

# Swapnil Jadhav

🌐 [Swapnil-2503.github.io/mywebsite](https://Swapnil-2503.github.io/mywebsite)

📧 [swapniljadhav6022@gmail.com](mailto:swapniljadhav6022@gmail.com)

+91 9405251793

## Education

Government College of Engineering, Karad, B. Tech

CGPA: 7.4

Bachelors in Electronics and Telecommunication

August 2020 – May 2024

Chattrapati Shivaji jr. College Osmanabad, Intermediate (XII)

94.92% (MHT-CET)

Samata High School Osmanabad, Matriculation (X)

85.80%

## Programming Profiles(Problem Solving)

[Hackerearth](#)

[Leetcode](#)

[CodeChef](#)

[HackerRank](#)

[GeeksforGeeks](#)

[Github](#)

## Experience

### ExpertsHub

July 2022 – Sep 2022

IoT Educational Internship at ExpertsHub

Collaborated with a team of experts to design and develop **IoT projects**.

Assisted in conducting IoT workshops for students and professionals.

Gained hands-on experience in working with various sensors and microcontrollers, such as **Raspberry Pi**, **Arduino**.

## Achievements

### Experience

Sih **Hackathon** 2022 rank 7<sup>th</sup> out of 50 teams at university level (team leader Project- **Virtual visit to Indian pilgrimage**)

**Rank 2** for mini project Rain Sense (mini project for academics mentioned in projects section)

**2 star** coder on Codechef , [Problem solving certificate](#) on HacerRank, Solved more than **150 problems** on Leetcode

Prepared aptitude tests as a **responsibility** for the Aptitude Club in college.

## Projects

### HydrateMe (Water Intake Reminder)

Mar 2023

- Designed and implemented a water intake reminder system using an **ultrasonic sensor**, **microcontroller board(Rpi)**, and **Bluetooth module**
- Developed a program for the microcontroller board that **reads sensor data** and triggers the reminder system when the water level drops below a set threshold.

A water intake reminder system that uses an ultrasonic sensor, microcontroller board, and Bluetooth module to track and notify users when it's time to drink water.

**Tech Stack:** Raspberry pi, Ultrasonic Sensor , Lm35, Bluetooth module, Android Studio

### CropTrack (Sensor Data Monitoring System for Farmers)

Sep 2022

- Designed and implemented a sensor data monitoring system for farmers using **ultrasonic sensor**, **LM35**, and **DHT11** sensors.
- Tested and validated the system to ensure accurate and reliable performance, Demonstrated proficiency in hardware design, **programming**, and web development.

Developed a program to collect sensor data from the microcontroller board and transmit it to a web hosting service for farmers to monitor crop conditions.

**Tech Stack:** Raspberry pi, Ultrasonic Sensor ,Dht11, Lm35, RESTful APIs

### RainSense ( IoT-based Rainfall Monitoring System)

April 2022

- RainSense is an innovative system that uses Raspberry Pi, ultrasonic sensor, and DHT11 sensor to **measure rainfall, humidity, and temperature** in real-time

The system is not only helpful for weather monitoring but can also be useful for agriculture, irrigation, and other similar applications. **Tech Stack:** Rsapberry pi, Ultrasonic Sensor ,Python programming

## Technical Skills and Technologies:

**Circuit design and simulation software:** Proteus

**Microcontroller Programming IDE:** Keil, Arduino IDE

**Programming Languages:** Python, C , C++, VHDL for embedded system development. Java, JavaScript

**Hardware Tools:** Oscilloscopes, Signal generators, Multimeters, Spectrum Analyzers

**Telecommunication Technologies:** RF systems, cellular networks, Wi-Fi, Bluetooth, Zigbee

**Communication Protocols:** CAN, SPI, I2C, UART

**Operating Systems:** Linux, Windows, Raspberry pi OS Embedded RTOS

**Microcontrollers:** Arduino, Raspberry Pi, 8051

**Coursework:** Embedded Systems, VLSI, Operating Systems, Computer Networks, IOT, Signal and Systems