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ERODE - 638052 TAMILNADU

Email:principal@nandhaengg.orgMobile: 73737 12234

POST EVENT REPORT

Department	Electronics and Communication Engineering			
Name of the event	Soft skills / Language and communication skills / Life skills (Yoga, physical fitness, health and hygiene) / Awareness of trends in technology			
Title of the Event	Hands on Training for Real-Time IoT applications using ESP 32 Controller.			
Date & Time	19.10.2022 & 20.10.2022 9.30 AM – 4.00 PM			
Venue	Industry Supported Laboratory , Block – 2, Second Floor			
Name of the Chief Guest	Mr.Elango Manivannan, Software Developer, Mr.M.Maruthupandi, Project Engineer, Vi Microsystems Pvt. Ltd, Chennai			
Designation of the Chief Guest	Project Engineer			
Number of Participants	54			
Outcome	The Final year students will be able to develop Final year academic projects, II Year and III year students will be able to develop Project based learning (PBL) projects for IoT applications using ESP 32 controller.			
Feedback	Session was good and gave an in using ESP 32 Controller.	sight to complete the projects		



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Invitation



NANDHA ENGINEERING COLLEGE (Autonomous)

Affiliated to Anna University

Perundurai, Erode - 638 052.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Accredited by NBA)

in association with

INDUSTRY SUPPORTED LABORATORY

INSTITUTION OF ELECTRONICS AND TELECOMMUNICATION ENGINEERS

Hands on training for Real-time IoT application using ESP 32 controller

RESOURCE PERSONS



Mr. Elango Manivannan Software Developer, Vi Microsystems Pvt. Ltd, Chennai.



Mr. M. Marudhupandi Project Engineer, Vi Microsystems Pvt. Ltd, Chennai.

STUDENT COORDINATOR

Mr. R.K. Bhoopesh Student Secretary IV Year / ECE

FACULTY COORDINATORS

Mr. M. Srinevasan, Assistant Professor / ECE Ms. T.G. Dhaarani, Assistant Professor / ECE

CO-CONVENOR

Ms. V. Parameshwari, Assistant Professor / ECE (Industry Supported Laboratory Incharge)

CONVENORS

Dr. S. Kavitha, Dean / ECE

Dr. C.N. Marimuthu, Dean / R&D

DIRECTOR

Dr. J. Senthil Nandha Engineering College

PRINCIPAL

Dr. N. Rengarajan Nandha Engineering College

Date: 19.10.2022 & 20.10.2022

Venue: Industry Supported Laboratory - Block 2, 2nd Floor

Last Date to Register: 12.10.2022



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Welcome address by Head of the Department



Principal Address







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Hands on Training by Resource Persons

Photos











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Certificate Distribution for participants









Faculty Group Photo





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Chief Guest Profile

MARUDHUPANDI M

Mobile No: 9042591157

Email:marudhupandi1995@gmail.com

PROFILE SUMMARY:

- Develop Embedded systems software by applying key principles of Embedded systems engineering and mathematical analysis.
- Tested and implemented the communication protocols like UART, I2C, SPI, RS485 and know basics about CAN protocol.
- ➢ Worked with Microcontrollers like ARM Cortex M4, dsPIC30F4011, 8051, Arduino RaspberryPi3 model B and B+, Pico and Siemens IOT2040.
- Coded in Embedded C for microcontrollers in MPLAB IDE, STM Cube IDE, RIDE, Keil IDE, JAR. for Raspberry Pi based IOT.
- Worked with Wireless modules like Lora WAN(rn2483 & MKR1300), ESP 8266,MKR1010,MKR1000.
- ➤ Worked with Communication modules like GSM, GPS and RFID reader.

WORK EXPERIENCE:

 $6\ month\ experience\ as\ an\ \textbf{Production}\ \textbf{Engineer}\ at\ \textbf{Champion}\ \textbf{plastic}\ \textbf{Pvt.Ltd}\ \ , \textbf{Hosur}.$

Currently i am working as a **Project Engineer** at **VI Microsystems Pvt. Ltd.Chennai**, in the Field of **Embedded system and IOT** from February 2020.

