture of the organization. The research is about HR policies and its implementation process that promotes unity action and stop duplication. This study deals with the human resource policies of an organization is considered the valuable and competitive advantage over its competitor because of its commitment to towards organization. I have used four statistical tools for my research study and I have taken 103 samples

I. INTRODUCTION

Human resource policy is the study of activities regarding people working in an organization. It is a managerial function that attempts to be equal to an organization's needs to the skills and abilities of its employees. Human resource policies are systems to develop that human technique is used effectively and efficiently to achieve organizational goals. Therefore, the HR policies are involved in obtaining, developing, utilizing, maintaining and retaining the job to achieve the organization objectives.

II. OBJECTIVES OF THE STUDY

- To study the HR Policies and its implementation in the organization.
- To understand the opinion about the various welfare measures provided to the employees.
- To analyze the recruitment and training process offered by the organization to the employees.
- To give the suggestions needed to the organization.

III. SCOPE OF THE STUDY

- It is assumed that the information and data collected through this study suffice in order to create a generalization.
- It has been given in respect that how effective HR policy implementation yields employee development, employee relations, employee voice, employment, equal opportunity, grievances, health and safety, managing diversity, promotion, employee performance, employee welfare, and high performance in an organization.
- This research study may be helpful for the future researchers for their study purposes.

IV. REVIEW OF LITERATURE

Malathi.t 2019

This paper is aimed toward discovering how employees' motivation and satisfaction relate to their learning behaviors while doing certain tasks. The study explored employee motivation and satisfaction among unskilled and skilled employees in Automobile industries in India. With expanding and increasing technology and globalization, many, especially in developing countries, have problems keeping their employees motivated and satisfied. Hence, it's vital to explore motivation and satisfaction to hunt out good solutions for human resource management, managers, policy makers, practitioners, etc.



A Study on Absenteeism among the Employees and its Reduction Techniques with Special Reference to Omega Techniks India Private Limited, Chennai

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ABSTRACT: Employee absenteeism is the absence of an employee from work. Absenteeism of employees from work ends up in back logs, piling of labour and thus works delay. Employee absenteeism is additionally a big problem for industry because it needs additional expenses. The target of is to test the reasons for absenteeism, to identify factors that motivates the staff, that helps to cut back absenteeism, to study the various measure adopted by the industry to cut back absenteeism. The look adopted by the researcher for this study is Descriptive Research Design. Descriptive research studies are those studies which are concerned with describing the characteristic of a particular individual, or of a bunch to grasp familiarity with a phenomenon or to grasp new insights into it, often to formulate more precise research problem. Data has been collected using structure questionnaire. Were tools used to analyse the data interpreted with the various statistical tools. The tools used to analyse the data is simple percentage, Chi square test, ANOVA test and weighted average method. The sample taken for this study was 117. out of the population 400.

I. INTRODUCTION ABOUT THE STUDY

Employee Absenteeism – Defined by Indian Factories Act, 1948.

According to this Act, “Absence is the failure of an employee to report for work on duty when he is scheduled to work on his duty. An employee is to be considered as scheduled to work when the employer has work available” for him and the employee is aware of it.

For calculating the rate of absenteeism we require the number of people scheduled to work and number of people actually present. Absenteeism can be find out of absence rate method.

No. of man days lost

Absence Rate = $\frac{\text{No. of man days lost}}{\text{No. Of man Days planned to work}} \times 100$

No. Of man Days planned to work

Company profile

Omega Techniks India Private Limited is one of the leading company in the field of manufacturing Sheet metal press parts. It's an unlisted private company incorporated on 14 September, 2005. It is located at SIDCO Estate Ambattur, Chennai, Tamil Nadu. Sidco Industrial Estate Ambattur is a prominent landmark in the area and this establishment is in close proximity to the same. Omega Techniks India Private Limited has two directors - Pranay Agarwala and Prateek Agarwalla. It has earned stamps like JD Verified, JD Trusted, JD Escrow substantiating the credentials of the business. The business strives to make for a positive experience through its offerings. The accepted modes of payment such as Cash, Cheques make every business transaction easy and seamless, contributing to making the entire process even more effective. Is known to satisfactorily cater to the demands of its customer base. Products



A Study on Customer Satisfaction with Special Refer NECE to St Roadways, Tiruppur

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ABSTRACT: A study on customer satisfaction in ST Roadways makes analysis about customer satisfaction. Customer satisfaction is defined as a measurement that determines how happy customers are with a transportation service, goods handling delivery timing and cost. Customer satisfaction information including surveys and ratings can help a company determine how to best improve or changes it's service, goods handling and delivery timing. The purpose of this questionnaire distributed among 101 respondents through direct survey. The required information for the study has been collected from primary sources. The primary data has been collected from the respondents by direct survey method through the questionnaire. A sampling procedure is collected through the simple random sampling method. Tools I used here is chi square analysis and interpretation. The current study used to find out customer satisfaction of transportation.

