



CRITERION 1- CURRICULAR ASPECTS

1.3 Curriculum Enrichment

1.3.3 Percentage of students undertaking project work/field work/internship (Data for the latest completed academic year 2021-2022).

Program name	Program Code	List of students undertaking project work/ field work/Internship	Page No
B.E.EEE	105	ARAVINDKUMAR K	21
B.E.EEE	105	AHAMED AFZAR A	29
B.E.EEE	105	ARIVUSELVAN S	6
B.E.EEE	105	ARUNKUMAR S	78
B.E.EEE	105	BASKAR A	77
B.E.EEE	105	BHARATHA RAJA S	79
B.E.EEE	105	BHARATHIRAJA C	51
B.E.EEE	105	BRINTHA R	56
B.E.EEE	105	DEENA KARTHICK M	10
B.E.EEE	105	DINESH KUMAR M	13
B.E.EEE	105	GANESH S	80
B.E.EEE	105	GEETHANJALI DEVI S	56
B.E.EEE	105	GOVINTHAVASAN A	50
B.E.EEE	105	GURU PRASATH A	25
B.E.EEE	105	HAREESH K.S	81
B.E.EEE	105	HARISH G	52
B.E.EEE	105	ISHAS AHAMED A	53
B.E.EEE	105	JEYARAM M	59
B.E.EEE	105	JUSTIN THIRAVIYAM A	59
B.E.EEE	105	KABIL SHARMA M	59
B.E.EEE	105	KALAI SELVI S	56
B.E.EEE	105	KARTHI KEYAN R	33
B.E.EEE	105	KASTHURI M	37
B.E.EEE	105	KRISHNA PANDIYAN S	90
B.E.EEE	105	LAKSHMANAN T	82
B.E.EEE	105	LAKSHMI PRIYA A	37
B.E.EEE	105	LOGANATHAN M	83
B.E.EEE	105	LOGESH KUMAR M	59
B.E.EEE	105	LOGESHWARAN N	37
B.E.EEE	105	MAHENDRA S	90
B.E.EEE	105	MANIVEL C	10
B.E.EEE	105	MOHAMMED ASHIK S	90
B.E.EEE	105	MOHAMMED HARISH H	90
B.E.EEE	105	MONIKA V	6
B.E.EEE	105	PITCHIYATHA D	33
B.E.EEE	105	POORNAKUMAR V	25
B.E.EEE	105	POOVARASAN R	90
B.E.EEE	105	PRADAPKANNAN B	29
B.E.EEE	105	PRAVEEN KUMAR R	90





NPR

College of Engineering & Technology

Approved by AICTE, Affiliated to Anna University,
Accredited by NAAC WITH 'A' GRADE | Recognized by UGC under 2 (f)
Natham, Dindigul - 624 401. Web: www.nprcet.org



B.E.EEE	105	RAJAMURUGAN M	33
B.E.EEE	105	RAJASEKAR M	21
B.E.EEE	105	RAMAR V	90
B.E.EEE	105	REEGAN S	90
B.E.EEE	105	SANJAY KISHORE K M	17
B.E.EEE	105	SANRON MATHI S	92
B.E.EEE	105	SARAN R B	17
B.E.EEE	105	SARAVANA MUTHU K	92
B.E.EEE	105	SARAVANAKUMAR S	92
B.E.EEE	105	SARWESH R	92
B.E.EEE	105	SHYLESH KUMAR V	92
B.E.EEE	105	SIVA S	92
B.E.EEE	105	SUJEETHRAN S	29
B.E.EEE	105	THARUN N	92
B.E.EEE	105	THAVAMANI A	92
B.E.EEE	105	USHADEVI C	37
B.E.EEE	105	VENKATESH V	92
B.E.EEE	105	VIGNESH M	25
B.E.EEE	105	VIGNESHWARAN R	13



PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



NPR

College of Engineering & Technology

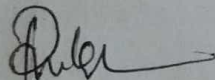
Approved by AICTE, Affiliated to Anna University,
Accredited by NAAC WITH 'A' GRADE | Recognized by UGC under 2 (f)
Natham, Dindigul - 624 401. Web: www.nprcet.org



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING


Class: IV EEE ACADEMIC YEAR: 2021-22
EE8811-PROJECT WORK

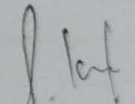
S.No.	Batch	Register No	Students Name	Guide	Project Topic	Domain Name	Type of the Project
1	1	920818105001	S.ARIVUSELVAN	Mr.S.SATHYAMOORTHY (AP/EEE)	AN INTELLIGENT TRAFFIC LIGHT SYSTEM FOR EMERGENCY VEHICLE	EXPERT SYSTEMS	REAL TIME APPLICATIONS
		920818105005	V.MONIKA				
2.	2.	920818105002	M.DEENA KARTHICK	Dr.K.VIJAYAKUMAR (PROF/EEE)	GOOGLE ASSISTANT BASED SMART HOME	IoT	REAL TIME APPLICATIONS
		920818105004	C.MANIVEL				
3	3	920818105003	M.DHINESH KUMAR	Dr.S.PRAKASH (AP/EEE)	IoT BASED INDUCTION MOTOR PARAMETERS MONITORING AND CONTROLLING	IoT	REAL TIME APPLICATIONS
		920818105701	R.VIGNESHWARAN				
4	4	920818105007	R.B.SARAN	Mrs.S.T.SARANYA (AP/EEE)	WIRELESS CHARGING OF ELECTRIC VEHICLE WHILE DRIVING	EV TECHNOLOGY	REAL TIME APPLICATIONS
		920818105006	K.M. SANJAY KISHORE				


PROJECT CO-ORDINATOR

Dr.S.PRAKASH, AP/EEE




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.


HOD-EEE
Dr.P.KANIRAJAN



NPR

College of Engineering & Technology

Approved by AICTE, Affiliated to Anna University,
Accredited by NAAC WITH 'A' GRADE | Recognized by UGC under 2 (f)
Natham, Dindigul - 624 401. Web: www.nprcet.org



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

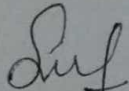
Class: III EEE ACADEMIC YEAR: 2021-22

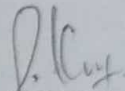
EE8611- MINI PROJECT

S.No.	Batch	Register No	Students Name	Guide	Project Topic	Domain Name	Type of the Project
1	1	920819105001	A.AHAMED AFZAR	Mrs.S.T.SARANYA (AP/EEE)	POWER GENERATION USING PIEZO ELECTRIC MATERIAL	POWER SYSTEMS	REAL TIME APPLICATIONS
		920819105014	S.SUJEETHRAN				
		920819105011	B.PRADAP KANNAN				
2.	2.	920819105002	K.ARAVIND KUMAR	Mrs.U.SARAYU (AP/EEE)	BLIND SPOT MONITORING AND ALERT FOR DRIVERS	EXPERT SYSTEMS	REAL TIME APPLICATIONS
		920819105013	M.RAJASEKAR				
3	3	920819105004	R.KARTHIKEYAN	Dr.S.PRAKASH (AP/EEE)	SMART ROAD SAFETY AND VEHICLE ACCIDENT AVOIDANCE SYSTEM FOR HILL ROADS	EV TECHNOLOGY	REAL TIME APPLICATIONS
		920819105012	M.RAJAMURUGAN				
		920819105009	D.PITCHAYATHA				
4	4	920819105006	A.LAKSMI PRIYA	Mrs.U.SARAYU (AP/EEE)	SMART WEARABLES FOR RESCUERS /VICTIMS	EV TECHNOLOGY	REAL TIME APPLICATIONS
		920819105005	M.KASTHURI				
		920819105015	C.USHADEVI				




		920819105007	N.LOGESHWARAN				
5	5	920819105007	V.POORNA KUMAR	Mrs.U.SARAYU (AP/EEE)	SMART PLANT MONITORING WITH IoT	IoT	REAL TIME APPLICATIONS
		920819105007	A.GURU PRASATH				
		920819105007	M.VIGNESH				


 PROJECT CO-ORDINATOR
 Mrs.S.T.SARANYA, AP/EEE


 HOD-EE
 Dr.P.KANIRAJAN




Dr. J.SUNDARARAJAN,
 B.E., M.Tech., Ph.D.,
 Principal
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.



**AN INTELLIGENT TRAFFIC LIGHT SYSTEM FOR
EMERGENCY VEHICLE**

A PROJECT REPORT

Submitted by

S. ARIVUSELVAN 920818105001

V. MONIKA 920818105005

*in partial fulfillment for the award of the degree
of*

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

NPR COLLEGE OF ENGINEERING & TECHNOLOGY, NATHAM

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

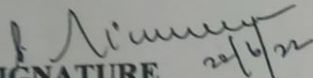
N.P.R. College of Engineering & Technology

Natham, Dindigul (Dt) - 624 401



ANNA UNIVERSITY: CHENNAI 600 025
BONAFIDE CERTIFICATE

Certified that this project report "AN INTELLIGENT TRAFFIC LIGHT SYSTEM FOR EMERGENCY VEHICLE" is the bonafide work of "S. ARIVUSELVAN (920818105001), V. MONIKA (920818105005)" who carried out the project work under my supervision.

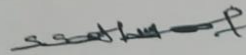

SIGNATURE

Dr. P. KANIRAJAN., M.E., Ph.D.,

HEAD OF THE DEPARTMENT

PROFESSOR

DEPARTMENT OF ELECTRICAL
AND ELECTRONICS ENGINEERING
NATHAM, DINDIGUL-624401



SIGNATURE

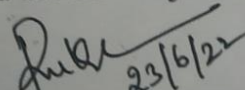
Mr. S. SATHYAMOORTHY, M.E., (Ph.D.),

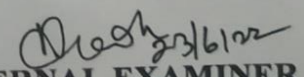
SUPERVISOR

ASSISTANT PROFESSOR

DEPARTMENT OF ELECTRICAL AND
ELECTRONICS ENGINEERING
NATHAM, DINDIGUL-624401

Submitted for the Project viva-voce examination held on 23/6/22.....


