

# Tarun Karrthick R S

Embedded Developer

📍 India 📞 +91 9750317611 @ karrthicktarun@gmail.com 🔗 Portfolio

## Profiles

[in Tarun Karrthick](#) [🔗 Tarun-karrthick](#) [🔗 Tarun\\_karrthick](#)

## 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

**Intern, MSME Technology Development Centre** **June 2024**  
Embedded Systems Coimbatore

- 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

**Intern, Salzer Electronics** **July 2024**  
Quality Control Coimbatore

- 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

**Self Balancing robot** **May 2024**  
Embedded Systems

- "Designed and built a self-balancing robot using PID control algorithms, implemented with MPU6050 sensor and programmed in C++ .

**IoT-based Home Automation** **September 2024**  
Sinric Pro, Google Home, Alexa

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

**Fantasy Sports Platform** **August 2024**  
MERN Stack

- Implemented user authentication, team selection, and real-time updates.
- Designed responsive UI/UX and integrated with third-party APIs for sports data.

## Skills

**Embedded Systems Design** ●●●●○  
**Microcontroller Programming** ●●●●○

**IoT Development, Hardware interfacing** ●●●●○  
**Software Development and Debugging** ●●●●○

**Programming Languages** ●●●●○  
C++, MERN, JAVA, JavaScript, SQL, HTML, CSS  
**Tools Used and IDEs** ●●●●○  
MPLAB, Arduino IDE, VS Code, Proteus, Oscilloscopes, Multimeters, Vs code, render, versal

## Education

**Sri Krishna College of Engineering and Technology**  
Electronics and Communication Engineering  
8.51 CGPA  
**September 2022 - present**  
Bachelor of Engineering  
**Keartiman Matriculation Higher Secondary School**  
2021-2022  
12th - 93.16%

## Certifications

**Tech Web Development using html and Css**  
Infosys Springboard  
**Java for Beginners**  
Infosys SpringBoard  
**Building your Leadership skills**  
Coursera  
**Enhancing soft skills and personality**  
Nptel  
**Ethics in Engineering practice**  
Nptel

## Languages

**English** ●●●●○  
**Tamil** ●●●●○