I. INTRODUCTION

A study on customer satisfaction in ST Roadways makes analysis about customer satisfaction. Customer satisfaction is defined as a measurement that determines how happy customers are with a transportation service, goods handling delivery timing and cost. Customer satisfaction information including surveys and ratings can help a company determine how to best improve or changes it's service, goods handling and delivery timing. Customer satisfaction is very important for Transport companies seeking competitive advantage, because they realize that if they do not satisfy the expectations of customers, their place will be taken by other companies whose activities will be more concentrated on customer expectations. So for that Transport companies want take all customers' feedback and full fill the customers expectation. A high satisfaction will show our companies services and loyalty. Through this study I will show how the customers satisfied from the ST Roadways and what all the things the customers expecting from ST Roadways.

The history of transportation has taken a very drastic change with the introduction of wheels. This is because of the discovery of the axel and the wheel in other smaller devices like wheelbarrows that came into use. The existing means of transportation were continuously improved thereafter . The steam engines lead to the invention of bullet trains. The manned flight created by the Wright brothers lead to a Jumbo Jet! From travelling on foot we have come a long way and different means of travelling have to lead to a vast network. The types of transportation in existence now are given below.

- Land Transport
- Railways Water Transport
- Air Transport or Aviation Space Travel

The movement of goods and persons from place to place and the various means by which such movement is accomplished. The growth of the ability and the need to transport large quantities of goods or numbers of people over long distances at high speeds in comfort and safety has been an index of civilization and in particular of technological progress.

REASON FOR CHOOSING THIS PROJECT

- The main reason for choosing this project is that I'm going to start a business of my own. For that purpose I need know about the complete details about transportation
- So I'm joining these ST roadways to gain more knowledge about the field and why I'm choosing these is to know about the satisfaction of customers and their opinion about the delivery of goods.

COMPANY PROFILE

They introduced their goods transport service-oriented company in the year 1991 at the name of SATHYAA ROADWAYS, in future they have changed their name as



A Study on Employee Relationship towards Working Environment in Jai Maruthi Tex Pvt. Ltd

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ABSTRACT: Employee relationship management constitutes an emerging trend of managing human resource by building and maintaining individualized and mutually valuable relationship with employees based on information technology. Employees are the major assets of an organization. It is very essential that the employees perform together as a collective unit and contribute equally towards the realization of common goal. Employee relationship management has focused on enabling to collaborate on typical managerial tasks with their employers. By engaging inputs from both sides of the employment relationship, ERM platforms aim to align the interests of both parties, worker and employer, and inform day-to-day business functions under a streamlined workflow.

I. INTRODUCTION TO THE STUDY

Employee relationship describes the overall outlook, relationship, satisfaction, and confidence that employees feel at work. When employees are positive about their work environment and believe that they can meet their most important needs at work, employee morale is positive or high. If employees are negative and unhappy about their workplace and feel unappreciated and as if they cannot satisfy their goals and needs, employee morale is negative or low. Belief in themselves and their organization, its mission, goals, defined path, daily decision, Employee morale is defined by the employee's outlook, optimism, self-concept, and assured and employee appreciation. Faith in self and faith in their organization are both important factor in positive employee morale.

Employee morale refers to an relationship of satisfaction with a desire to continue and strive for attaining the objective of a factory. Morale is purely emotional. It is an relationship of an employee towards his job, his superior and his organization. It is not static thing, but it Morale may range from very high to very low. High Morale is evident from the positive changes depending on working conditions, superiors, fellow workers pay and soon feelings of employees such as enthusiasm, desire to obey orders, willingness to co-operate with coworkers. Poor or low Morale becomes obvious from the negative feelings of employees such as dissatisfaction, discouragement or dislike of the job. Prof Mee, However, holds the view that "Good employee morale is the mental of the individuals, or of the group, which enables an employee to realize that the maximum satisfaction of his drives coincides with the fulfillment of the objective with those of the company, and subordinate his own desires to those of the company".

II. STATEMENT OF THE PROBLEM

In an organisation, employee relationship makes an essential part. In an employee relationship there could be presence of conflicts, misunderstanding, absence of coordination. Here we could know that how employee relationship makes an impact.