INTERNAL EXAMINER


EXTERNAL EXAMINER

Dr. JSUNDARARAJAN,
B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

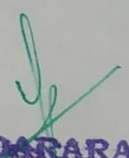
ABSTRACT

The project is aimed at designing a density based dynamic traffic signal system where the timing of signal will change automatically on sensing the traffic density at any junction. Therefore it is time to shift more manual mode or fixed timer mode to an automated system with decision making capabilities. Present day traffic signaling system is fixed time based which may render inefficient if one lane is operational than the others. To optimize this problem we have made a framework for an intelligent traffic control system. Sometimes higher traffic density at one side of the junction demands longer green time as compared to standard allotted time. We, therefore propose here a mechanism in which the time period of green light and red light is assigned on the basis of the density of the traffic present at that time. This is achieved by using IR(Infrared sensors). Once the density is calculated, the glowing time of green light is assigned by the help of the microcontroller (Arduino). The sensors which are present on sides of the road will detect the presence of the vehicles and sends the information to the microcontroller where it will decide how long a flank will be open or when to change over the signal lights. In subsequent sections, we have elaborated the procedure of this framework. It also supports smart city transportation applications including emergency vehicle signal preemption (EVSP) using RF based ambulance identification.

CHAPTER-6

CONCLUSION

The project work is aimed that the control of the traffic jams in the roads in the presence of emergency vehicle. As the number of cars is increasing day by day so our traffic control system should change. Number of passing vehicle in the fixed time slot on the road decide the density range of traffic and on the basis of vehicle count microcontroller decide the traffic light delays for next recording interval.


Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



ANNA UNIVERSITY: CHENNAI 600 025

BONAFAIDE CERTIFICATE

Certified that this project report " **GOOGLE ASSISTANT BASED SMART HOME** " is the Bonafide work of " **M. DEENA KARTHICK (9208180105002), C. MANIVEL (920818105004)** " who carried out the project work under my

[Signature]
SIGNATURE

Dr. K. KANNIRAJAN, M.E., Ph. D,
HEAD OF THE DEPARTMENT
PROFESSOR
DEPARTMENT OF ELECTRICAL
AND ELECTRONICS
ENGINEERING
NATHAM, DINDIGUL-624401

[Signature]
SIGNATURE

Dr. K. VIJAYAKUMAR, M.E., Ph.D,
SUPERVISOR
PROFESSOR
DEPARTMENT OF ELECTRICAL
AND ELECTRONICS
ENGINEERING
NATHAM, DINDIGUL-624401

Submitted for the ANNA UNIVERSITY Project viva-voce examination held
on 23/06/2022 at NPR College of Engineering and Technology, Natham.

[Signature]
INTERNAL EXAMINER

[Signature]
EXTERNAL EXAMINER



[Signature]
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT

This project presents a proposal for home automation using voice via Google Assistant. Home automation or demotic's a term for home automation coined by Jim Hill has been evolving drastically. We saw many home automation technologies introduced over these years from Zigbee automation to Amazon Echo, Google Home and Home from Apple. The system is implemented using ordinary household appliances Natural language voice commands are given to the Google Assistant and with the help of IFTTT (If This Then That) application and the Blynk application the commands are decoded and then sent to the microcontroller, the microcontroller in turn controls the relays connected to it as required, turning the device connected to the respective relay On or OFF as per the users request to the Google Assistant. The microcontroller used is Node MCU (ESP8266) and the communication between the microcontroller and the application is established via Wi-Fi (Internet).



Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER 7

CONCLUSION

In this project, commands are given to the Telegram bot. Home appliances like Bulb, Fan and Motor etc., are controlled according to the given commands. The commands given through the Telegram bot are decoded and then sent to the microcontroller and it controls the relays. The device connected to the respective relay turned On or OFF as per the user's request to the Google Assistant. The microcontroller used is Node MCU (ESP8266) and the communication between the microcontroller and the application is established via Wi-Fi (Internet). There has been tremendous growth in the home automation sector, and many reputed companies utilizing their opportunity to work with IFTTT to deliver an elegant way to connect families to their homes. Consumers are looking to secure their home environment in today's unpredictable world, and the new Home automation service gives them the peace of mind that they need to protect their family's well-being. This project is about wireless home automation using Android mobile helps us to implement such a fantastic system in our home at a very reasonable price using cost-effective devices. Thus, it overcomes many problems like costs, inflexibility, security etc. In addition, will provide greater advantages like it decreases our energy costs, it improves home security. In addition, it is very convenient to use and will improve the comfort of our home. The project has proposed the idea of smart homes that can support a lot of home automation systems. C++ programming language and Node microcontroller have been used to connect the sensors circuit to the home.





IOT BASED INDUCTION MOTOR PARAMETERS MONITORING AND CONTROLLING

A PROJECT REPORT

Submitted by

M. DHINESH KUMAR 920818105003

R. VIGNESHWARAN 920818105701

in partial fulfillment for the award of the degree

of

**BACHELOR OF ENGINEERING
IN**

ELECTRICAL AND ELECTRONICS ENGINEERING

**NPR COLLEGE OF ENGINEERING AND TECHNOLOGY,
NATHAM**

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022

Dr. JSUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

**N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.**



ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report “**IOT BASED INDUCTION MOTOR PARAMETERS MONITORING AND CONTROLLING**” is the bonafide work of “**M. DHINESH KUMAR (920818105003)**,

R. VIGNESHWARAN (920818105701)” who carried out the project work under my supervision.

[Signature]
SIGNATURE 24/6/22

[Signature]
SIGNATURE 20/6/22

Dr. P. KANIRAJAN.,M.E.,Ph.D.

Dr. S. PRAKASH.,M.E.,Ph.D.

HEAD OF THE DEPARTMENT

SUPERVISOR

PROFESSOR

ASSISTANT PROFESSOR

DEPARTMENT OF ELECTRICAL
AND ELECTRONICS ENGINEERING

DEPARTMENT OF ELECTRICAL
AND ELECTRONICS ENGINEERING

NATHAM, DINDIGUL-624401

NATHAM, DINDIGUL-624401

Submitted for the Project viva-voice examination held on 23/06/2022

[Signature]
INTERNAL EXAMINER 23/6/22

[Signature]
EXTERNAL EXAMINER 23/6/22

Dr. J.SUNDARARAJAN,

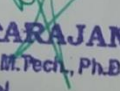
B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT


This work tends to develop for protections of three phase induction motor from phase reversal and over temperature. Due to this electrical fault the windings of motor get heated which lead to insulation failure and thus reduce the life time of motor. Thus fault is generated in induction motor due to variation in induction motor parameters. When there is phase induction motor runs continuously, it is necessary to protect the motor from there anticipate faults. Three phase induction motor generally directly connected through the supply, if the supply voltage has sag and swell due to fault the performance of motor is affected and in some cases winding is burned out. When phase sequences is reversed due to wrong connection have then motor start rotating in another directions, if supply system has only one phase and other phase is directly disconnected then it is single phasing problem.


Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER 6

CONCLUSION

This project presents the concept of Internet of Things for early detection and monitoring of motor system failures remotely. The system has been designed to combine various parameter measurements in real-time, improving the delectability of different faults. The monitoring of the motor system presents the measurement of different parameters namely vibrations, temperature, voltage and current consumption. Thus, compared to conventional methods that relies solely on vibrations or temperature, this design has more information sources which can enable an alarm. The concept of IoT is presented here for remote monitoring and controlling the motor. The data received by the coordinator node is stored and graphically presented in real-time by means of a application developed in remote device. With the help of this device, it is very easy to have the real time parameters of the Induction motor which will helps us in various aspects leading to the growth of the industry and increase working efficiency of motor.


Dr. JSUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



WIRELESS CHARGING OF ELECTRIC VEHICLE WHILE DRIVING

A PROJECT REPORT

Submitted by

R. B. SARAN

920818105007

K. M. SANJAY KISHORE

920818105006

in partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

NPR COLLEGE OF ENGINEERING AND TECHNOLOGY, NATHAM

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022



Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

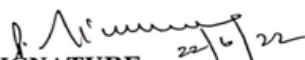
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report "WIRELESS CHARGING OF ELECTRIC VEHICLE WHILE DRIVING" is the bonafide work of "R.B.SARAN (920818105007), K.M.SANJAY KISHORE (920818105006), " who carried out the project work under my supervision.


SIGNATURE

Dr. P. KANIRAJAN, M.E., Ph.D.,

HEAD OF THE DEPARTMENT

Professor,
Department of Electrical and Electronics
Engineering,
Technology,
Natham, Dindigul-624 401.


SIGNATURE

Mrs. S. T. SARANYA, M.E.,

SUPERVISOR

Assistant Professor,
Department of Electrical and
Electronics Engineering
and Technology,
Natham, Dindigul- 624 401.


Submitted for the Project viva-voce examination held on 23.06.2022


INTERNAL EXAMINER


EXTERNAL EXAMINER

ii




Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT

Static wireless charging is becoming popular all over the world to charge the electric vehicle(EV). But an EV cannot go too far with a full charge. It will need more batteries to increase its range. Dynamic wireless charging is introduced to EVs to capitally increase their driving range and get rid of heavy batteries. Some modern EVs are getting off this situation. But with Dynamic wireless power transfer (WPT) the need of plug-in charge and static WPT will be removed gradually and the total run of an EV can be limitless. If we charge an EV while it is driven, we do not need to stop or think for charging it again.

