



## THIAGARAJAR COLLEGE OF ENGINEERING

A Government Aided ISO 9001:2000 Certified Autonomous Institution Affiliated to Anna University)

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### RESUME

**NAME** : Mani Bharathi R

**REG NO** : 19E050

**DEGREE** : Bachelor of Engineering (Electrical and Electronics Engineering)



### PROFESSIONAL OBJECTIVE

To associate with a best organization, to fully utilize my knowledge, abilities, project development skills and contribute to the overall growth of the organization and build my professional career.

CLASS /COURSE	NAME OF THE INSTITUTION	BOARD OF STUDY	YEAR OF PASSING	MARKS / CGPA %
B.E (EEE)	Thiagarajar college of Engineering	Anna University	2023	8.60*
XII	Rose Mary Matric Hr. Sec. School	State Board	2019	77.34
X	A.U.P.E.T. Chinmaya Vidyalaya Matriculation Higher Secondary School	State Board	2017	91

\*CGPA (out of 10) up to 5th semester

### TECHNICAL EXPERTISE:

Programming Languages : Basics of Python, Java, C++, C.

Tools : Arduino, MATLAB.

## AREAS OF INTEREST

- Power Electronics
- Data structures and Algorithm
- Object Oriented Programming

## ACADEMIC PROJECTS

### 1) IOT Based Water flow controller using Solenoid Valve:

#### **Tech Stack: Node MCU Board and Arduino IDE.**

Built an IOT Based Water flow controller employing a Solenoid Valve.

A solenoid valve was used and it was operated electrically using a relay.

The relay received commands from the Node MCU, which receives command from a mobile application that transfers instructions to turn on or turn off the relay.

The transfer of data between the mobile application and the Node MCU is made possible by the use of a WIFI Module.

A water flow sensor is used to detect the start of flow of water. This then instructs the Node MCU to send a message to the application.

### 2) TEMPERATURE BASED FAN CONTROL

#### **Tech Stack: Arduino.**

Built a temperature based fan control using Arduino.

Used temperature sensor LM35 to get the temperature as the voltage.

Implemented the process of converting the voltage from temperature sensor into actual temperature reading in an Arduino program.

The project was able to vary the speed of the fan based on the temperature reading.

Pulse Width Modulation technique was used to control the speed of the fan

### 3) HEART DISEASE PREDICTION USING MACHINE LEARNING

**Tech Stack: Python and Pandas.**

Built a machine learning model using Logistic regression algorithm to predict the occurrence of heart disease.

Data such as Cholesterol level, blood pressure, age and gender were taken as parameters for the model.

The model predicted the occurrence of heart disease by analyzing the above parameters.

The model was able to predict the occurrence of heart disease with an accuracy of 98.4%.

### 4) Buck Converter based Power Supply Unit

**Tech Stack: Buck Converter.**

Built an efficient Power Supply Unit with input as 24V DC.

Used Buck Converters instead of bulky transformers to get 12V, 5V and 3.3V at the output.

Use of the buck converter greatly increases the efficiency with lower power losses

### ACHIEVEMENTS

- Attended **NSS Camp**, conducted at Thangalacheri Village in Madurai in the year 2019 - 2020 and actively participated in programs like Temple cleaning, Lake cleaning, Awareness Rally.
- Was the organizer of the **NSS Camp** at Sambakulam Village in Madurai in the year 2021 - 2022
- Was a part of the Bharat Scouts and received the **Rajya Puraskar Award**.

## CO-CURRICULAR ACTIVITIES

- Completed the **Programming for Everybody (Getting Started with Python)** course in **Coursera** offered by **Charles Russell**.
- Completed the **Python Data Structures** course in **Coursera** offered by **Charles Russell**.
- Participated some technical events in **IE** and **EEE Association**.

## EXTRA-CURRICULAR ACTIVITIES

- A Successful **NSS VOLUNTEER**, Conducted and Organized events within and outside our college campus to serve the Needy people.
- Was an event coordinator of the event "**MATLAB MASTERS**" in **TECHUTSAV'22**.

## HOBBIES

- Reading Comics.
- Playing Badminton.

## CONTACT ADDRESS

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## PERMANENT ADDRESS

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Nagar, Palayamkottai,  
Tirunelveli - 627011  
**Phone** : 9486423050  
**Email** : lrsmani196@gmail.com

<b>DATE OF BIRTH</b>	: 23.06.2001	<b>AGE</b>	: 20	<b>SEX</b>	: MALE
<b>FATHER'S NAME</b>	: Ravi Ramdas L				
<b>MOTHER TONGUE</b>	: Tamil				
<b>LANGUAGES KNOWN</b>	: English (Read, Write, Speak), Tamil (Read, Write, Speak)				

I, Mani Bharathi R, do hereby confirm that the information given above is true to the best of my knowledge.

Place: Madurai

Date: 06.07.2022

Signature