A Study on Effectiveness of Employees Motivation in Sanma Knit Fashion, Gobichettipalayam

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ABSTRACT: The study is to examine Motivation of employees in Sanma knit Fashion at gobichettipalayam. Every organization needs to have well motivation in employees to perform their work good in the organization when the employee feel good about their jobs, certain factors tend to consistently related to job satisfaction. The study provides an explanation of job satisfaction and the comfortableness of an employee in the organization. My study is to examine the various factors of motivation in employees with reference. A questionnaire was designed which included questions regarding motivation in employees their satisfaction and dissatisfaction.

Accordingly, 200 employee's have been selected at random from all the departments of the organization and respondents forms (questionnaire) have been obtained. Through this analysis, interpretations were done accordingly.

I. INTRODUCTION

Employee Motivation is an integral part Human Resource Management and it plays a crucial role in the long-term growth of an organization. Motivation can be defined as the inherent enthusiasm and driving force to accomplish a task. It can be used in directing employees' behavior and actions for a constructive vision or goal. Proper motivation turns an employee into a loyal asset and helps in maintaining the retention rate.

Hygiene factors:

According to Herzberg, hygiene factors do not actually motivate a person but their absence will lead to dissatisfaction. These factors are also known as extrinsic factors or maintenance factors. They help to maintain a reasonable level of job satisfaction among the employees. These are:

- Company policies and administration
- Type of supervision
- Inter -personal relationship
- Working conditions
- Salary
- Job security and
- Status

The motivational factors are also known as intrinsic factors. According to Herzberg the presence of the intrinsic factors will motivate the employees but their absence will not lead to dissatisfaction. These are:

- Work it self
- Achievement ○ Recognition
- Advancement
- Growth and
- Responsibility



A Study on Career for Women Empowerment in Britannia Industries with Special Referance to Erode

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ABSTRACT: This Project entitledwith "A STUDY ON CAREER FOR WOMEN EMPOWERMENT IN BRITANNIA INDUSTRIES LIMITED" make analysis about "Women empowerment" and "women equality with men" is an issue. Women Empowerment refers to the creation of an environment for women where they can make decisions of their own for their personal benefits. To Analysis the Women Employees promotion & level of satisfaction in Britannia Industries, Analysis the Women Equality of opportunity and treatment in the organization, To find the Women security of Employment, find the freedom of association and the right to organize in the organization Ensure the health, safety and well being of all women worker in the organization. A structure questionnaire distributed among 103 respondents through direct survey. The primary data has been collected from the respondents By direct survey method through the issue of questionnaire. A sampling procedure is collected through the simple random sampling method. Statistical tools were Simple percentage, Chi square have been used for analysis and interpretation. The current study used to find out career development for Women Empowerment in Britannia Industries.

I. INTRODUCTION

The purpose of the present study is to know whether women empowerment leads to the development of economy. Women play a pivotal role in the overall progress of a country as they constitute half the human resources of nation. Data Indicates that society still does not welcome a women are the part of our society but they have less authority. Women should be empowered because both men and women are human being and are equal.women are performing different roles of working but still they not equal to men. Gender discrimination reduces the chances for women to eliminate poverty and to improve their lives. Inequalities between women and men are found. This paper shows that by empowering women i.e. giving them their rights of education, health, job opportunities, decision making power, better living standard, removing violence, poverty reduction, and welfare will bring development in the economy.

II.OBJECTIVES OF THE STUDY

- 1) To Analysis the Women Equality of opportunity and treatment in the organization
- 2) To find the Women security of Employment in a organization
- 3) To find the freedom of association and the right to organize in Organization
- 4) Ensure the health, safety and well being of all women worker in the Organization.

III.SCOPE OF THE STUDY

- 1.To establish high-level corporate leadership for women equality.
2. The study will also be helpful in analyzing the problems faced by the Career for women Empowerment in Britannia industries.



A Study on Employees Health and Safety of Honeywell Creation with Reference to Tirupur

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ABSTRACT: This study is an outcome of the title called “A study on Employees Health and Safety of Honeywell Creation with Reference to Tirupur”. Human resources professionals are requires for rendered a significant contributions in promoting health and safety of the employees. Health and safety of the employees are important concepts that need to be focused upon, in order to leading to effectively growth fullness and developmental of the organization and its employees. As apparently that when employees will maintained good health and safety within their working environmental conditions, they will be able to render a significant contribution in the achievement of organizational goals.

