

Name: Yallampalli Navaneetha

Phone Number : 9391271913

Email : navaneethay4050@gmail.com

LinkedIn : <https://www.linkedin.com/in/navaneetha-yallampalli-747a48267/>

PROFESSIONAL SUMMARY:

Highly motivated Embedded Systems Project Developer with 1.8 years of experience in software development and testing for Embedded and IoT applications. Proficient in developing firmware using C, Embedded C, and basic Python. Experienced in integrating sensors, optimizing code, and collaborating with cross-functional teams to deliver robust and efficient solutions.

KEY SKILLS:

- Programming: C, Embedded C, Basics of Python
- Microcontrollers: Arduino ,8051,basics of Lpc2148.
- Sensor Integration: infrared Sensors, ultrasonic,BLE sensors, Motor Drives
- Communication Protocols: I2C, SPI, UART, CAN, BLE, RS232, RS485
- Tools: Keil μ Vision, Arduino IDE.
- Operating Systems: Windows, Basic Linux.

EXPERIENCE:

Project Developer – Embedded Systems

Datapoint it & Hardware tech pvt ltd, Hyderabad | Sep 2023 –Apr 2025

- Developed and programmed microcontroller-based projects using C and embedded C.
- Worked on IoT solutions integrating sensors and communication modules
- Integrated and tested sensors and communication protocols (I2C, SPI, UART, CAN), enhancing device reliability.
- Collaborated with teams to deliver end-to-end project solutions.

PROJECTS:

RFID Based Shopping Cart system

- **Developed firmware** for Arduino microcontrollers to control sensor modules, Push Button, and lcd, enabling autonomous navigation of the system.
- **Integrated EM-18 Module** to read data from tags, Enabling accurate identification and tracking individual items.
- **Programmed motor control algorithms** in Embedded C, optimizing the rover's movement and pruning precision, ensuring a smoother and faster operation.
- **Implemented sensor calibration techniques** to ensure high accuracy in varying environmental conditions, enhancing system reliability.
- **Optimized system performance** for low power consumption, resulting in longer operational time and improved battery life.
- **Tools & Technologies:** Arduino, Arduino IDE, 16*2 LCD, Push Button, 7805 voltage regulator, and buzzer.

IoT-Based Electrical vehicle Battery Management system and fire Protection

- **Developed firmware** for Arduino using Arduino IDE to enable real-time monitoring of energy consumption with voltage sensor (0V-25V) ADIY and flame sensor.
- **Implemented control algorithms** to manage battery charging and discharging based on real-time voltage data, and to trigger safety protocols in case of abnormal conditions, enhancing battery performance and fire protection.
- **Designed a user interface** on a 16x2 LCD to display real-time energy data and appliance control status, enhancing user interaction.
- **Integrated Wi-Fi** enable remote monitoring and control of devices , allowing users to manage energy consumption from anywhere.
- **Tools & Technologies:** Arduino, Arduino IDE, (0V-25V) ADIY Voltage Sensor, Flame sensor, 16x2 LCD.

EDUCATION:

2019-2023 (B.Tech, Electronics and Communication Engineering – Mother Theresa institute of engineering and Technology, palamaner) 78.61%.

2017-2019 (Intermediate, Mpc – SPW Junior college, Tirupati) 85.54%.

Declaration:

I hereby declare that the details above are correct and true to the best of my knowledge.

Place :

Y Navaneetha