



SUMMARY

Engineering graduate specializing in Embedded Systems, IoT, and System Programming with hands-on experience developing intelligent systems using C++, Python, Linux, Arduino, microcontrollers, and sensor-driven platforms. Strong foundation in DSA, algorithms, real-time data processing, debugging, and hardware-software integration. Experienced in implementing robotics, automation, and IoT solutions with end-to-end development, testing, and optimization.

EDUCATION

BMS Institute of Technology & Management

Bachelor of Engineering, Electronics and
Telecommunication | 2023-2025 (April)

MS Ramaiah Polytechnic

Diploma in Electronics and Communication
Engineering | 2018-2022

SKILLS

- Programming:** C++ (Intermediate), Python (Beginner), MATLAB
- Embedded:** ADC, SPI, I2C, UART, timers, Sensors, Microcontrollers, PCB Design, Soldering
- Operating Systems:** Linux, Windows
- Scripting:** Bash, PowerShell
- Networking:** TCP/IP, UDP, VPC (Virtual Private Cloud), Oracle Cloud
- Tools:** Docker, Git, Linux CLI
- Domains:** Embedded Systems, IoT, Robotics, System Programming, Hardware Testing

INTERESTS

- Travelling
- Cricket
- Robotics
- Technology Exploration,
- Sports
- Reading

PROFESSIONAL EXPERIENCE

Project Associate

Indian Institute of Science | Oct 2025 - Present

Worked on advanced IoT and embedded systems research focused on intelligent, next-generation solutions. Developed sensor-based monitoring devices using C++ and Arduino for real-time data processing. Built an AI-enabled robot with speech recognition, face tracking, and facial recognition. Integrated embedded systems with AI for autonomous interaction, image processing, and real-time decision-making.

Project Intern

Indian Institute of Science (Smart Stem Lab). | May 2025 - Oct 2025

Collaborated on an advanced IoT research project focused on next-generation embedded and intelligent systems. Designed and prototyped sensor-based monitoring devices using C++ and Arduino, integrating real-time data collection and analysis. Developed and programmed a robot featuring speech recognition (Ollama), face tracking, and facial recognition capabilities. Integrated embedded systems with AI algorithms for autonomous interaction, image processing, and real-time decision-making.

PROJECTS

IoT-Based Vehicle Safety and Monitoring System

- Engineered an IoT-enabled vehicle monitoring system complete with automated safety features.
- Implemented sensor-based monitoring in C++ to provide real-time data and alerts.

IoT-Based Grey-water Detection and Treatment System

- Integrated sensors with an Arduino microcontroller to monitor water quality parameters (e.g., turbidity, pH) in real-time.
- Implemented a cloud-based notification system to alert users on the treatment status and water suitability for reuse.

Agriculture Modernization System (IoT and Sensor-Based)

- Designed a remote crop monitoring system to prevent damage from extreme weather conditions.
- Integrated IoT with sensors and Arduino, enabling real-time tracking for farmers.