I. INTRODUCTION

Health and Safety at Work is important because it protects the wellbeing of employers, visitors and customers. Looking after Health and Safety makes good business sense. Workplaces which neglected Health and Safety risk prosecution, may lose staff, and may increase costs and reduce profitability. Health and safety are measures employers must take protect the mental and physically well-being of workers and non- workers. The Health and Safety at Work Act protects employees, customers, Ideally, employers aim to eliminate or significantly preventing accidents happenings in the workplace. Health and Safety plays vital part in our personal and work life and the environment around us. To the Awareness of health and safety is important for us in order to perform our day to day activities at work and life. The purpose of health and safety is to give us knowledge of the up to date health and safety rules and regulations in place and all approval methodology and action plans coming from them. Health and safety plan or program has to be definite plan of action designed to preventing accidents and occupational hazard and diseases and it must include the elements requires by the health and safety regulations and legislations as a minimum. The main provisions of these regulations require employers to provided: adequate lighting, heating, Ventilation and Workplace and keeps them in a cleaning condition staff facilities, including toilets, washing facilities and refreshment; and. Safe passageways to prevent slipping and tripping hazards We want to emphasized on tree Health and Safety key components.

II. OBJECTIVES OF THE STUDY

- To study that the proper health and safety measures are provided to the employees.
- To identify that the equipments are maintained properly as per the quality standards.
- To find out the mental well-being of the employee.

III. SCOPE OF THE STUDY

- This study will helps to know the health and safety measures provided in the organization.
- This study helps to understand the awareness regarding health and safety in workplace like accidents, injuries etc



A Study on Customer Satisfaction towards With Special Reference to Erode District

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ABSTRACT: Customer Satisfaction need to be the principle intention of a enterprise. It is important for businesses to effectively manage customer satisfaction. To be able do this, firms need reliable and representative measures of satisfaction. The importance of customer satisfaction diminishes when a firm has elevated bargaining electricity. The researcher has carried out this observe to locate out the stage of consumer pride towards vivo smart phones. The target respondent includes those customers who are using the vivo smart phones. The collected information changed into edited, code and tabulated by using the use of a few statistical tools.

I. INTRODUCTION

Customer pride is described as a size that determines how happy clients are with a organization's merchandise, services and abilities. Customer satisfaction records, along with surveys and ratings can help a employer determine the way to best improve or adjustments its services and products. An company's essential focus have to be to fulfill its clients. This applies to business corporations, retail and wholesale agencies, authorities bodies, carrier agencies, nonprofit groups, and every subgroup within and corporation.

II. OBJECTIVES OF THE STUDY

- ❖ To study the various services offered by vivo to the customer.
- ❖ To find out the satisfaction level towards vivo users.

III. SCOPE OF THE STUDY

From this study, the performance and problems of the customer can be analyzed. The study helps to know the factors that influence the customer to buy the product. This study helps to know the necessary change in product features and customer feeling about the vivo smart phone. The study will be useful for the company to make necessary changes in price, designs, apps, and etc. This focuses on customer satisfaction towards the services provided by vivo mobiles.

IV. LIMITATIONS OF THE STUDY

- ❖ The survey was limited to Erode region only, so it cannot be generalized to all the cities.
- ❖ The samples size is limited to 150 customers only.
- ❖ Time is one of the major constraints.
- ❖ At most care taken by the researches to choose the correct in formation from the respondents.
- ❖ The study is based upon primary data, so any wrong information given by the respondents may mislead the findings.

V. REVIEW OF LITERATURE

Gerald S. Berke, Dennis M. Moore, Bruce R. Gerratt

The particle velocity across the glottis was measured with simultaneous electro glottography, photoglottography, and subglottic pressure in an in vivo canine model of phonation. A constant temperature anemometer measured flow velocity at five midline anterior to posterior glottal positions.



A Study on Employee Training and Development with Special Reference to Phoenix Fashion Private Limited Company, Tirupur

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ABSTRACT: The purpose of this paper is to present a conceptual study established on the employee training and program and its benefits. This paper will inspect the structure and elements of employee training and development program and later the study present what are the positive outcomes for employees and company. Company find it difficult to stay competitive in recent global economy. Importance of employee development program is growing for the company those pursuing to receive an advantage among competitors. Employees are esteemed resource of the company and success or failure of the company relay on the performance of employees. Therefore, company are financing large amount on employee training and development programs. Furthermore, in training program it is supportive for companies to emphasis on knowledge, expertise and ability of employees. There is substantial discussion among professionals and researchers on the affect that development program has on both employee and company. The study described here is a vigilant assessment of literature on fundamental of employee development program and its benefits to organizations and employees.

I.INTRODUCTION MEANING: EMPLOYEE TRAINING & DEVELOPMENT

Training and development refers to educational activities within a company created to enhance the knowledge and skills of employees while providing information and instruction on how to better perform specific tasks. Employee Training and Development helps in updating employees' skills and knowledge for performing a Job which at the end results in increasing their work efficiency and increase the productivity of an organization. It ensures that Employees oddness or eccentricity is reduced and learning or behavioural change should take place in a very structured format.

