JEEVAN SHAJI V V

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OBJECTIVE

To contribute my 2 years of experience in embedded systems development and strong programming skills in C/C++, Java, and Python to design and develop high-volume, low-latency applications for mission-critical systems. I aim to leverage my expertise in communication protocols (CAN, UART, SPI...etc) and wireless technologies (UWB, BLE) to deliver high-availability, high-performance solutions. I am passionate about writing well-designed, testable, and efficient code, ensuring compliance with specifications, and supporting continuous improvement through innovative technologies and architectural reviews.

CORE SKILLS

- Communication Protocols: SPI, UART, I2C, CAN ..etc.
- Wireless Technologies: UWB (Ultra-Wideband), BLE (Bluetooth Low Energy), NFC (Near-Field Communication).
- Security Implementation: mbedTLS for encryption, secure boot, and authentication in embedded systems.
- Programming Languages: C/C++, Java, Python.
- Embedded Systems Development: Firmware development, debugging, and optimization for low-latency, high-reliability systems.
- Android App Development: Java, Android SDK, REST APIs, BLE communication.
- Tools Platforms: Embedded IDEs, mbedTLS, Git, Android Studio, VS Code..etc

EDUCATION

GOVERNMENT COLLEGE OF ENGINEERING kannur   Kannur, Kerala
Btech in computerscience and engineering   CGPA: 9.22/10.0   2023

ST JOSEPHS HIGHER SECONDARY SCHOOL   Thalassery, Kerala
Computer Science   98.416   2019

WORK EXPERIENCE

THINKSEED SYSTEMS PVT LTD   WHITEFIELD, BANGALORE
SOFTWARE ENGINEER, Embedded System   Oct, 2023 − Ongoing

- Developed cryptographic security features using MbedTLS for embedded projects, leading to improvements in data protection during communication.
- Collaborated with the embedded systems team to develop BLE applications, ensuring seamless wireless communication.
- Implemented UWB applications for precise ranging and location tracking in embedded systems.
- Worked on multiple wired communication protocols, including CAN, SPI, UART, and I2C, optimizing data transmission reliability.
- Developed an Android application integrating BLE communication, enabling seamless interaction between mobile devices and embedded systems.

PROJECT WORK

Automated Plastic Waste Detection Bot   2023

- Developed an autonomous robot for plastic waste detection and collection using deep learning and embedded technologies.
- Implemented a computer vision model to detect plastic waste with high accuracy, enhancing the efficiency of waste collection.
- Designed and integrated a robotic arm for automated waste grabbing and disposal, improving the automation process.
- Optimized real-time navigation using embedded systems, enabling the bot to autonomously search for and collect plastic waste.

Medcare   2022

- Developed a hospital management web application using the MERN stack to streamline patient record management and token booking.
- Implemented a secure and scalable backend with MongoDB and Express.js, ensuring efficient data storage and retrieval.
- Designed an intuitive user interface with React.js for seamless interaction and improved patient experience.
- Integrated real-time token booking and patient record tracking, reducing manual workload for hospital staff.

Automatic Fire Fighting Bot   2020

- Developed an IoT-based automated fire-fighting bot that detects fire using sensors and autonomously moves towards the fire source.
- Integrated fire sensors with an embedded control system to enable real-time fire detection and quick response.
- Implemented autonomous navigation and firefighting mechanisms, improving fire suppression efficiency.