PROFESSIONAL HISTORY:

1. IOT BASED AUTOMATIC DRIP IRRIGATION CONTROL SYSTEM

DESCRIPTION:

Soil Moisture sensor gives the information about the moisture and humidity content of soil. The value of sensed data is transmitted to the control station i.e.Lora WAN(MKR1300) or WiFi (MKR1010). These values has been processed through the Raspberry PI processor. If the soil moisture values and humidity values are below in normal, solenoid valve will turn ON automatically to supply the water in the entire field. By the use of RaspberryPi 3 model B+ processor, can store the data on cloud. We can monitor the soil moisture, humidity and control the solenoid valve through the internet.



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2. IOT BASED SMART ENERGY MONITORING AND CONTROL SYSTEM.

DESCRIPTION:

In this project, we use a smart energy meter (mf384) to get the current consumption data from electrical appliances. This data can be get and transfer to the siemens IOT2040 gateway by using LoRaWAN MKR1300. Through this gateway, data is transferred to the IoT cloud. From the cloud, we can control and monitor electrical appliances.

3.SPEED CONTROL OF 3 PHASE LINEAR INDUTION MOTOR USING PWM

DESCRIPTION:

I developed the software part of speed control of 3 phase Linear induction motor using **PWM** in **dsPIC30F4011.** The induction Motor is connected to the microcontroller via a Motor Driver. The Motor Driver is an IC which receives a **PWM(Pulse Width Modulation)** input from the microcontroller and gives an output to the induction Motor based on the input. By varying the pulse width, the duty cycle of the PWM can be varied. By varying the duty cycle of the induction Motor, the speed and rotation of the motor can be varied.

4.MCROCONTROLLER BASED BATTERY CHARGNG SYSTEM

DESCRIPTION:

The fields used in this project are the **dsPIC30F0411** microcontroller and development tools **buck converter** and other hardware. Five modes of operation used in this project are Constant voltage charge, Constant current charge, Trickle charge, Bulk charge and MPPT charge. Input is taken from the **solar panel** and given to the charger system. Outputs connected to a **lithium-ion battery**, based upon the battery voltage and current PWM produced by the microcontroller.

5.ELECTRICAL TWO WHEELER

DESCRIPTION:

In this project, I develop the software part dsPIC30F4011 is used to control the speed of the hub motor, measure the speed of the hub motor, measure the speed of the hub motor, measure the battery voltage and current, measure the motor current RYB and measure the motor temperature. These parameters send to the raspberry pi4 through CAN protocol. Raspberry pi is connected with a 7-inch touch display. Through this display, we can monitor the parameters of the electrical vehicle.



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SOFTWARE SKILLS:

> Programming Languages : C,C++, Python.

> Application Software : RIDE, KEIL, Arduino, STM Cube, IAR, MPLAB, MS Office.

Operating Systems : Windows, Linux

EDUCATIONAL QUALIFICATION:

Under Graduate (B.E)

Mechatronics Engineering from SNS College of technology, Coimbatore .

CONFERENCES ATTENDED

I have attended a National level conference on Engineering Trends in Automation, Robotics and Mechatronics (NCETARM'18) on March 2018, at SNS College of Technology, Combatore.

PAPER PRESENTED

"SAFETY ENHANCE SYSTEM FOR SEATBELT" at Bannari amman institute of technology in Sep 2017.

PUBLICATONS

- "AUTOMATIC SEATBELT RELEASE SYSTEM" Published in IAETSD-Journal for Advanced Research in Applied Science (JARAS) Volume 5, Issue 2, February 2018.
- "SAFETY ENHANCE SYSTEM FOR SEATBELT" Published in International Journal of Scientific Research and Review (IJSRR), ISSN:2279-543X, Volume 7, Issue 3, March 2018.