II.OBJECTIVE OF THE STUDY

- ❖ To Analyse and Identify the evaluation of Employee Training and Development program in Phoenix fashion Pvt Ltd, Tirupur.
- ❖ To study the impact of various factors that influenced the Training program happening in the company

III.SCOPE OF THE STUDY

- ❖ This study will help to know the employee skills, knowledge, attitude and behaviours needed in order to perform in the organization
- ❖ This will help to understand the organization to find out their present position and asses the possible change for improvement in the system.

IV.LIMITATIONS OF THE STUDY

- ❖ Respondents took long time to fill the questionnaire because of their work load.



A Study on Employees Work Life Balance in L&T Infotech

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ABSTRACT: Work life balance is now playing an important role in deciding the job-related performance of employees in any sector. It is about effective managing the balance between paid work and other activities like spending time with family, taking part in Sports and recreation, undertaking further study. Earlier companies attract the candidate by just providing effective training for Job security. But many employees in 21st century see "work life balance policies" as a critical factor for selecting the companies.

This paper aims to study the level of work life balance among employees in LTI and explore how it is affecting the work-related activities of the employees at LTI. A structured questionnaire distributed among 111 respondents through questionnaire. Tools used were simple percentage ranking method and chi-square test. The purpose of this paper is to present the result of a survey on the Work life balance of employees towards the various levels of satisfaction categories will be applied for the firm.

I. INTRODUCTION

Work life and personal life are two separate priorities. But as time passes due to globalization and gradual increase in work pressures, maintaining work-life balance has attracted the attention of the organizations and employees as well. The employees who spend long working hours or for the entire day are facing many challenges in balancing their personal lives with the demands of their profession.

The origin of the term Work-Life Balance took place in early 80's, because of gradual increase in the count of working women employees having children in tender age-groups dependent on them.

Work-Life balance means an effective management between the work and the personal or social responsibilities which an individual is expected to perform in the firm. Work life can influence organizational productivity and the well-being of the employees in different ways. Given below are some of the impact of work life balance issues:

- 1) Impact on the Profitability and Growth:** Excessive pressure of achieving the profitability and growth targets builds stress, hampers the overall productivity of the employees, and disturbs their balance of work-life.
- 2) Employee's work Engagement and Quality of customer service:** An imbalance in the work and life front will adversely affect the complete engagement of the employees at work and hamper the quality of services delivered to the customers. The other side, the quality of service must be reliable and consistent, if the employees perceive that their efforts or their presence is valued by the management and the organization is committed to both personal and professional success of their employees.
- 3) Talent Acquisition strategy and the Challenges related to it:** There is an increase in the composition of the baby boomers and a relatively young pool of working professionals, have increased their expectations for a favorable work life culture. Apart from work responsibilities, they need to attend to the personal/social responsibilities of their life. Research reveals that to achieve a reduction in the rate of absenteeism by almost 50% by introducing flexi-work options and employee welfare policies.

Benefits of Healthy Work Life Balance

By knowing the importance of maintaining a healthy work-life balance, employees will get motivated to take the necessary steps for achieving the balance. Work-Life balance is advantageous for the employees and organization as well. A balance between the work and personal life, helps in improving the employee productivity, morale, and health condition. In fact, work-life balance should be a priority for all of us. An imbalance in any of the front will make life difficult and pose several hazards or challenges in terms of health, happiness, and emotional stability.

The benefits of work-life balance are given below

- **Fulfillment:** People who maintain a balance between work and personal life experience a sense of fulfillment in their life.

A Study on Stress Management for Employees in Infratex at Perundurai

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ABSTRACT: Stress is generally indicated as a deviation from normal functioning of body and mind. Stress can approach in an organization due to many reasons such as control over work, managerial style of manager etc. Stress in limited quantity is beneficial to organization and employee as well. It helps to achieve personal as well as goals of organization. But stress in excess quantity can cause harmful effects on the body, mind and psychology of employees. Stress can be measured by using psychological methods involving use of questionnaires. Physical measurement involve measuring of various physical constants of body such as blood pressure. Physiological measures include measurements of various hormonal levels etc. And the measures to relieve this stress include sports, music, dancing, hobbies etc. Excessive stress can be reduced by help of professional counselors. But the stress at workplace is an important issue must be dealt with to achieve progress. Day by day challenges for human is increasing in many different fields as if progress in turn creates new problems. Slowly the nature of working has been changed and still these changes are in progress. Because of these changes, number of illnesses has been increased, morality and human aspects are faded and new problems are occurred every day, so that we are facing job stress which called "illness of the century". As a measure to minimize stress, delegating some work, share burden with colleagues, leave and time off work with family and love ones, as well as reducing work overtime ranked highest as strategies for stress management.