Eventually, in the future the batteries can be also removed from EVs by applying this method in everywhere. Wireless charging needs two kinds of coils named the transmitter coil and the receiver coil. The receiver coil will collect power from the transmitter coil while going over it in the means of mutual induction.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER 8 CONCLUSION

Research on WPT is getting popular these years. This work compares the most famous WPT technologies and develops an effective one known RIPT. The RIPT method is used for resonating the transmitter coil frequency and receiver coil frequency. It shows how air gap and misalignment affect the WPT while the EV is driven in the charging lane.

The goal of this project was to design and implement a wireless charger for vehicle via resonant inductive coupling. After analysing the whole system step by step for optimization, a circuit was designed and implemented. Experimental results showed that significant improvements in terms of power-transfer efficiency have been achieved. It was described and demonstrated that resonant inductive coupling can be used to deliver power wirelessly from a source coil to a load coil and charge a low power device. We can also select voltage variations by using variable resistor. As it was mentioned earlier, wireless charging could be the next big thing.




Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



**BLIND SPOT MONITORING AND ALERT
FOR DRIVERS**



A PROJECT REPORT

Submitted by

ARAVIND KUMAR .K

(920819105002)

RAJA SEKAR .M

(920819105013)

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

NPR COLLEGE OF ENGINEERING AND TECHNOLOGY, NATHAM

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

BONAFIDE CERTIFICATE

Certified that this project report "BLIND SPOT MONITORING AND ALERT FOR DRIVERS" is the bonafide work of "ARAVIND KUMAR .K (920819105002) and RAJASEKAR .M (920819105013)" who carried out the project work under my supervision.


SIGNATURE

Dr. P.KANIRAJAN, M.E., Ph.D.
HEAD OF THE DEPARTMENT
Professor,
Electrical and Electronics
Engineering,
NPR College of Engineering
and Technology,
Natham,
Dindigul – 624001.

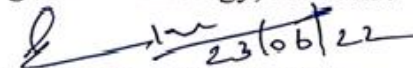

SIGNATURE

Mrs. U.SARAYU, M.E.,
SUPERVISOR
Assistant Professor,
Electrical and Electronics
Engineering,
NPR college of Engineering
and Technology,
Natham,
Dindigul – 624001.

Submitted for the ANNA UNIVERSITY viva-voce Examination held
on

23.06.2022, at NPR College of Engineering and Technology, Natham.


EXTERNAL EXAMINER


EXTERNAL EXAMINER




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT

In the current ever-growing traffic, security is one of the biggest concerns during travel. From airbags and ABS to EBD and automatic braking, work is on to make road travel more secure by the day. This project describes a design and implementation of an effective alert system to monitor an automobile's condition during travel. It is designed to send out an alert in case the vehicle has met with an accident. Our design of the system uses the in-built Ultra sonic sensor in the Electronic Control Unit to detect the obstacles. This detection and messaging system is composed of buzzer system with automatic speed reduction.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER 5

CONCLUSION

The project was successfully implemented. Thus by having this prototype in place we can address an unexplored area of security and safety and thereby contribute towards reducing the death toll numbers which are caused due to road accidents. Our prototype would help accelerate the response from the concerned team thereby resulting in a quicker addressing to the victims of the accidents. This experiment still will require real-life scenario validation. There is a lot of work to be done to see if the presence of such a system can be made a norm in all the vehicles sold and all the commercial vehicles such as buses/trucks plying on our roads. In addition, there is a vast scope for future developments in this field. This system can be expanded to have a high population density warning system for areas such as schools, colleges etc. It could be used to develop a speed limit warning system as well.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



SMART PLANT MONITORING WITH IOT



A PROJECT REPORT

Submitted by

POORNAKUMAR.V

(920819105010)

GURUPRASATH.A

(920819105003)

VIGNESH. M

(920819105016)

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

NPR COLLEGE OF ENGINEERING AND TECHNOLOGY, NATHAM

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022



Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology

Natham, Dindigul (Dt) - 624 401.

BONAFIDE CERTIFICATE

Certified that this project report "SMART PLANT MONITORING WITH IOT" is the bonafide work of "POORNAKUMAR.V (920819105010), GURUPRASATH.A (920819105003), VIGNESH.M (920819105016) " who carried out the project work under my supervision.


SIGNATURE

Dr. P.KANIRAJAN, M.E.,Ph.D.

HEAD OF THE DEPARTMENT

Professor,
Electrical and Electronics
Engineering,
NPR College of Engineering
and Technology,
Natham,
Dindigul – 624001.


SIGNATURE

U.SARAYU M E.,

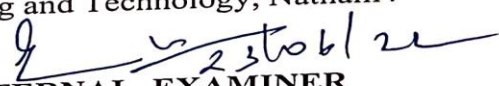
SUPERVISOR

Assistant Professor,
Electrical and Electronics
Engineering,
NPR college of Engineering
and Technology,
Natham,
Dindigul – 624001.

Submitted for the ANNA UNIVERSITY viva-voce Examination held
on

23.06.22..... at NPR College of Engineering and Technology, Natham .


INTERNAL EXAMINER


EXTERNAL EXAMINER




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT

As we can see in today's world only some devices like PC's and mobiles are connected to internet. Now-a-days world is fully overtaken by the internet and internet of things. Internet is use for basic need of all human beings. The Internet of Things (IOT) is the network of physical objects. It simply means to monitor a physical device or machine, or it is inter-networking of physical devices which is embedded with electronics, sensors, software and network connectivity to enable it to achieve greater value and services by exchanging data with the manufacturer. This project is designed as a plant monitoring system based on IOT. In this project we used different modules such as IOT, NodeMCU, Temperature sensor, Moisture sensor, Humidity sensor. India is agriculture sector, on either side, is losing ground every day, affecting the ecosystem's output capacity. In order to restore vitality and put agriculture back on a path of higher growth, there is a growing need to resolve the issue. A large-scale agricultural system necessitates a great deal of upkeep, knowledge, and oversight. The IoT is a network of interconnected devices that can transmit and receive data over the internet and carry out tasks without human involvement. Agriculture provides a wealth of data analysis parameters, resulting in increased crop yields. The use of IoT devices in.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER 5

CONCLUSION

A system to monitor temperature, humidity, moisture levels in the soil was designed and the project provides an opportunity to study the existing systems, along with their features and drawbacks. Agriculture is one of the most waterconsuming activities. The proposed system can be used to switch the motor (on/off) depending on favorable condition of plants i.e., sensor values, thereby automating the process of irrigation. which is one of the most time efficient activities in farming, which helps to prevent over irrigation or under irrigation of soil thereby avoiding crop damage. The farm owner can monitor the process online through Front End Structure. By this work, the wastage of water and the consumption of power by motor can be reduced so that they are conserved for the future use. Through this project it can be concluded that there can be considerable development in farming with the use of IOT and automation..




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



**POWER GENERATION USING
PIEZOELECTRIC MATERIAL**



A PROJECT REPORT

Submitted by

AHAMED AFZAR .A	(920819105001)
SUJEETHARAN.S	(920819105014)
PRADAP KANNAN.B	(920819105011)

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

NPR COLLEGE OF ENGINEERING AND TECHNOLOGY, NATHAM

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

BONAFIDE CERTIFICATE

Certified that this project report “**POWER GENERATION USING PEIZOELECTRIC MATERIAL**” is the bonafide work of “

AHAMED AFZAR .A (920819105001), **SUJEETHARAN.S** (920819105014) and **PRADAP KANNAN.B**

(920819105011)” who carried out the project work under my supervision.


SIGNATURE

Dr. P.KANIRAJAN, M.E.,Ph.D.

HEAD OF THE DEPARTMENT

Professor,
Electrical and Electronics
Engineering,
NPR College of Engineering
and Technology,
Natham,
Dindigul – 624001.


SIGNATURE

Mrs S.T.SARANYA,M.E.,

SUPERVISOR

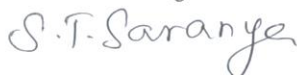
Assistant Professor,
Electrical and Electronics
Engineering,
NPR college of Engineering
and Technology,
Natham,
Dindigul – 624001.

Submitted for the ANNA UNIVERSITY viva-voce Examination held
on

23.06.2022 at NPR College of Engineering and Technology, Natham


INTERNAL EXAMINER


EXTERNAL EXAMINER



ii




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT

In present condition the shortage of electricity is the big problem for industrial growth as well as rural developing. Shortage of electricity has its effects on India's developing growth. To solve such types of problem we need to develop strong electricity generating techniques with the help of wasting human energy for our better future.

In this project we are generating electrical power as non-conventional method by simply walking or running on the foot step. Non-conventional energy system is very essential at this time to our nation. Nonconventional energy using foot step is converting mechanical energy into the electrical energy. Due to this a lot of energy resources have been exhausted and wasted. Proposal for the utilization of waste energy foot power with human locomotion is very much relevant and important for highly populated countries like India and china where the Roads, Railway stations, Bus stands, Temple, etc., are all over crowded and millions of people move around the clock.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER – 8

CONCLUSION:

The project is successfully tested which is the best economical, affordable energy solution to common people. This can be used for many applications in city areas where want more power. Bangladesh is a developing country where energy management is a big challenge for huge population. By using this project I can drive D.C loads according to the force I applied on the piezoelectric sensor. Although the theory developed in this report justifies the use of switching techniques in efficiently converting that energy to a usable form, there are obviously some practical limitations to the systems presented. The final prototype design does fulfill the objective of generating electricity from piezoelectric disk. Due to the low cost design of the piezoelectric system it is a practical product which could increase the operating period of most common products.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



**SMART ROAD SAFETY AND VEHICLE ACCIDENT
AVOIDANCE SYSTEM FOR HILL ROADS**



A PROJECT REPORT

Submitted by

KARTHIKEYAN.R

(920819105004)

RAJA MURUGAN.M

(920819105012)

PITCHIYATHA.D

(920819105009)

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

NPR COLLEGE OF ENGINEERING AND TECHNOLOGY, NATHAM

ANNA UNIVERSITY: CHENNAI 600 025

JUNE 2022



Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

**N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.**

BONAFIDE CERTIFICATE

Certified that this project report "SMART ROAD SAFETY AND VEHICLE ACCIDENT AVOIDANCE SYSTEM FOR HILL ROADS" is the bonafide work of "KARTHIKEYAN .R (920819105004), RAJA MURUGAN .M (90819105012) and PITCHIYATHA .D (920819105009) " who carried out the project work under my supervision.


