#### RACHANA MALGER

Tech Enthusiast

**9** +918660818470

rachanamalger@gmail.com

#### **ABOUT ME**

I'm an engineering student who enjoys working on real-world projects using technology like IoT, machine learning, and embedded systems. I've built smart tools to help people and improve farming. I'm a quick learner, solve problems well, and like working with others to create useful solutions.

#### **EDUCATION**

#### JSS ACADEMY OF TECHNICAL EDUCATION, BENGALURU

2022 - Present

B.E. in Electronics and Instrumentation Engineering

CGPA: 8.3 (5th Sem)

GSS PU COLLEGE 2020 – 2022

PCMB (Pre-University Course)

87.16%

#### ST. JUDE HIGH SCHOOL, PUNE

2020

Grade 10 86.6%

#### **SKILL**

**Core Skills:** Digital and Analog Electronics, Embedded Controllers, MATLAB, Basics of C programming, Python and Machine Learning.

**Soft Skills**: Critical Thinking, Leadership, People Management, Problem Solving, Teamwork, Communication.

### **PROJECTS**

## **Smart Agriculture and Crop Protection System**

2024

Developed an affordable Arduino-powered system for monitoring environmental conditions like temperature, humidity, and soil moisture. Integrated automated irrigation and real-time alerts for pests or intruders using a PIR sensor. Tailored for small-scale farmers to boost crop yield, optimize water usage, and strengthen field security

# An Intelligent System for Real-Time Sign Language Translation.

2024

Created a real-time sign language translation system using image processing and machine learning on a microcontroller platform. The system captures hand gestures and converts them into both text and speech outputs through a web interface and an LCD display with built-in text-to-speech functionality, promoting inclusive communication for individuals with hearing and speech impairments.

## AWARDS AND ACHIEVEMENTS

- Secured 2nd Runner-Up at the Design & Innovation Clinic 2025, organized by CMTI, Bangalore, for developing a real-time sign language recognition system to bridge communication gaps for the speech and hearing impaired.
- Participated in State VTU Athletics meet in 2023.

# **INTERESTS**

Hockey, Athletics, Volunteering, Dance, Arts

#### LANGUAGES KNOWN

English, Kannada, Hindi, Marathi