I. INTRODUCTION

Each person responds to stress in a different way, but too much stress can lead to health problems. Stress is the body's natural defense against predators and danger. It flushes the body with hormones to prepare systems to evade or confront danger. This is known as the "fight-or-flight" mechanism. When we are faced with a challenge, part of our response is physical. The body activates resources to protect us by preparing us either to stay and fight or to get away as fast as possible. The body produces larger quantities of the chemical's cortisol, adrenaline, and no adrenaline. These trigger an increased heart rate, heightened muscle preparedness, sweating, and alertness. All these factors improve the ability to respond to a hazardous or challenging situation. Factors of the environment that trigger this reaction are called stressors. Examples include noises, aggressive behavior, a speeding car, scary moments in movies, or even going out on a first date. The more stressors we experience, the more stressed we tend to feel.

II. OBJECTIVES OF THE STUDY

- To identify the various factors related to work stress.
- To study the level of work stress among the managerial employees.
- To analyze the effects of stress on the health of employees.
- To interpret suggestions to reduce the work stress.

III. SCOPE OF THE STUDY

The scope of the study deals with the employees work stress in the organization. The study has a wide scope and has coverage of employees at all the departments of the organization. The study was conducted at INFRATEX. It also identified the employee's level of stress towards management. It mainly concentrated in what way employees are stressed by the organization. The present study has been conducted among employees in order to find out the employee work stress. Through the study, employee's expectations would be identified.

A Study on Employee Absenteeism in Saint Gobin Private Limited Erode

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ABSTRACT: The undertaking report entitle a concentrate on worker's non-appearance is planned to decide the representatives condition, compensation, office, participation program, preparing program, inspiration methods and advancements. The reason for this paper is to audit on issues of worker. Non-attendance as a type of withdrawal conduct separated from turnover. Representatives not going to work when booked can be a significant issue for associations. This concentrate on intends to recognize the most well-known reason for representative nonappearances on business cost. Worker Absence is a major issue for the executives since it includes significant weight. The work fulfillment is the essential driver of non-appearance. Non-appearance is one of the most wide spread impediments to efficiency, benefit and seriousness. Representative bugged by collaborators or the executives is one of the justification behind truancy. Thereactions might be impacted by private predisposition. It contributes toward the improvement of execution and efficiency, further developing prosperity of labor force and their families. Representatives not going to work when timetable can be a significant issue of the association. Worker non-appearance is an overall peculiarity which, because of the monetary effect on a country's economy, is a significant subject on the worldwide plan.

I. INTRODUCTION

Non-appearance is one of the significant dangers to Indian industry. Non-appearance is the disappointment of representatives to report for work when they are booked to work. Representatives who are away from work on perceived occasions, get-aways, endorsed leaves of nonappearances, or supported time away could not be incorporated. Non-attendance is turning into a genuine practice in labor situated ventures particularly in those huge businesses where workers are working in mass.

II. OBJECTIVES OF THE STUDY

- ✓ To identify the reasons for employee absenteeism.
- ✓ To study the major factors which leads to employee absenteeism.

III. SCOPE OF THE STUDY

- ✓ The study helps an organization depends on the regularity of employees.
- ✓ The study is conducted to know the various levels and reasons for absence of employees in the organization.
- ✓ By looking it, one can adopt corrective measures to decrease irregularities in the organization, leads to organizational growth

IV. LIMITATIONS OF THE STUDY

- ✓ Most of the respondents neglected to respond to the survey in their busy schedule.
- ✓ Respondents do not give the correct and proper information.
- ✓ The lack of time to carry out a survey.



A Study on Employee Retention Strategy with Reference to Sun Raja Oil Industries Private Limited Reference to Erode

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ABSTRACT: The review's significant objective was to find out about segment factors, buying propensities, and worker maintenance at SUN RAJA OIL INDUSTRIES PVT LTD,ERODE

The principal objective of the review to know segment factors, purchasing conduct, of the Employee maintenance on SUN RAJA OIL INDUSTRIES PVT LTD,ERODE

The study undertaken by the researcher is descriptive in nature. To collect both primary and secondary data, a prescribed questionnaires method is used as an instrument. The questionnaires consist of multiple choice, five scale, and ranking questions, and convenience sampling is used in the study with a sample size of 103

For this review, rate investigation, weighted normal technique, and chi-square test were used. Executing will support individual and hierarchical efficiency by expanding position fulfillment and inspiration

I.INTRODUCTION

Employee retention is concerned with motivating employees to stay or stay in a company for as long as possible. Employees have been an important resource for any company. Based on their critical nature, they can be called the lifeblood of an organization. Advances in technology have made most companies more and more technology dependent. However, this situation does not diminish the value of employees in a company because technology requires human resources to function.