PERSONAL PROFILE:

Address

Father's Name : N.Murugan
Mother's Name : M.Amudha
Gender : male
Date of Birth : 19-10-1995
Marital Status : Single

Languages known : Tamil, English

3/83 Belur main road,

: Athanurpatty

(POST), Valappady (Taluk), Salem (Distric) - PIN 636115.



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Elango Manivannan Software Developer A highly motivated software engineer seeking to get a position in a reputed company, where I can use my skills and knowledge to learn new things and grow as a software developer. elankyoket@gmail.com elankyoket@gmail.com in linkedin.com/in/elan-kyoket-502461250

WORK EXPERIENCE

github.com/elankyoket

IOT INTERNSHIP TRAINING

Vi MicroSystems Pvt Ltd

07/2021 - 07/2022

Chennai, india

In my 7th and 8th semester of Engineering i'm here for internship due to high interested in IOT , joined as a Full time Developer .

Software Developer

Vi MicroSystems Pvt Ltd

07/2022 - Present

Chennai, India.

PERSONAL PROJECTS

Detecting missing values in database using mathematical prediction

- In this project we can recover the possible datas in organizations by using prediction algorithams like dft, polynomial prediction and etc.
- by Java with SQL Server

IOT Cloud Computing

- Interfacing with Sensors and update the sensors data to ubidots and thingspeak cloud
- use Data science and Data analytics

EDUCATION

Bachelor Of Engineering

Sengunthar Engineering College

07/2019 - 07/2022

Tiruchengode,Tamil Nadu.

Computer Science And Engineering

 with 7.2 * CGPA(*upto 7th semester)

Diploma In Computer Engineering

Kongu Polytechnic College

Computer Science And Engineering

06/2016 - 05/2019

Perundurai,Tamil Nadu

with 66 %

SKILLS

Python Html Css. Javascript, Sql and Diango

Intermediate Knowledge in Linux Server Adminstration And Cloud Deployment

Working with Docker

WORKSHOP

Ethical Hacking Workshop at IIT(Chennai)

To get a in depth knowledge about hacking i attened 3 continuous workshop at IIT professionals collaborative with azure cloud.

LANGUAGES

English

Full Professional Proficiency

Tamil

Native or Bilingual Proficiency

INTERESTS

Hardware and Networking

Cloud Computing And Virtualization

Racing & Paragliding

Gymnastics & Bodybulding



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Programme Participation List

DEPARTMENT OF ECE

Hands on Training for Real-time IoT Application using ESP-32 Controller

Programme – Registration form



NANDHA ENGINEERING COLLEGE (Autonomous), ERODE-638052

Affiliated to Anna University, Chennai
Department of Electronics and Communication Engineering
(Accredited by NBA)

Industry Supported Lab, Vi Microsystems Private Limited, Chennai

Institution of Electronics and Telecommunication Engineers (IETE)

Hands on Training on RealTime IoT applications—using ESP 32 controller

Date: 19.10.2022 & 20.10.2022

Registration Form

S.NO	Name of the participant	Designation	College Name	Mobile Number	Mail Id	Signature of the participant
1	X. Hemadharshini	student	Nandha Engineering college	9488540085	Khemuilburdum 1122 fightail. 12 m	1 The fact withing
2.	R Harini	Student	Nandha Enginæring Glege	9786602440	ramah, hanniloso @g mail.com	Robard
3	G. Harshavarthini •	Student	Nandha Engineering College	902552734-8	achhuofficial 0425@gmaul com	of Haven
4	N. Keerthana	student	Nandha Engineering College	965964934	keerthanan382001@gmailcom	N. Kath.
5	S. Deepika	student	Nandha Engineering College	9361106949	deepikas 21602@gmai).com	posplie S
6	N. Keethana	student	Nandha Engineering College	6374496703	keerthananataraj2019@gmzil	beetly.
7	D. halish hanzen	Student	Wendha Enginaring Wa	5708 52:36	Koluzharroda zanilin	21-3
8	V. Grayal Lanan	student			trappliation framiliem	,
9	kson Hari higreyh	Student	1		haridignes back a Brail	
		Student			gokutrajahrgam 27 Egmail com	



