Tarun Karrthick R S

[](mailto:karrthicktarun@gmail.com) [karrthicktarun@gmail.com  9750317611 [](https://leetcode.com/u/Tarunkarrthick/) [Leetcode [](https://www.linkedin.com/in/tarun-karrthick-r-s-58a536258/) [LinkedIn [](https://github.com/Tarun-karrthick-rs) [Github](https://github.com/Tarun-karrthick-rs)](https://www.linkedin.com/in/tarun-karrthick-r-s-58a536258/)](https://leetcode.com/u/Tarunkarrthick/)](mailto:karrthicktarun@gmail.com)

# Career Statement

A current engineering student seeking opportunities in a dynamic and challenging environment that fosters continuous improvement and learning. Motivated to contribute to organisation growth and personal development within the engineering industry.

# Education

## B.E. Electronics and Communication Engineering

*Sri Krishna College of Engineering and Technology*

* GPA: 8.53 (current)

## Higher Secondary

*Keartiman Matriculation Higher Secondary School*

* Percentage: 93.17

# Projects

*Oct 2022 - Present*

*2020 - 2022*

**Self-Balancing Robot ** [GitHub [](https://github.com/Tarun-karrthick-rs/Self-balancing-robot)](https://github.com/Tarun-karrthick-rs/Self-balancing-robot)

* Designed and built a self-balancing robot using PID control algorithms, implemented with MPU6050 sensor
* Tools Used: C++, Arduino
* Tuned PID parameters to achieve stable balancing on uneven surfaces

**Fantasy Sports Platform ** [GitHub [](https://github.com/Tarun-karrthick-rs/project-frontend)](https://github.com/Tarun-karrthick-rs/project-frontend)

* Built a MERN stack platform with user authentication, team selection, and sports data integration via third-party APIs
* Tools Used: MongoDB, Express.js, React, Node.js
* Implemented role-based access and optimized API calls for faster data retrieval

## Face Recognition Attendance System [GitHub](https://github.com/Tarun-karrthick-rs/face-detection-attendance-system)

* Developed a real-time attendance system with face detection and CSV logging using machine learning
* Tools Used: Python, OpenCV
* Implemented efficient face detection to handle large groups and ensure quick attendance logging

**Vision Cursor ** [GitHub [](https://github.com/Tarun-karrthick-rs/Vision-Cursor)](https://github.com/Tarun-karrthick-rs/Vision-Cursor)

* Created a tool to control the mouse pointer using eye movement tracked via webcam
* Tools Used: Python, OpenCV, PyAutoGUI
* Added eye-blink detection for click events to enable full hands-free interaction

# Skills

**Languages:** C++, Java, C, JavaScript, Python (Basics), HTML, CSS, MySQL, MongoDB **Developer Tools:** IDE (VS Code, Arduino IDE, MPLAB IDE), VCS (GitHub, Git, CodeCommit) **Web Development Tools:** Bootstrap, React, MERN Stack

**Hardware:** Arduino, PIC16F877A, Intel 8051

**Libraries:** Flask, OpenCV, Numpy (Basics)

# Experience

* **Intern - Embedded System Development** *June 2024 MSME Technology Development Centre*
* **Intern - Quality Control** *July 2024*

*Salzer Electronics*