II. OBJECTIVES OF THE STUDY

To examine the motivational techniques of retaining employees in Mr.GoldPvt Ltd.

III. SCOPE OF THE STUDY

1.The purpose of this study is to examine the organization culture and Employee retention. The significance of the study can contribute many advantages to many parties such as human resources managers in forming their strategy and the analytical and empirical researches.

2.As job satisfaction has often been perceived as an important contributor towards job performance and work commitment level, it is of utmost important that the management knows and understands these factors.

3.Researcher hopes that this study will help the management of the organizations to have the opportunity to be more aware about organization culture and employee retention towards the organizations. Besides that, by determining

4.This matter, the organizations might to be able to recognize the factor organization does not affect the employee retention directly.



A Study on Consumer Satisfaction towards Kitchenware Products of Sail (SSP)

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ABSTRACT: In marketing, customer satisfaction is considered as a key construct in the last few years. Previously it is a less acceptable construct, since most of the marketing-oriented organizations are perceived that attracting new customers better than retaining existing thing. However, currently these organizations are using customer satisfaction as a prime business performance indicator and a weapon in the dynamic environment to get the sustainable competitive advantage. This customer satisfaction is impact by several variables and dimensions. Therefore, this qualitative comprehensive review examines with the variety of literature support the relationship of variables with respect to customer satisfaction. To broaden and make possible further studies contextually and empirically, a mind-map is presented to show how these relationship variables relate to customers satisfaction. This would improve the studies related to customer satisfaction in particular.

I. INTRODUCTION TO THE STUDY

Consumer buying behaviour is the study of how individual customers, groups or organizations select, buy, use, and dispose ideas, goods, and services to satisfy their needs and wants. It refers to the actions of the consumers in the marketplace and the underlying motives for those actions. Marketers expect that by understanding what causes the consumers to buy particular goods and services, they will be able to determine—which products are needed in the marketplace, which are obsolete, and how best to present the goods to the consumers. The study of consumer behaviour assumes that the consumers are actors in the marketplace. The perspective of role theory assumes that consumers play various roles in the marketplace. Starting from the information provider, from the user to the payer and to the disposer, consumers play these roles in the decision process.

OBJECTIVES OF THE STUDY

- To identify the product awareness of kitchenware from SAIL, (SSP).

SCOPE OF THE STUDY

- This study aims to measure consumer satisfaction level about kitchenware products.
- This research also finds out various products are expected by consumer.
- This study was conducted through the questionnaire for getting response from various consumers.

LIMITATIONS OF THE STUDY

- Time duration of this survey was too short.
- The data was collected through questionnaire for getting response from consumers.
- The sample size of the study was 105 respondents only.



A Study on Work Life Balance among Employees in SCM Textile Processing Mill PVT Ltd

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ABSTRACT: Work life balance is a term used to describe the balance between an individual's personal life and professional life. A healthy work-life balance assumes great significance for working employees particularly in the current context in which both, the family and the workplace have posed several challenges and problems for employees. The dynamics of the work environment have exerted enormous pressure on working employees as they need to cope with virtually two full time jobs – one at the office and the other at home. They feel irritable and resentful often due to their inability to balance work and family life. The findings have implications for working employees and provide insights into finding solutions to maintain healthy work life balance

I. INTRODUCTION TO THE STUDY

Work and personal life were once considered to be two separate priorities. But with the changing times due to globalization and ever-increasing work pressures, maintaining work-life balance has attracted the attention of the organizations and employees as well. The employees who devote a crucial period of time of their entire day at work or sometimes work for extended hours, are faced with the challenge of balancing their personal lives with the demands of their profession.

The origin of the term Work-Life Balance took place in early 80's, because of a sharp rise in the number of working professionals having children in tender age-groups dependent on them. The demand for maintaining a work-life balance has risen unprecedentedly among the employees and the management has also acknowledged its importance in the current scenario. In future, work life balance will be one of the hot topics of debate in the boardrooms and is going to be a major area of concern for the management and HR professionals which they will be faced.

OBJECTIVES OF THE STUDY

- To identify determinants of work life balance of respondents.

SCOPE OF THE STUDY

The study made on the topic 'work life balance' will reveal the feelings of working employees about the work and the society which will help them to realize their importance and their contribution to the society.

LIMITATIONS OF THE STUDY

1. In view of the limited time available for the study, only the training and development
2. the answers given by the respondents have to be believed and have to taken for granted as truly reflecting their perception.

II. RESEARCH METHODOLOGY

RESEARCH DESIGN

- A Master plan that specifies the method and procedures for collecting and analysing needed information
- A research design is a framework or blueprint for conducting the marketing research project.

