

Sharanu N Dibbadamani

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SUMMARY:

Embedded developer with expertise in firmware development for embedded system, experienced in microcontroller architecture, hardware interfaces, and delivering efficient firmware solutions.

TECHNICAL SKILLS:

- **Programming languages:** C, Embedded C, Python.
- **RTOS:** FreeRTOS, Nucleus RTOS.
- **Communication Protocols:** UART, RS485, I2C, SPI, OBD, CAN, BLE, Ethernet.
- **Network protocols:** TCP/IP, FTP, UDP, HTTP, MQTT.

EXPERIENCE:

Embedded Firmware Developer - Thingularity | May 2024 – Present

- Developed and maintained firmware for ESP32 C3, S3 and STM32 microcontrollers in C.
- Implemented device drivers for various peripherals including UART, SPI, and I2C.
- Collaborated with hardware engineers to design and test embedded systems.
- Optimized code for performance and memory usage, reducing overall footprint by 30%.
- Documented software design and provided technical support to the development and testing team.
- Conducted thorough testing of Bluetooth mobile app for embedded systems, ensuring seamless functionality and user experience.

Embedded Firmware Engineer - iTriangle Infotech | Aug 2022 – April 2024

- Created comprehensive test plans and test cases based on software requirements and specifications.
- Conducted system-level testing, integration testing, and regression testing for embedded systems.
- Automated test processes using custom Python scripts resulting 100% increase in efficiency.
- Executed manual and automated tests, reporting defects and tracking their resolution.
- Conducted thorough testing of Bluetooth mobile app for embedded systems, ensuring seamless functionality and user experience, leading to successful deployment on Play Store, showcasing expertise in QA and meticulous attention to detail.
- Collaborated with development teams to identify, document, and resolve defects.

EDUCATION:

SDM College of Engineering and Technology, Dharwad | EEE | 2018 - 2022