SIGNATURE

Dr. P.KANIRAJAN, M.E.,Ph.D.
HEAD OF THE DEPARTMENT

Professor,
Electrical and Electronics
Engineering,
NPR College of Engineering
and Technology,
Natham,
Dindigul – 624001.


SIGNATURE

Dr.S.PRAKASH,M.E.,Ph.D.,
SUPERVISOR

Assistant Professor,
Electrical and Electronics
Engineering,
NPR college of Engineering
and Technology,
Natham,
Dindigul – 624001.

Submitted for the ANNA UNIVERSITY viva-voce Examination held on

~~23.6.22~~ 23.6.22..... at NPR College of Engineering and Technology, Natham.


INTERNAL EXAMINER


EXTERNAL EXAMINER




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT

Within the Developing countries accident is that the main reason for death. If we watch top 10 countries within the globe all of them are mountain road and curve roads. Within the mountain there'll be tight curves and narrow roads due to this visibility is blocked .In these reasonably situation the motive force of vehicle cannot see vehicle coming from opposite side. The developing countries need to adopt the model followed by developing countries like Netherland & Denmark where roads are built in line with their function .in developing countries buses and trucks are more involved in accidents because of lack of proper safety standards. Thousands of individuals lost their lives due to this problem. . utilization of day time light, high mounted stop lamps, reflectors, colorful clothing has decreased the incidence of crashes due to poor visibility. The answer of this problem is alerting the motive force about the vehicle coming from opposite side. This is often done by keeping the ultrasonic sensor in one side of the road before the curve and keeping a LED light after the curve ,so that vehicle comes from one side of curve a senses and LED light glow at opposite side. By viewing the LED light on /off criteria the motive force can become alert and may hamper the speed of vehicle.



Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER 5

CONCLUSION

In the present globe the proportion of accident has increased so widely because people weren't helping when accident occurs even person is fallen before of their eyes .So our main motive of this project is to avoid the accident by implementing sensor based technology and in future if accident of person is happened he wouldn't need to depend upon others he can safely travel or can pass curves or hilly roads when LED light glows it gives in indications of alert .The purpose of this paper is to decrease the quantity of accidents in curve roads. This can be done by alerting the driver by means of LED light which glows when vehicle comes from the opposite side of the curve. The vehicle is detected by the assistance of Ultrasonic sensor which is interfaced to the microcontroller arduino UNO. By this we can save thousands of lives within the curve roads.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



SMART WEARABLES FOR RESCUERS/VICTIMS



A PROJECT REPORT

Submitted by

LAKSHMI PRIYA. A (920819105006)

KASTHURI. M (920819105005)

USHADEVI. C (920819105015)

LOGESHWARAN. N (920819105007)

in partial fulfillment for the award of the

degree of

BACHELOR OF ENGINEERING

IN

ELECTRICAL AND ELECTRONICS ENGINEERING

NPR COLLEGE OF ENGINEERING AND TECHNOLOGY,

NATHAM, DINDIGUL.

ANNA UNIVERSITY : CHENNAI 600 025

JUNE 2022




Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

BONAFIDE CERTIFICATE

Certified that this project report "SMART WEARABLES FOR RESCUERS/VICTIMS" is the bonafide work of "LAKSHMIPRIYA.A (920819105006), KASTHURI.M (920819105005), USHADEVIL.C (920819105015) and LOGESHWARAN.N (920819105007)" who carried out the project work under my supervision.


SIGNATURE

Dr. P.KANIRAJAN, M.E.,Ph.D.

HEAD OF THE DEPARTMENT

Professor,
Electrical and Electronics
Engineering,
NPR College of Engineering
and Technology,
Natham,
Dindigul – 624001.



SIGNATURE


Mrs. U.SARAYU, M.E.

SUPERVISOR

Assistant Professor,
Electrical and Electronics
Engineering,
NPR college of Engineering
and Technology,
Natham,
Dindigul – 624001.

Submitted for the ANNA UNIVERSITY viva-voce Examination held on
.. 23.06.2022 at NPR College of Engineering and Technology, Natham .


INTERNAL EXAMINER
S.T. Saranya


EXTERNAL EXAMINER




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT

A rescuer is a person who saves someone from an dangerous or an unpleasant situation during disaster management such as Tsunami, Earthquake, landslides etc. Even soldiers who are involved in Warfield lose their contact with their authorities ,die due to lack of medical help during emergency. To overcome this, there must be some wearable device which performs the following tasks – sense, analyze, store transmit, receive using wireless body area sensor networks such as Temperature sensor, Pulse rate sensor etc. This is the main aim of our project.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER - 5

CONCLUSION

This project proposed a smart system for health parameter detection, prediction, and response for soldier people. It designed the main five building blocks of the envisioned system, as well as highlighted the main technologies to be considered in each building block. The proposed system is best suitable for rescuer people to save the life. In addition, the motivation for the interaction between the components of our system was highlighted, as well as how these interactions will happen. Finally, we discussed some of the main challenges that will be addressed in the future works, towards the implementing the proposed smart system.



Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

	<h1 style="text-align: center;">NPR College of Engineering & Technology</h1> <p style="text-align: center;">NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India. Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai. An ISO 9001:2015 Certified Institution. Phone No: 04544- 246 500, 246501, 246502. Website : www.nprcolleges.org, www.nprcet.org, Email: nprcetprincipal@nprcolleges.org</p>	
---	---	---

Ref: NPRCET/OFF/EEE/IPT-01/2021-22

Date: 08/09/2021

From

The Principal,
 NPR College of Engineering & Technology,
 Natham, Dindigul-624 401.

To

The Manager
 Elysium Technologies,
 229, Ground floor, A Block, Elysium Campus,
 Church road, Madurai-625020

Sir,

Sub: Permission for In-plant training for our students - Reg.

NPR College of Engineering & Technology, Natham, Dindigul is a reputed institution in Tamilnadu affiliated to Anna University, Chennai.


The following students of **Final year B.E Electrical and Electronics Engineering** are interested to undergo In-Plant training in your organization. During the course of the training they will follow the rules and regulations of your organization.

S.No.	Name of the student	Register Number	Year& Branch
1.	Mr. S.ARVUSELVAN	920818105001	IV EEE
2.	Mr. M.DEENA KARTHICK	920818105002	IV EEE
3.	Mr.M.DINESH KUMAR	920818105003	IV EEE
4.	Mr. C.MANIVEL	920818105004	IV EEE
5.	Mr.K.M.SANJAY ISHORE	920818105006	IV EEE

Looking forward for your reply.

Thank you




PRINCIPAL
Dr. J.SUNDARARAJAN,
 B.E., M.Tech., Ph.D.,
 Principal
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.

	<h1 style="text-align: center;">NPR College of Engineering & Technology</h1> <p style="text-align: center;">NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India. Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai. An ISO 9001:2015 Certified Institution. Phone No: 04544- 246 500, 246501, 246502. Website : www.nprcolleges.org, www.nprcet.org, Email: nprcetprincipal@nprcolleges.org</p>	
---	---	---

Ref: NPRCET/OFF/EEE/IPT-01/2021-22

Date: 08/09/2021


BONAFIDE CERTIFICATE

This is to certify that the following students of our institution are studying in **Final year B.E Electrical and Electronics Engineering** during the academic year 2021-22.

S.No.	Name of the student	Register Number	Year& Branch
1.	Mr. S.ARIVUSELVAN	920818105001	IV EEE
2.	Mr. M.DEENA KARTHICK	920818105002	IV EEE
3.	Mr. M.DINESH KUMAR	920818105003	IV EEE
4.	Mr. C.MANIVEL	920818105004	IV EEE
5.	Mr. K.M.SANJAY ISHORE	920818105006	IV EEE

This certificate is issued for the purpose of **In-Plant Training** only.




PRINCIPAL
Dr. J.SUNDARARAJAN,
 B.E., M.Tech., Ph.D.,
 Principal
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.

Date: 10.09.2021

To

The Principal,
NPR College of Engineering & Technology,
Natham.


Sir,


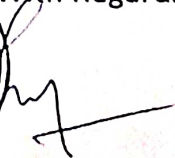
Sub: Permission for In-plant training-reg

Ref: NPRCET/OFF/EEE/IPT-01/2021-2022 dated: 08.09.2021

With reference to your letter we are pleased to grant permission for Mr. S. Arivuselvan (920818105001), Mr. M. Deena Karthik (920818105002), Mr. M.Dinesh Kumar (920818105003), Mr. C. Manivel (920818105004), Mr. K.M. Sanjay Kishore (920818105006), of final year Electrical and Electronics Engineering of your institution to undergo In-plant training in our concern from 14.09.2021 to 25.09.2021.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.


