# Madhav Karthickk I

Bachelor Of Engineering

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Web Resumemadhavkarthickki/GitHub

## Education

**B.E in Mechatronics Engineering** CGPA - 7.01

Kumaraguru college of technology

**ISC - XII** Percentage - 58.5 Riverside Public School

2020 - 2024 Coimbatore, India 2018-2020 Kotagiri ,India

## Skills summary

• Language: Python, Java

• Frameworks: Numpy, Pandas, Scikit-Learn, Matplotlib

Platform: Pycharm, Visual studio code, Android Studio, Jupyter Notebook
 Soft Skills: Leadership, Attention to Detail, Problem-Solving, Teamwork

## Experience and internships

#### Universal Automation systems Pvt Ltd Bangalore

PLC Programmer

- Developed and implemented PLC programs with integration to SCADA systems, using LabVIEW.
- Focused on designing user-friendly HMI interfaces to improve operator efficiency.
- Conducted testing, debugging, and provided technical support during installation, along with contributing to technical documentation.

## Ara Institute of Canterbury Ltd New Zealand

(Jan 2023-Mar 2023)

(Mar 2024-April 2024)

Student internship

- Completed a three-month internship in New Zealand focused on Engineering System Analysis.
- Gained hands-on experience with race cars (F4, F3, F2, F1), engine mechanics, and components like camshafts and cylinder heads.
- Participated in track races, enhancing practical automotive engineering skills.
- The internship combined professional development with cultural exploration, shaping my future career in engineering and motorsports.

## **Projects**

#### Smart portable and modular retail checkout device with web application

(Dec 2023-April 2024)

- Utilized Raspberry Pi 5 for the project, installing Python and leveraging computer vision to achieve 96% accuracy in product detection.
- Created a user-friendly shopping platform with secure payment integration, using HTML, CSS, JavaScript,
  MongoDB, and Figma to ensure an efficient and secure shopping experience.
- Built a dynamic web application for managing cart products and enhancing user experience in retail environments, integrating with the previously developed authentication and payment systems.

#### Employee Attendance Management system in Coimbatore

(Jan 2021-April 2021)

- Developed an Android attendance management system using Java in Android Studio, integrating Google Firebase for data storage.
- Designed a user-friendly interface for efficient attendance tracking and conducted rigorous testing.
- Utilized Java, Google Firebase, Android Studio, and Adobe XD for seamless development and effective results.

### Automated vending and packing machine

(Jun 2023-Nov 2023)

- Weighed and packed products according to customer specifications, employing ESP32 microcontrollers and programming with the Arduino IDE to ensure accuracy and reliability. Got accuracy of 98%
- Configured the RemoteXY App to facilitate seamless product control and integration, enhancing the user interface and interaction for efficient management.
- Utilized ESP32, Arduino IDE, and RemoteXY App to streamline product management processes, achieving high efficiency and responsiveness in handling customer requirements.

#### Certificates

- Webinar on 'Digital Twin Solution for Autonomous Vehicles' on 27 & 28 of March 2023.
- 'E Grid on Electric vehicles' on 18, 19 & 21 of May 2022.
- Certificate of completion on 'Learn 5 PLCs in a Day-AB, Siemens, Schneider, Omron & Delta' in Udemy on 20 December 2022.
- Certificate of completion on 'Engineering system analysis' in New Zealand on 9 February 2023
- Certificate of completion on 'UI/UX Concepts and figma basics' in sns square on 9 & 10th Dec 2023

## Paper in IEEE

- Experimental and Simulation Analysis of Race car engines Ford Cortina 1962 & Toyota G16E
  - This was our Third year project which compare the stock engine vs the modified engine in the Simulation Way using the Dat4T,EngMod4T and Post4t Software's.