V. Pallalana Co-convener

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N. Principal 2010-2022



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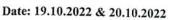


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Industry Supported Lab, Vi Microsystems Private Limited, Chennai

Institution of Electronics and Telecommunication Engineers (IETE) Hands on Training on Rea Time IoT applications using ESP 32 controller







Registration Form

	Registration Form					
S.NO	Name of the participant	Designation	College Name	Mobile Number	Mail Id	Signature of the participant
11	P. Sathish Kumar	Student	Nandha Engineering college	6369310245	sathishkumarpssy @gmail.	P. Southhotol
12	P. Sathish Kumar.	Student	Nandton Engineering College	8825960554	Sathisho 70777 @g mail.com	P.st.
13	C. Ragul	Student	Nardha Engineering College	8344406829	raguls10agm@gmail.com	C. FEH
14	Tamilarasu.V	Student	Alandha Engineering College	· 9360388691	tampigizi@gmail.lom	Vity
15	M. Riyaz Khan	Student	Nandha Engineering elg			
16	T. Vikneshwaran	Student	Nandha Engineering olg		vicky 465007@g mail.com	J. Ayey
17	R. SIVASHANKAR	Student		9344733893	sivashankarshir 47 ognail.	R. Suff.
18	M. SABARTSH	Student	Nambha Engineering elg	9025198019	con Saharash yageshwaran@gmil.	Holist.
19	111 Gopakkannon	student	Nandha Enggineering Clg	6374)67615	Gapakkunnan VKL73 (Ogmail.com	K. Gold.
00	A. Dhinesh	student	Alandha Engineesu ngcollege	9360448462	dhùneshananthoin@gmail.com	ASL

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Hands on Training on RealTime IoT applications using ESP 32 controller



Date: 19.10.2022 & 20.10.2022

Registration Form

			Registration For	m		
S.NO	Name of the participant	Designation	College Name	Mobile Number	Mail Id	Signature of the participant
21	Rahul p. K	31 udent	Nanda Engineering 6 Voge	7356370309	rahulpkadd@gneil.com	Edul pis
22	Bhavan Vidhyathi. S	Student	Nondha Engineering College	8680885068	Bhavan baki 2001 Egrail (on	BBL1.
23	VIONESH WARAN S	Student	Nanda Engineering College	9788650759	VIUNESHUARANOSV@ GMONI-COM	9 vighte
24	S.Gwana Xumax	SAUGENE	Nangha Englabosing college	9597789566	arara kumarzzezogmaile	s.Cula
25	VENKATESAN.N	Student			Verkateson 007 Venkat Ogmail-Can	N. Penkat
26	JAYADEV.G	Student	Nandha Engineering college	8248692593	Jaydevige gmail.com	Jun.
27	Tamils elvan. A.16	student	Nandha Engineering college	6374026561	tamilselvankumas 28@gmi	1 Family.
28	I.S. BALASHASANTH	Student	Northa Egiraning Collage	812469556	MOD. Via Via Co Shace coled ad	Bridge C
29	C.NITHISH Kumar	Student	Handha anginaling de	T0/08/10 TW	withis huma 1449.com	athr
30	S. SABARI NATHAN	Student				20 1

Co-ordinators

Co-convener

S- Karrille Jan

Principal 20. 40.2022



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Hands on Training on RealTime IoT applications using ESP 32 controller



