Sakeena Mumtaz Jagirdar

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Electronics and Communication Student

SKILLS

Programming Languages:

8/10

C Programming

7/10

Python

C Programming:

- ✓ Arrays.
- ✓ Functions.
- ✓ Pointers.
- ✓ Strings.
- ✓ Bitwise Operator.
- ✓ Structure & Union.
- ✓ File Operations.

Python:

- ✓ Data types.
- ✓ Functions & Modules.
- ✓ Operators.
- ✓ Control Structures.
- ✓ File Handling.

Embedded Systems:

- ✓ Arduino Uno.
- ✓ Microcontrollers.

Circuit Design:

- ✓ Proteus.
- ✓ Multisim.

Course Work:

- ✓ Embedded systems.
- ✓ Microcontrollers.

ABOUT ME

Aspiring Electronics and Communication student with a strong foundation in circuit design, embedded systems, and programming. Passionate about applying technical skills to real-world challenges.

EXPERIENCE

Student Intern

Sirintel Technologies | Davangere | August 2023 to September 2023

- ✓ Worked on embedded systems, IoT, and circuit design.
- ✓ Gained hands-on experience with microcontrollers (Arduino, ESP32), PCB design, and MATLAB.

Student Intern

Take it Smart | Bengaluru | October 2023–November 2023

- ✓ Designed and implemented embedded systems solutions using Arduino, ESP₃₂.
- Developed firmware (C, Python) for microcontrollers and IoT devices.

CERTIFICATIONS

- ✓ Internship completion Certificate Sirintel Technologies
- ✓ Internship completion Certificate *Take it Smart*
- ✓ Embedded systems & IoT Training Certification.

PERSONAL INTEREST

- ✓ Art & Sketching.
- ✓ DIY & Crafting.

EDUCATION

BE (Electronics & Communication)

S. T. J Institute of Technology, Ranebennur, Haveri, Karnataka 2021–2025 With Aggregate of 70%.

Class XII

R. T. E. S PU College, Ranebennur, Haveri, Karnataka 2019-2021 With Score of 90%.

Class X

Rotary English Medium School, Ranebennur, Haveri, Karnataka 2018-2019 With score of 89.40%.

PROJECT DETAILS

SMART HOME AUTOMATION SYSTEM

Sirintel Technologies | August 2023

Project description:

The objective was to design, control and monitor household appliances remotely using a smartphone. The system integrates Node MCU (ESP8266) as the central controller, sensors, and relay modules to automate lighting, fans, and other electrical appliances.

Software and Hardware Environment:

Arduino IDE, Blynk App, MQTT Protocol, Embedded C, Proteus, Node MCU (ESP8266), Relay Module, PIR Sensor.

Key challenges & Learnings:

- Ensuring a stable and reliable connection between the Node MCU and cloud servers
- Ensuring the relay module operates efficiently without excessive heating.
- Coordinating real-time data updates between the sensors, microcontroller, and mobile application

SOCIAL DISTANCING E-ID CARD

S. T. J Institute Of Technology, Ranebennur June2024-September2024

Project description:

The Social Distancing E-ID Card is a wearable device designed to ensure safe social distancing by alerting users when they come too close to others. The system utilizes RFID, Ultrasonic Sensors, to detect proximity between individuals wearing the device.

Software and Hardware Environment:

Arduino IDE, Embedded C, RFID Libraries, Microcontroller, Ultrasonic Sensor, RFID Module (MFRC522), Buzzer.

Key challenges & Learnings:

- Ensuring precise detection of social distancing violations using RFID/BLE/Ultrasonic sensors.
- RFID signals fluctuate, causing unwanted alerts.
- Keeping the device active for long durations without frequent charging.

SMART SALINE LEVEL MONITORING SYSTEM

S. T. J Institute Of Technology, Ranebennur November 2024-February 2025

Project description:

The Smart Saline Level Monitoring System is an IoT-based healthcare solution designed to automatically monitor the fluid level in a saline bottle and alert nurses or caregivers when the level is critically low. The system ensures timely intervention, preventing complications caused by an empty saline bottle, which can lead to air embolism in patients.

Software and Hardware Environment:

Arduino IDE, Embedded C, Mobile App, Microcontroller, Sensors, Wi-Fi Module (ESP8266), Buzzer, LED, LCD Display.

Key challenges & Learnings:

- Ultrasonic and IR sensors sometimes give inaccurate readings of liquid inside the bottle.
- Maintaining real-time connectivity in hospitals with multiple Wi-Fi networks.