With Regards

(For Elysium technologies)

Date: 25.09.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the students of final year EEE of NPR College of Engineering & Technology, Natham has successfully done the In-Plant training in our concern from 14.09.2021 to 25.09.2021.

During this period their conduct was sincere and hardworking.

S. No.	Name of the Student	Register Number	Year & Branch
1.	Mr.S.ARIVUSELVAN	920818105001	IV EEE
2.	Mr.M.DEENA KARTHICK	920818105002	IV EEE
3.	Mr.M.DINESH KUMAR	920818105003	IV EEE
4.	Mr.C.MANIVEL	920818105004	IV EEE
5.	Mr.K.M.SANJAY ISHORE	920818105006	IV EEE



Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



With Regards

(For Elysium technologies)

Ref: NPRCET/OFF/EEE/IPT-02/2021-22

Date: 28/09/2021

From

The Principal,
 NPR College of Engineering & Technology,
 Natham, Dindigul-624 401.

To

The Managing Director
 Megatronics,
 62,R.K.Mill 'B' Colony, Peelamedu Pudur,
 Near PSG Tech, Coimbatore-641 004

Sir,

Sub: Permission for In-plant training for our students - Reg.

NPR College of Engineering & Technology, Natham, Dindigul is a reputed institution in Tamilnadu affiliated to Anna University, Chennai.


The following students of **Third year B.E Electrical and Electronics Engineering** are interested to undergo In-Plant training in your organization. During the course of the training they will follow the rules and regulations of your organization.

S.No.	Name of the student	Register Number	Year& Branch
1.	Mr. LOGESHWARAN N	920819105007	III EEE
2.	Mr. PITCHIYATHA D	920819105009	III EEE
3.	Mr. POORNAKUMAR V	920819105010	III EEE
4.	Mr. RAJAMURUGAN M	920819105012	III EEE
5.	Mr. RAJASEKAR M	920819105013	III EEE

Looking forward for your reply.

Thank you




 PRINCIPAL
Dr. J.SUNDARARAJAN,
 B.E., M.Tech., Ph.D.,
 Principal
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.

Ref: NPRCET/OFF/EEE/IPT-02/2021-22

Date: 28/09/2021


BONAFIDE CERTIFICATE

This is to certify that the following students of our institution are studying in **Third year B.E Electrical and Electronics Engineering** during the academic year 2021-22.

S.No.	Name of the student	Register Number	Year& Branch
1.	Mr. LOGESHWARAN N	920819105007	III EEE
2.	Mr. PITCHIYATHA D	920819105009	III EEE
3.	Mr. POORNAKUMAR V	920819105010	III EEE
4.	Mr. RAJAMURUGAN M	920819105012	III EEE
5.	Mr. RAJASEKAR M	920819105013	III EEE

This certificate is issued for the purpose of **In-Plant Training only**.




PRINCIPAL
Dr. J.SUNDARARAJAN,
B.E. M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Date: 01-10-2021

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Dear Sir,

Sub: Permission for In-Plant Training-reg

Ref: NPRCET/OFF/EEE/IPT-02/2021-2022 dated: 28-09-2021.

With reference to your letter cited above, we are pleased to give permission for Mr. LOGESHWARAN N (920819105007), Mr. PITCHIYATHA D (920819105009), Mr. POORNAKUMAR (920819105010), Mr. RAJAMURUGAN M (920819105012), Mr. RAJASEKAR M (920819105013) of Third year Electrical and Electronics Engineering of your institution to undergo In-Plant Training in our organization from 05.10.2021 to 16.10.2021.

Thank you.

Yours truly,
For Megatronics



(C.Kannan)

Megatronics

65, R.K. Mills 'B' Colony, Peelamedu Pudur, Coimbatore - 641 004.
Cell : 98422-85001 Phone : 0422 - 256 5001 E-mail : megatronicsindia@gmail.com
Web : www.megatronicsindia.in



Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Date: 16-10-2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the students of Third year EEE of NPR College of Engineering & Technology, Natham has successfully done the In-Plant training in our concern from 05.10.2021 to 16.10.2021.

During this period their conduct was sincere and hardworking.

S. No.	Name of the Student	Register Number	Year & Branch
1.	Mr. LOGESHWARAN N	920819105007	III EEE
2.	Mr. PITCHIYATHA D	920819105009	III EEE
3.	Mr. POORNAKUMAR V	920819105010	III EEE
4.	Mr. RAJAMURUGAN M	920819105012	III EEE
5.	Mr. RAJASEKAR M	920819105013	III EEE

Yours truly,
For Megatronics



(C.Kannan)

Megatronics

65, R.K. Mills 'B' Colony, Peelamedu Pudur, Coimbatore - 641 004
Cell : 98422-85001 Phone : 0422 - 256 5001 E-mail : megatronicsindia@gmail.com
Web : www.megatronicsindia.in



Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Date: 10.09.2021

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Sir,

Sub: Permission for Internship Training-reg

Ref: NPRCET/OFF/EEE/INT-01/2021-2022 dated: 06.09.2020

With reference to your letter we are pleased to grant permission for Mr. BHARATHIRAJA C (920820105002), Mr. GOVINTHAVASAN A (920820105003), Mr. HARISH G (920820105004), Mr. ISHAS AHAMED A (920820105005) of second year Electrical and Electronics Engineering of your institution to undergo Internship Training in our concern from 15.09.2021 to 25.09.2021.

With Regards

For SUPERFECT SOLUTIONS,



AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, Mail: info@superfectsolutions.com, Web: www.superfectsolutions.com



Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that **Mr. GOVINTHAVASAN A (920820105003)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,



AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, **Mail:** info@superfectsolutions.com, **Web:** www.superfectsolutions.com



Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that Mr. BHARATHIRAJA C (920820105002) pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern from 15.09.2021 to 25.09.2021.

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,



AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, Mail: info@superfectsolutions.com, Web: www.superfectsolutions.com



Dr. J. SUNDARARAJAN,
BE., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that Mr. HARISH G (920820105004) pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern from 15.09.2021 to 25.09.2021.

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,



AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, Mail: info@superfectsolutions.com, Web: www.superfectsolutions.com



Br. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that Mr. ISHAS AHAMED A (920820105005) pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern from 15.09.2021 to 25.09.2021.

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,



AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, Mail: info@superfectsolutions.com, Web: www.superfectsolutions.com



Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



NPR College of Engineering & Technology

NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India.
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

An ISO 9001:2015 Certified Institution.

Phone No: 04544- 246 500, 246501, 246502.

Website : www.nprcolleges.org, www.nprcet.org, Email: nprcetprincipal@nprcolleges.org



Ref: NPRCET/OFF/EEE/INT-02/2021-22

Date: 13/10/2021

From

The Principal,
NPR College of Engineering & Technology,
Natham, Dindigul-624 401.

To

The Managing Director
NanoTech Groups,
No:31/588, 5th cross, Shanmuga Nagar,
U.K.T.Malai, Trichy – 620 102.

Sir,

Sub: Permission for Internship training for our students - Reg.

NPR College of Engineering & Technology, Natham, Dindigul is a reputed institution in Tamilnadu affiliated to Anna University, Chennai.

The following students of **Second year B.E Electrical and Electronics Engineering** are interested to undergo Internship training in your organization. During the course of the training they will follow the rules and regulations of your organization.

S.No.	Name of the student	Register Number	Year& Branch
1.	Ms. BRINTHA R	920820105303	II EEE
2.	Ms. GEETHANJALI DEVI S	920820105305	II EEE
3.	Ms. KALAI SELVI S	920820105307	II EEE
4.	Ms. MONIKA K	920820105312	II EEE

Looking forward for your reply.

Thank you



PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

	<h1 style="text-align: center;">NPR College of Engineering & Technology</h1>	
<p style="text-align: center;">NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India. Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai. An ISO 9001:2015 Certified Institution. Phone No: 04544- 246 500, 246501, 246502. Website : www.nprcolleges.org, www.nprcet.org, Email: nprcetprincipal@nprcolleges.org</p>		

Ref: NPRCET/OFF/EEE/INT-02/2021-22

Date: 13/10/2021


BONAFIDE CERTIFICATE

This is to certify that the following students of our institution are studying in **Second year B.E Electrical and Electronics Engineering** during the academic year 2021-22.

S.No.	Name of the student	Register Number	Year& Branch
1.	Ms. BRINTHA R	920820105303	II EEE
2.	Ms. GEETHANJALI DEVI S	920820105305	II EEE
3.	Ms. KALAI SELVI S	920820105307	II EEE
4.	Ms. MONIKA K	920820105312	II EEE

This certificate is issued for the purpose of **Internship Training only**.




PRINCIPAL
Dr. J. SUNDARARAJAN,
 B.E., M.Tech., Ph.D.,
 Principal
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.

Date: 18.10.2021

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Sir,

Sub: Permission for Internship training-reg

Ref: NPRCET/OFF/EEE/INT-02/2021-2022 dated: 13.10.2021

With reference to your letter we are pleased to grant permission for Ms. Brindha R (920820105303), Ms. Geethanjali Devi (920820105305), Ms. Kalaiselvi S (920820105307), Ms. Monika (920820105312) of second year Electrical and Electronics Engineering of your institution to undergo Internship training in our concern from 22.10.2021 to 03.11.2021.

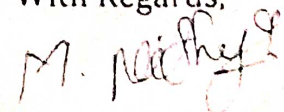


Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

NANO TECH GROUPS
No.31/588, 5th Cross
Shanmuga Nagar, U.K.T. Malai
Trichy- 620 102
Cell:98948 90200, 88070 90200

With Regards,



Date: 03.11.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the students of second year EEE of NPR College of Engineering & Technology, Natham has successfully done the Internship training in our concern from 22.10.2021 to 03.11.2021.

