# Tarun Karrthick R S

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**4** 9750317611

**⟨⟩** Leetcode

in LinkedIn

O Github

#### 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

Oct 2022 - Present

Sri Krishna College of Engineering and Technology

o GPA: 8.53 (current)

## **Higher Secondary**

2020 - 2022

Keartiman Matriculation Higher Secondary School

o Percentage: 93.17

# **Projects**

#### **Self-Balancing Robot**

GitHub 🗹

Designed and built a self-balancing robot using PID control algorithms, implemented with MPU6050 sensor

- o Tools Used: C++, Arduino
- $\circ\,$  Tuned PID parameters to achieve stable balancing on uneven surfaces

## **Fantasy Sports Platform**

GitHub 🗹

- o Built a MERN stack platform with user authentication, team selection, and sports data integration via third-party APIs
- o 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 🗹

- o 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 Z

- Created a tool to control the mouse pointer using eye movement tracked via webcam
- o Tools Used: Python, OpenCV, PyAutoGUI
- o 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

o Intern - Embedded System Development MSME Technology Development Centre

June 2024

o Intern - Quality Control

July 2024

Salzer Electronics