

RAHUL BARI

+91 7721864351, 8459101704 | rahulbari717@gmail.com | [Rahul bari](#) | Mumbai, Maharashtra

SUMMARY

Embedded Developer with 2 years of experience specializing in firmware development and microcontrollers (ESP8266, ESP32, STM32). Proven track record in R&D projects, optimizing embedded systems for AWS integration and OTA updates. Demonstrated expertise in RTOS, communication protocols, and IoT development. Hold a PG Diploma in IoT & Embedded Programming from COEP, dedicated to driving innovation in embedded and IoT systems.

SKILLS

- **Technical:** Embedded C, FreeRTOS, UART, SPI, I2C, MQTT, Git version control.
- **Development:** Firmware development, project ownership, goal-oriented execution, debugging, problem-solving, troubleshooting, IoT protocols.
- **Soft Skills:** Effective communication, quick learning, leadership, attention to detail, team building, time management, mentoring.

PROFESSIONAL EXPERIENCE

Lifespark Technologies Pvt Ltd | Embedded Developer

01/2024 -09/2024

- Designed and deployed OTA update mechanisms for seamless device firmware updates.
- Optimized MPU-6050 sensor calibration using ESP-IDF, achieving 0.01 precision through NVS offset storage.
- Diagnosed and fixed issues related to file uploading to aws s3 cloud, improving system reliability.
- Created detailed technical documentation for various hardware systems and software testing procedures.
- Provided strategic guidance and technical support to cross functional teams and interns, ensuring the successful completion of projects.
- Mentored interns through automatic flashing project, providing technical guidance and code reviews that resulted in successful project completions.

Vignaharta Technology Pvt Ltd | Embedded Developer (R&D)

11/2022- 08/2023

- Developed custom FreeRTOS task for ESP32, optimizing efficiency and Ensuring flawless data communication to AWS cloud for seamless remote monitoring of Gas.
- Collaborated with new client to enhance a gas leak detector system by integrating proprietary libraries.
- Identified and Reported system bugs during Product testing.
- Implemented comprehensive system testing protocols, identifying and documenting critical bugs for resolution

Vignaharta Technology Pvt Ltd | Embedded Intern (R&D)

05/2022- 11/2022

- Successfully resolved complex WiFi connectivity challenges in IoT devices through systematic troubleshooting
- Optimized MQTT protocol implementation, showcasing ability to enhance system performance
- Contributed to codebase improvements, focusing on stability and performance optimization

PERSONAL PROJECT WORK

Automated Irrigation System using IoT

05/2022 – 07/2022

Designed and implemented an IoT-based automated irrigation system to optimize water usage and reduce manual intervention. Addressed the business need for efficient water management to increase crop yield and minimize waste.

- Developed the solution using NodeMCU and moisture sensors for real-time, condition-based irrigation.
- Integrated ThingSpeak cloud platform for remote monitoring and data analysis, providing actionable insights into water consumption patterns.

EDUCATION

PG Diploma in IoT & Embedded Programming | COEP, Pune | 8.27 CGPA |

08/2021 – 08/2022

BE in Electronics & Telecommunication | SSBT COET, Jalgaon | 6.99 CGPA |

07/2016 – 05/2019