DATA COLLECTION METHOD PRIMARY DATA

These are data, which are collected for the first time directly by the researcher for the Specific study undertaken. In this research primary data are collected directly from the respondents by using Questionnaire.



A Study on Public Awareness towards Organic Foods with Special Reference to Erode District

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ABSTRACT: Health is wealth, is a statement which denotes the importance of health. Now a day's people lack in health because of eating an unhealthy, adulterated food product. In order to overcome this problem people must eat and use organic products which is grown or manufactured without use of fertilizers, pesticides and chemicals. So we must go organic farming to protect environment and ourselves. Organic food consumption has become the trend of the time, owing to the multiple health benefits that it offers. Organic food is absolutely natural and is packed with load of vital nutrients which is required by the body. Hence, an attempt has been made to reveal the consumer preference towards organic products in ERODE.

I. INTRODUCTION TO THE STUDY

organic foods are grown under a system of agriculture without use of chemicals, pesticides and fertilizers. This is a method of farming that works at grass root level preserving the reproductive and regenerative capacity of the soil, good plant nutrition and sound soil management, produces nutritious food rich in vitality which has resistance to diseases. India is bestowed with lot of potential to produce all varieties of agro products due to its agro climate regions. This holds promise for the organic producers to tap the market which growing steadily in domestic market related to the export market. The government of India has implemented the national programme for organic production (NPOP). The national programme involves the accreditation programme for certification bodies, norms for organic production, promotion of organic farming etc. The NPOP standards for production & accreditation system have been recognized by European commission and Switzerland as to their country standards. With these recognitions Indian organic products duly certified by the accredited certification bodies of India are accepted by the importing countries.

II. STATEMENT OF THE PROBLEM

The current growth in the organic market is driven by health factor and safe consumption. Day to day the environmental concern is increasing, consumers are focusing on the green aspect of the products as well as their impact on the environment. Some of the important problems related to agriculture and their possible solutions have been discussed below,

OBJECTIVE OF THE STUDY

- To analyse the problems faced by customers towards organic foods.

SCOPE OF THE STUDY

- The present study will be helpful in analysis the factors influencing to buy organic foods. products. The study makes to understand the problem faced by the consumer on using the organic food products.
- It will also help in suggesting to avoid non-organic food products and to take more organic food products.

LIMITATIONS OF THE STUDY

- Many consumers neglect to respond the survey in their busy schedule.
- Some consumers felt difficult to rank the problems in the organic food products.



A Study on Employee Welfare Measures with Special Reference to Kousic & Co

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ABSTRACT: Employee welfare is a voluntary effort of employers to establish within the existing industrial system and cultural conditions of the employees. It is a very comprehensive and includes various types of activities undertaken for the economic, social, intellectual and moral benefit of the employee community. Construction workers are exploited because they are socially backward, unorganized, uninformed and poor. So a need was felt for the comprehensive and separate welfare measures. The concept of employee welfare is dynamic. Its broad perspective and contents are prone to change, depending on socio economic changes that occur in society. Employee welfare includes various services, benefits and facilities offered to employees by the employers. An organization has to provide welfare facilities to their employees to keep their motivation levels high. The study throws light on impact of welfare measures on the employees' performances with respect to the construction industry.

I. INTRODUCTION OF THE STUDY

Construction workers constitute one of the largest categories of workers in the unorganized sector. Construction jobs are highly labor intensive and also highly mechanized. Employee welfare measure provides various services as allowances, housing, transportation, medical insurance and food. It also includes monitoring of working conditions of employee, creation of industrial harmony through infrastructure for health, industrial relations and insurance against disease, accident and unemployment for the workers and their families.

Objectives of the Study

To study the employee welfare measures in Kousic & co.

Scope of the Study

- This study aims to ascertain the view of the building construction workers whether the building construction industries are providing necessary health, safety and welfare measures.
- Employee Welfare in Construction Industry has thrown light on statutory and voluntary welfare measures provided by the employers to their workers in construction industry and will help the management to improve the welfare measures in order to increase job satisfaction and productivity.

Limitations of the Study

- It was very difficult to collect the information from the employee, because the employee was busy with their work schedule.
- The time of the study was very short period.
- Personal bias or attitude of the respondents may be an obstacle.
- Analysis of the information is done on the suspicion that the respondents have given the right information.

II. LITERATURE REVIEW

- PATRO, CHANDRA SEKHAR (2017) study in employee welfare Employee plays an important role in the industrial production of the company.

Hence, the organization should give cooperation to the employees in order to increase the production and to earn higher profits. Employee benefits constitute a major vehicle for the provision of income and security.