During this period their conduct was sincere and hardworking.

S. No.	Name of the Student	Register Number	Year & Branch
1.	Ms. BRINTHA R	920820105303	II EEE
2.	Ms. GEETHANJALI DEVI S	920820105305	II EEE
3.	Ms. KALAI SELVI S	920820105307	II EEE
4.	Ms. MONIKA K	920820105312	II EEE



Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

With Regards,

NANO TECH GROUPS
No:31/588, 5th Cross
Shanmuga Nagar, U.K.T. Malai
Trichy- 620 102
Cell:98948 90200, 88070 90200

	<h1 style="text-align: center;">NPR College of Engineering & Technology</h1>	
<p style="text-align: center;">NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai An ISO 9001:2015 Certified Institution Phone No: 04544- 246 500, 246501, 246502 Website : www.nprcolleges.org, www.nprcet.org, Email: nprcetprincipal@nprcolleges.org</p>		

Ref: NPRCET/OFF/EEE/INT-03/2021-22

Date: 11/03/2022

From

The Principal,
 NPR College of Engineering & Technology,
 Natham,Dindigul-624 401.

To

The Managing Director,
 Caliber Embedded Technologies India Pvt Ltd,
 No. 2b, Ghandhi Nagar,
 Kavundampalayam, Coimbatore-641 030

Sir,

Sub: Permission for Internship training for our students - Reg.

NPR College of Engineering & Technology, Natham , Dindigul is a reputed institution in Tamilnadu affiliated to Anna University, Chennai.

The following students of **Second year B.E Electrical and Electronics Engineering** are interested to undergo Internship training in your organization. During the course of the training, they will follow the rules and regulations of your organization.

S.No.	Name of the student	Register Number	Year& Branch
1.	Mr.JEYARAM M	920820105007	II EEE
2.	Mr.JUSTIN THIRAVIYAM A	920820105008	II EEE
3.	Mr.KABIL SHARMA M	920820105009	II EEE
4.	Mr.LOGESH KUMAR M	920820105010	II EEE

Looking forward for your reply.

Thank you




 PRINCIPAL
Dr. J.SUNDARARAJAN,
 B.E., M.Tech., Ph.D.,
 Principal
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.



Caliber

CALIBER VIRTUAL TECHNOLOGIES

NO:4, 1st FLOOR, GANDHI NAGAR FIRST STREET, KAVUNDAPALAYAM, COIMBATORE—641030.
GST. No: 33BYOPP5323C3ZH

Date: 14.03.2022

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Sir,

Sub: Permission for Internship training-reg

Ref: NPRCET/OFF/EEE/INT-03/2021-2022dated:11.03.2022

With reference to your letter we are pleased to grant permission for Mr.Jeyaram M (920820105007), Mr.Justin Thiraviyam(920820105008), Mr.KabilSharma M (920820105009), Mr. Logeshkumar (920820105010)of second year Electrical and Electronics Engineering of your institution to undergo Internship training in our concern from 21.03.2022 to 30.03.2022.

With Regards

(For Caliber Virtual
Technologies)



Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CALIBER VIRTUAL TECHNOLOGIES

Email: salemcaliberembeddedtech@gmail.com Mobile: 7867014811



Caliber

CALIBER VIRTUAL TECHNOLOGIES

NO:4, 1st FLOOR, GANDHI NAGAR FIRST STREET, KAVUNDAPALAYAM, COIMBATORE - 641030.
GST. No: 33BYOPP5323C3ZH

Date: 30.03.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the students of second year EEE of NPR College of Engineering & Technology, Natham has successfully done the Internship training in our concern from 21.03.2022 to 30.03.2022.

During this period their conduct was sincere and hardworking.

S. No.	Name of the Student	Register Number	Year & Branch
1.	Mr. JEYARAM M	920820105007	II EEE
2.	Mr. JUSTIN THIRAVIYAM A	920820105008	II EEE
3.	Mr. KABIL SHARMA M	920820105009	II EEE
4.	Mr. LOGESH KUMAR M	920820105010	II EEE

With Regards

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology

Natham, Dindigul (Dt) - 624 401.

CALIBER VIRTUAL TECHNOLOGIES

Email: salemcaliberembeddedtech@gmail.com Mobile: 7867014811

(For Caliber Virtual Technologies)



Ref: NPRCET/OFF/EEE/INT-04/2021-22

Date: 02/01/2022

From

The Principal,
 NPR College of Engineering & Technology,
 Natham, Dindigul-624 401.

To

The Chief Executive Officer,
 Umberlla Corporation Uyyakindan malai,
 Vayalur Road, Trichy – 620017,

Sir,

Sub: Permission for Internship training for our students - Reg.

NPR College of Engineering & Technology, Natham , Dindigul is a reputed institution in Tamilnadu affiliated to Anna University, Chennai.

The following students of **Third year B.E Electrical and Electronics Engineering** are to undergo Internship training in your organization. During the course of the training, they will the rules and regulations of your organization.

S.No.	Name of the student	Register Number	Year& Branch
1.	POORNAKUMAR V	920819105011	III EEE
2.	RAJAMURUGAN M	920819105013	III EEE
3.	SUJEETHRAN S	920819105015	III EEE
4.	VIGNESH M	920819105016	III EEE

Looking forward for your reply.

Thank you



PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.

Date: 09.01.2022

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Sir,

Sub: Permission for Internship training-reg

Ref: NPRCET/OFF/EEE/INT-04/2021-2022dated:02.01.2022

With reference to your letter we are pleased to grant permission for Mr.Poornakumar.V (920819105011), Mr.M.Rajamurugan M (920519105013), Mr.Sujeethran (920819105015), Mr.Vignesh M (920819105016) of third year Electrical and Electronics Engineering of your institution to undergo Internship training in our concern from 21.01.2022 to 05.02.2022.

With Regards

For UMBRELLA CORPORATION

Proprietor



Dr. JSUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Date:05.02.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the students of third year EEE of NPR College of Engineering & Technology, Natham has successfully done the Internship training in our concern from 21.01.2022 to 05.02.2022.

During this period their conduct was sincere and hardworking.

S. No.	Name of the Student	Register Number	Year & Branch
1.	POORNAKUMAR V	920819105011	III EEE
2.	RAJAMURUGAN M	920819105013	III EEE
3.	SUJEETHRAN S	920819105015	III EEE
4.	VIGNESH M	920819105016	III EEE

With Regards

For UMBRELLA CORPORATION

Proprietor

**Dr. J.SUNDARARAJAN,**

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

	<p align="center">NPR College of Engineering & Technology NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India. Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai. An ISO 9001:2015 Certified Institution. Phone No: 04544- 246 500, 246501, 246502. Website : www.nprcolleges.org, www.nprcet.org, Email:nprcetprincipal@nprcolleges.org</p>	
---	--	---

Ref: NPRCET/OFF/EEE/IPT-03/2020-21

Date: 22/03/2022

From

The Principal,
 NPR College of Engineering & Technology,
 Natham, Dindigul-624 401.

To

The Managing Director
 Labo Scientific,
 563, 7th cross Main Road,
 Srinivasa Nagar, Trichy – 620 107.

Sir,

Sub: Permission for In-Plant training for our students - Reg.

NPR College of Engineering & Technology, Natham, Dindigul is a reputed institution in Tamilnadu affiliated to Anna University, Chennai.

The following students of **Third year B.E Electrical and Electronics Engineering** are interested to undergo In-Plant training in your organization. During the course of the training, they will follow the rules and regulations of your organization.

S.No.	Name of the student	Register Number	Year& Branch
1.	AHAMED AFZAR A	920819105001	III EEE
2.	ARAVINDKUMAR K	920819105002	III EEE
3.	GURU PRASATH A	920819105003	III EEE
4.	KARTHI KEYAN R	920819105004	III EEE

Looking forward for your reply.

Thank you




 PRINCIPAL
Dr. J.SUNDARARAJAN,
 B.E., M.Tech., Ph.D.,
 Principal
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.

Labo Scientific

563, 7th Cross Main Road, Srinivasa Nagar, Trichy - 620017.
laboscientificindia@gmail.com, 8667767992



Date: 26.03.2022

To

The principal,
NPR College of Engineering & Technology,
Natham.

Sir,

Sub: Permission for In-Plant Training-reg

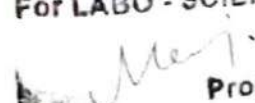
Ref: NPRCET/OFF/EEE/IPT-03/2021-2022 dated: 22.03.2022.

With reference to your letter we are pleased to grant permission for Mr. AHAMED AFZAR A (920819105001), Mr. ARAVINDKUMAR (920819105002), Mr. GURU PRASATHA (920819105003), Mr. KARTHIKEYAN R (920819105004) of Third year Electrical and Electronics Engineering of your institution to undergo In-Plant training in our concern from 28.03.2022 to 06.04.2022.




Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

With Regards

For LABO - SCIENTIFIC

Proprietor

Labo Scientific

563,7th Cross Main Road, Srinivasa Nagar, Trichy -620017.
laboscientificindia@gmail.com, 8667767992.



Date: 06.04.2022

TO WHOMSOEVER IT MAY CONCERN

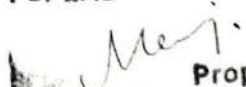
This is to certify that Mr. AHAMED AFZAR M (920819105001) of Third year EEE of NPR College of Engineering & Technology, Natham have successfully done the In-Plant training in our concern from 28.03.2022 to 06.04.2022.

During this period his behavior are good and hardworking.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

With Regards

For LABO - SCIENTIFIC

Proprietor

Labo Scientific

563, 7th Cross Main Road, Srinivasa Nagar, Trichy - 620017.
laboscientificindia@gmail.com, 8667767992.