Date: 19.10.2022 & 20.10.2022

Jules	19.10.2022 & 20.10.2022		Registration For	m		
s.NO	Name of the participant	Designation	College Name	Mobile Number	Mail Id	Signature of the participant
31.	J. Jayalakshmi	Student	Nandha Engineering College	9488328611	jecrajayeozi ag mail	J. Jayale. Holm.
32	B. Jansi	Student	Nandha Engineering College		Jarsi 2004 @g mail com	B Jas.
33	M. Rukumani	Student	Nandha Engineering College		rukur 296 @g mail loss	M. Ruburrani
34	V. Sharnika	Student	Nandha Engineering College	6369833802		
35	J. Darshana	Student	Nandha Engineering college	93630 49101	darehanakarthik20026gmail.	+ redens.
36	V. Sivananthîni	Student	Nandha Engenerang collage	9363381277	Egmailton Strananthini Yakuchamy 2003	Y. Sixaranth
37	M. Subha bree	Student	Nandha Englineening Lolley	8072321155	msubhaznu 152 € grail·lan	M. Subley.
38	S Roahu	Student			roabuled 24 to grain	
39	P. Dithik	Student	Nandhalmineering willige			-
40	H. Rasjith	Stugent	wordha tengineening where			

Co-ordinators

V. Palzololar Co-convener S. Kample Tool 22

Principal 20.1-2. 2022



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Registration Form

S.NO	Name of the participant	Designation	College Name	Mobile Number	Mail Id	Signature of the participant
41.	y Vishnupruja	Student	Nanolha Enguering (1/1)	9894911592	vipejsvd@gmail.ce.n	Whiteha.
42.	S. Yazhini	Student	Nandha Engineering Collage	8675990175		
43.	S. R. Joshiya	Student	Nordha Erymeeting College		٨	
44r	S. Varshini	Student	Martha Engineering College		vardinis 2204 @gmad. com	
45.	B. Mehala	Student	Mardha Engineering College	1		
46.	K.RHema •	Student	Nandha Engineering (alege		hema.20ec026@nandhaergg.org	
41.	V. Dhiwyadharshini	Student			dhivyavadivel15@gmail.	V. Bhutadhole
42 .	B. Monikka	Student	Nandha Engineering college		bmmonikka@gmail.com	B. No.
49.	S.Sharmita .	Student	Nandha Engineering	9659917148	Shamilasi Edwish &	P. Chille
1	S. Sahana Fariz.	Student	Nandha Engineering College Nandha Engeneering College	8668180640	Shamilasi Satarish a gmail.am fathimafarlz0301@ gmail.com	Sahaning S
	ACCOM.				Julian Co.	100

Co-ordinators

V. Payzoliol 22 Co-convener

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Principal a



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Hands on Training on Real Time IoT applications using ESP 32 controller

Date: 19.10.2022 & 20.10.2022

Registration Form



s.no	Name of the participant	Designation	College Name	Mobile Number	Mail Id	Signature of the participant
51	Naveen Kumar G	Student	slandha Engineering college	638179569	nborofficial agmail com	Now Kinar J.
52	M. Gowtham	student			00	Migouth
53	M. Mani kandan	Student	Nandha Engineering college Nandha Engineering college	8925107166	manikardamm8925@gmai	M. marikad
54	JAMBUKESWARAN.S	Student	Nondha Engineexing College			
			, U			

Co-ordinators

VPayto 10/2

Convener

Principal 20.10.200



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Industry Supported Laboratory, Vi Microsystems Private Limited, Chennai &

Institution of Electronics and Telecommunication Engineers (IETE)

Hands on Training for Real-Time IoT applications using ESP 32 controller.

The Hand on Training Program was organized on 19.102022 and 20.10.2022 from 9.30 am to 4.30 pm. It was handled by Mr.Elango Manivannan, Software Developer and Mr.Maruthupandi Murugan, Project Engineer, Vi Microsystems Pvt Ltd, Chennai. The objective of the training is to establish knowledge about the basics of IoT, installation of Arduino IDE, its libraries and its implementation in the IoT field and encourage the students to make their own project. In the training, the students were introduced to the basics of IoT, implementation of Analog and Digital sensors with LED interfacing, Switch interfacing, Communication with mobile phone and its interfacing with cloud using ESP Controller. The students gained comprehensive knowledge, so that they will be able to participate in various project Expo and carry out their final year academic projects and PBL projects.

Co-ordinators

May 20/22

Convener

Principal 20:10:20%