Tarun Karrthick R S

Embedded Developer

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**Profiles**

 [Tarun\_Karrthick](https://www.linkedin.com/in/tarun-karrthick-r-s-58a536258/) [Tarun-karrthick](https://github.com/Tarun-karrthick-rs) [Tarun\_karrthick](https://leetcode.com/u/Tarunkarrthick/)

**Summary**

Embedded Systems Engineer with hands-on experience in microcontroller programming, real-time systems, and hardware-software integration. Seeking a challenging role to contribute to innovative projects and leverage my expertise in system design and development

**Experience**

**Skills**

# Embedded Systems Design

**IoT Development, Hardware interfacing**

# Programming Languages

C++, MERN,

# Microcontroller Programming

**Software Development and Debugging**

# Tools Used and IDEs

MPLAB, Arduino

# Intern, MSME Technology Development Centre

Embedded Systems

# June 2024

Coimbatore

JAVA,

JavaScript, SQL, HTML, CSS

IDE, VS Code,

Proteus, Oscilloscopes,

Gained hands-on experience with microcontrollers such as PIC, focusing on embedded systems design and development

Developed firmware using MPLAB IDE for real-time control applications, including debugging and code optimization

**Education**

Multimeters, Vs code, render, versal

# Intern, Salzer Electronics

Quality Control

# July 2024

Coimbatore

**Sri Krishna College of Engineering and Technology** Electronics and Communication

Observed quality control processes for switch and wire harness testing. Contributed to quality assurance documentation and analysis.

Assisted in monitoring machine loops and three-phase transformers using diagnostic tools to ensure compliance with quality standards

**Projects**

Engineering

8.51 CGPA

# September 2022 - present

Bachelor of Engineering

# Keartiman Matriculation Higher Secondary School

**Self Balancing robot**

Embedded Systems

"Designed and built a self-balancing robot using PID control

# May 2024

**2021-2022**

12th - 93.16%

**Certifications**

algorithms, implemented with MPU6050 sensor and programmed in C++ .

# Tech Web Development using html and Css

**IoT-based Home Automation**

Sinric Pro, Google Home, Alexa

# September 2024

Infosys Springboard

# Java for Beginners

Created a user-friendly interface for device management and monitoring using MQTT protocol, NodeMCU, and integration with Google Home and Alexa

Infosys SpringBoard

# Building your Leadership skills

Coursera

# Fantasy Sports Platform

MERN Stack

# August 2024

**Enhancing soft skills and personality**

Implemented user authentication, team selection, and real-time updates.



Designed responsive UI/UX and integrated with third-party APIs for sports data.

Nptel

# Ethics in Engineering practice

Nptel

**Languages**

# English Tamil