Date: 06.04.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. ARAVINDKUMAR K (920819105002) of Third year EEE of NPR College of Engineering & Technology, Natham have successfully done the In-Plant training in our concern from 28.03.2022 to 06.04.2022.

During this period his behavior are good and hardworking.


Dr. JSUNDARARAJAN,

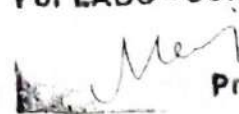
B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

With Regards

For LABO - SCIENTIFIC


Proprietor



Labo Scientific

563, 7th Cross Main Road, Srinivasa Nagar, Trichy - 620017.
laboscientificindia@gmail.com, 8667767992.



Date: 06.04.2022

TO WHOMSOEVER IT MAY CONCERN


This is to certify that Mr. GURU PRASATH A (920819105003) of Third year EEE of NPR College of Engineering & Technology, Natham have successfully done the In-Plant training in our concern from 28.03.2022 to 06.04.2022.

During this period his behavior are good and hardworking.



Dr. JSUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

With Regards

For LABO - SCIENTIFIC

Proprietor

Labo Scientific

563, 7th Cross Main Road, Srinivasa Nagar, Trichy -620017.
laboscientificindia@gmail.com, 8667767992.



Date: 06.04.2022

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.KARTHIKEYAN R (920819105004) of Third year EEE of NPR College of Engineering & Technology, Natham have successfully done the In-Plant training in our concern from 28.03.2022 to 06.04.2022.

During this period his behavior are good and hardworking.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

With Regards

For LABO - SCIENTIFIC


Proprietor



NPR

College of Engineering & Technology

Approved by AICTE, Affiliated to Anna University,
Accredited by NAAC WITH 'A' GRADE | Recognized by UGC under 2 (f)
Natham, Dindigul - 624 401. Web: www.nprcet.org



Ref: NPRCET/OFF/EEE/IV-03/2021-22

Date: 20/02/2022

From

Head of the Department
Electrical and Electronics Engineering
NPR College of Engineering & Technology,
Natham, Dindigul-624 401.

To

The Managing Director,
Caliber Embedded Technologies India Pvt Ltd,
No. 2b, Ghandhi Nagar,
Kavundampalayam, Coimbatore-641 030

Sir,

Sub: Permission for Industrial visit for our students - Reg.

NPR College of Engineering & Technology, Natham, Dindigul is a reputed institution in Tamilnadu affiliated to Anna University, Chennai.

The **Third year B.E Electrical and Electronics Engineering** are interested to visit your organization on 11.03.2022. During the visit, they will follow the rules and regulations of your organization.

Looking forward for your reply.

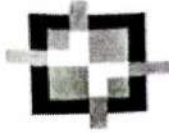
Thanking you

Place : Natham

Date: 20.02.2022




HOD/EEE



Caliber

For your first experience

CALIBER VIRTUAL TECHNOLOGIES

NO:4, 1st FLOOR, GANDHI NAGAR FIRST STRLET, GST. No: 33BYOPP5323C3ZH
KAVUNDAPALAYAM, COIMBATORE— 641030.

Date: 25.02.2022

To

The Principal
Electrical and Electronics Engineering
NPR College of Engineering & Technology,
Natham.

Sir,

Sub: Permission for Industrial Visit-reg.

Ref: NPRCET/OFF/EEE/IV-03/2021-2022 dated:20.02.2022

With reference to your request letter, permission is granted for one day visit, for your students along with faculties on 11/03/2022. The faculties and students should abide the rules & regulations and industrial safety practices during the Industrial visit.

AUTHORISED SIGNATURE



salemcaliberembeddedtech@gmail.com Contact 7867014811

COMPANY DESCRIPTION:

Caliber Embedded Technologies INDIA Pvt Ltd in Coimbatore is one of the leading businesses in the Computer Training Institutes. Also known for Computer Training Institutes, PCB Designing Institutes, Computer Training Institutes For Embedded System, Computer Hardware Training Institutes, Institutes For Masters In VLSI and much more. Find Address, Contact Number, Reviews & Ratings, Photos, Maps of Caliber Embedded Technologies INDIA Pvt Ltd, Coimbatore.

Since 2007, Caliber Embedded Technologies INDIA Pvt Ltd in Kavundampalayam, Coimbatore has been offering professional training to students. It specialises and is well-known for training students as well as working professionals in accounting, web designing, programming languages, hardware and networking. It is run and managed by a seasoned professionals who leads a team of educators and trainers having relevant domain expertise. At this institution, one can get trained in the subject of their choice by opting from a wide range of courses. These easy-to-follow courses are primarily aimed at students, working professionals as well as IT professionals who want to enhance their knowledge and further their career prospects. Located, you can find this institution with relative ease at No.2b in Kavundampalayam . Undoubtedly it is one of the best computer training institutes in Kavundampalayam , Coimbatore.

COMPANY DETAILS:

Caliber Embedded Technologies India Pvt Ltd,

No. 2b, Ghandhi Nagar,

Kavundampalayam, Coimbatore-641 030

Phone: 0422-4377424, +91-9894602144,+91-9842223252.

URL: www.calibretech.net

Processes of work:

Caliber Embedded Technologies INDIA Pvt Ltd in Kavundampalayam offers short-term courses and certificate courses. Inclusive of comprehensive learning, the long-term programmes feature subjects such as web development, financial accountancy, computer application and programming, information technology, multimedia and web-designing. Some of the short-term courses cover topics like Windows XP, 7, 8, 10, Vista, MS Office, DTP (Desk Top Publishing), Web Designing, Multimedia, Tally ERP 9, C, C++ , and Visual Basic .





NPR

College of Engineering & Technology

Approved by AICTE, Affiliated to Anna University,
Accredited by NAAC WITH 'A' GRADE | Recognized by UGC under 2 (f)
Natham, Dindigul - 624 401. Web: www.nprcet.org



Department of Electrical and Electronics Engineering

III year Students Name List for Industrial Visit

S.No	Reg. No.	Name of the Student
1	920819105001	AHAMED AFZAR A
2	920819105002	ARAVINDKUMAR K
3	920819105004	KARTHI KEYAN R
4	920819105007	LOGESHWARAN N
5	920819105009	PITCHIYATHA D
6	920819105010	POORNAKUMAR V
7	920819105011	PRADAPKANNAN B
8	920819105012	RAJAMURUGAN M
9	920819105013	RAJASEKAR M
10	920819105014	SUJEETHRAN S





NPR

College of Engineering & Technology

Approved by AICTE, Affiliated to Anna University,
Accredited by NAAC WITH 'A' GRADE | Recognized by UGC under 2 (f)
Natham, Dindigul - 624 401. Web: www.nprcet.org



FEEDBACK FORM



NPR College of Engineering & Technology
NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
An ISO 9001:2015 Certified Institution
Phone No: 04544 246 500, 246 501, 246 502
Website: www.nprcolleges.org, www.nprcet.org, Email: npr@nprcet.org, npr@nprcolleges.org



STUDENT FEEDBACK

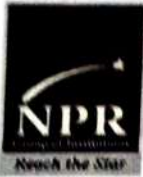
Sl.No.	Particulars	Excellent(3)	Good(2)	Fair(1)
1.	Experience at the Industrial Visit		✓	
2.	Gain of knowledge		✓	
3.	Relevance to the course		✓	
4.	Industry's interaction	✓		
5.	Learning value (in terms of knowledge, concepts, manual skills, analytical abilities and broadening perspectives)	✓		
6.	Provision of sufficient time for visiting the industry			✓
7.	Opportunities for doing relevant projects			✓
8.	Gain of opportunities to interface with real world		✓	
9.	Provision of hands on experience		✓	
10.	Overall rating	✓		
TOTAL				

Name: R. Karthi Keyan
Reg.no: 920819105004

Signature

Page 2 of 2





NPR

College of Engineering & Technology

Approved by AICTE, Affiliated to Anna University,
Accredited by NAAC WITH 'A' GRADE | Recognized by UGC under 2 (f)
Natham, Dindigul - 624 401. Web: www.nprcet.org



NPR College of Engineering & Technology

NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
An ISO 9001:2015 Certified Institution
Phone No: 04544 246 500, 246501, 246502
Website: www.nprcet.org, www.nprcet.org, Email: nprcet@nprcet.org



STUDENT FEEDBACK

Sl.No.	Particulars	Excellent(3)	Good(2)	Fair(1)
1	Experience at the Industrial Visit	✓		
2	Gain of knowledge		✓	
3	Relevance to the course	✓		
4	Industry's Interaction		✓	
5	Learning value (in terms of knowledge, concepts, manual skills, analytical abilities and broadening perspectives)			✓
6	Provision of sufficient time for visiting the industry	✓		
7	Opportunities for doing relevant projects		✓	
8	Gain of opportunities to interface with real world			✓
9	Provision of hands on experience	✓		
10	Overall rating		✓	
TOTAL		4	4	2

Name:- A. AHAMED AFZAR

Reg No: 920819105001

Innaidu
Signature

Page 2 of 2





Date: 10.09.2021

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Sir,

Sub: Permission for Internship Training-reg

Ref: NPRCET/OFF/EEE/INT-01/2021-2022 dated: 06.09.2020

With reference to your letter we are pleased to grant permission for Mr. BASKAR A (920820105001), Mr. ARUN KUMAR S (920820105301), Mr. BHARATHARAJA S (920820105302), Mr. GANESH S (920820105304), Mr. HAREESH K.S (920820105306), Mr. LAKSHMANAN T (920820105309), Mr. LOGANATHAN (920820105310) of second year and Mr. VIGNESWARAN R (92081810701) Final year Electrical and Electronics Engineering of your institution to undergo Internship Training in our concern from 15.09.2021 to 25.09.2021.

With Regards

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. G. S.", is written over a circular stamp.

AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, Mail: info@superfectsolutions.com, Web: www.superfectsolutions.com



Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that **Mr. BASKAR A (920820105001)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. G. Ray", written over a circular stamp.

AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, **Mail:** info@superfectsolutions.com, **Web:** www.superfectsolutions.com



Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that **Mr. ARUN KUMAR S (920820105301)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. R. S.", is written over a faint, circular stamp.

AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, Mail: info@superfectsolutions.com, Web: www.superfectsolutions.com



Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that **Mr. BHARATHARAJA S (920820105302)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. Ravi", written over a circular stamp.

AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, **Mail:** info@superfectsolutions.com, **Web:** www.superfectsolutions.com



Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that **Mr. GANESH S (920820105304)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. Ganes" or similar, written over a circular stamp.

AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, **Mail:** info@superfectsolutions.com, **Web:** www.superfectsolutions.com



Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that), Mr. **HAREESH K.S (920820105306)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. Ravi", written over a circular stamp.

AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, **Mail:** info@superfectsolutions.com, **Web:** www.superfectsolutions.com



Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that), **Mr.LAKSHMANAN T(920820105309)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. Ray" or similar, written over a circular stamp.

AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, **Mail:** info@superfectsolutions.com, **Web:** www.superfectsolutions.com



Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that), **Mr.LOGANATHAN (920820105310)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. Ray", is written over a circular stamp.

AUTHORIZED SIGNATORY



SUPERFECT SOLUTIONS

Tel: 9025-655-523, **Mail:** info@superfectsolutions.com, **Web:** www.superfectsolutions.com



Date: 25-09-2021

Ref No: SUP/INT/21016

INTERNSHIP TRAINING CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that, Mr. **VIGNESHWARAN R (920818105701)** pursuing his second year EEE at NPR College of Engineering & Technology, Natham, has undergone his Internship Training in our concern **from 15.09.2021 to 25.09.2021.**

We appreciate his participation with interest towards the training program.

For SUPERFECT SOLUTIONS,

A handwritten signature in black ink, appearing to be "V. Ravi", written over a circular stamp.

AUTHORIZED SIGNATORY



ABSTRACT

This project presents a proposal for home automation using voice via Google Assistant. Home automation or demotic's a term for home automation coined by Jim Hill has been evolving drastically. We saw many home automation technologies introduced over these years from Zigbee automation to Amazon Echo, Google Home and Home from Apple. The system is implemented using ordinary household appliances Natural language voice commands are given to the Google Assistant and with the help of IFTTT (If This Then That) application and the Blynk application the commands are decoded and then sent to the microcontroller, the microcontroller in turn controls the relays connected to it as required, turning the device connected to the respective relay On or OFF as per the users request to the Google Assistant. The microcontroller used is Node MCU (ESP8266) and the communication between the microcontroller and the application is established via Wi-Fi (Internet).



iii

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

CHAPTER - 5

CONCLUSION

This project proposed a smart system for health parameter detection, prediction, and response for soldier people. It designed the main five building blocks of the envisioned system, as well as highlighted the main technologies to be considered in each building block. The proposed system is best suitable for rescuer people to save the life. In addition, the motivation for the interaction between the components of our system was highlighted, as well as how these interactions will happen. Finally, we discussed some of the main challenges that will be addressed in the future works, towards the implementing the proposed smart system.




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

ABSTRACT

Static wireless charging is becoming popular all over the world to charge the electric vehicle(EV). But an EV cannot go too far with a full charge. It will need more batteries to increase its range. Dynamic wireless charging is introduced to EVs to capially increase their driving range and get rid of heavy batteries. Some modern EVs are getting off this situation. But with Dynamic wireless power transfer (WPT) the need of plug-in charge and static WPT will be removed gradually and the total run of an EV can be limitless. If we charge an EV while it is driven, we do not need to stop or think for charging it again.

Eventually, in the future the batteries can be also removed from EVs by applying this method in everywhere. Wireless charging needs two kinds of coils named the transmitter coil and the receiver coil. The receiver coil will collect power from the transmitter coil while going over it in the means of mutual induction.



Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401,

CHAPTER 8

CONCLUSION

Research on WPT is getting popular these years. This work compares the most famous WPT technologies and develops an effective one known RIPT. The RIPT method is used for resonating the transmitter coil frequency and receiver coil frequency. It shows how air gap and misalignment affect the WPT while the EV is driven in the charging lane.

The goal of this project was to design and implement a wireless charger for vehicle via resonant inductive coupling. After analysing the whole system step by step for optimization, a circuit was designed and implemented. Experimental results showed that significant improvements in terms of power-transfer efficiency have been achieved. It was described and demonstrated that resonant inductive coupling can be used to deliver power wirelessly from a source coil to a load coil and charge a low power device. We can also select voltage variations by using variable resistor. As it was mentioned earlier, wireless charging could be the next big thing.



Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.
Principal
NPR College of Engineering & Technology
Nathan, Dindigul (Dt) - 624 401.

Date: 01-10-2021

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Dear Sir,

Sub: Permission for In-Plant Training-reg

Ref: NPRCET/OFF/EEE/IPT-02/2021-2022 dated: 28-09-2021.

With reference to your letter cited above, we are pleased to give permission for Mr. KRISHNAPANDIYAN S (920820105308), Mr. MAHENDRA S (920820105011), Mr. MOHAMMED ASHIK S (920820105012), Mr. MOHAMMED HARISH H (920820105311), Mr. POOVARASAN R (920820105013) Mr. PRAVEEN KUMAR R (920820105314) Mr. RAMAR V (920820105013) Mr. REEGAN S (920820105315) of Second year Electrical and Electronics Engineering of your institution to undergo In-Plant Training in our organization from 05.10.2021 to 16.10.2021.

Thank you.

Yours truly,
For Megatronics



(C.Kannan)

Megatronics

65, R.K. Mills 'B' Colony, Peelamedu Pudur, Coimbatore - 641 004.
Cell : 98422-85001 Phone : 0422 - 256 5001 E-mail : megatronicsindia@gmail.com
Web : www.megatronicsindia.in

Date: 16-10-2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the students of Third year EEE of NPR College of Engineering & Technology, Natham has successfully done the In-Plant training in our concern from 05.10.2021 to 16.10.2021.

During this period their conduct was sincere and hardworking.

S. No.	Name of the Student	Register Number	Year & Branch
1.	Mr. KRISHNAPANDIYAN S	920820105308	II EEE
2.	Mr. MAHENDRA S	920820105011	II EEE
3.	Mr. MOHAMMED ASHIK S	920820105012	II EEE
4.	Mr. MOHAMMED HARISH H	920820105311	II EEE
5.	Mr. POOVARASAN R	920820105312	II EEE
6.	Mr. PRAVEEN KUMAR R	920820105315	II EEE
7.	Mr. RAMAR V	920820105013	II EEE
8.	Mr. REEGAN S	920820105315	II EEE

Yours truly,
For Megatronics



(C.Kannan)

Megatronics

65, R.K. Mills 'B' Colony, Peelamedu Pudur, Coimbatore - 641 004.
Cell : 98422-85001 Phone : 0422 - 256 5001 E-mail : megatronicsindia@gmail.com
Web : www.megatronicsindia.in

Labo Scientific

563, 7th Cross Main Road, Srinivasa Nagar, Trichy - 620017.
laboscientificindia@gmail.com, 8667767992.



Date: 26.03.2022

To

The principal,
NPR College of Engineering & Technology,
Natham.

Sir,

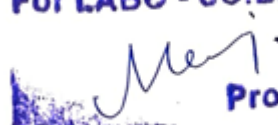
Sub: Permission for In-Plant Training-reg

Ref: NPRCET/OFF/EEE/IPT-03/2021-2022 dated: 22.03.2022.

With reference to your letter we are pleased to grant permission for Mr. SANRONMATHI S (920820105316), Mr. SARAVANAMUTHU K (920820105015), Mr. SARAVANAKUMAR S (920820105014), Mr. SARWESH R (920820105016), Mr. SHYLESH KUMAR V (920820105317), Mr. SIVA S (920820105318), Mr. THARUN N (920820105017), Mr. THAVAMANI A (920820105018), Mr. VENKATESH V (920820105019) of Second year Electrical and Electronics Engineering of your institution to undergo In-Plant training in our concern from 28.03.2022 to 06.04.2022.

WITH REGARDS


Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

For LABO - SCIENTIFIC

Proprietor

Labo Scientific

563, 7th Cross Main Road, Srinivasa Nagar, Trichy - 620017.
laboscientificindia@gmail.com, 8667767992.



Date: 06.04.2022


TO WHOMSOEVER IT MAY CONCERN

This is to certify that the following students of Second year EEE of NPR College of Engineering & Technology, Natham have successfully done the In-Plant training in our concern from 28.03.2022 to 06.04.2022.

During this period their behavior are good and hardworking.

S.NO.	REGISTER NUMBER	NAME OF THE STUDENT
1	920820105315	Mr.SANRONMATHI S
2	920820105015	Mr.SARAVANAMUTHU K
3	920820105014	Mr.SARAVANAKUMAR S
4	920820105016	Mr.SARWESH R
5	920820105317	Mr.SHYLESH KUMAR V
6	920820105318	Mr.SIVA S
7	920820105017	Mr.THARUN N
8	920820105018	Mr.THAVAMANI A
9	920820105019	Mr.VENKATESH V

WITH REGARDS

For LABO - SCIENTIFIC

Proprietor