Embedded Software Engineer

Arlington, Texas
Department: Engineering

Job Summary

- We are looking for a highly motivated and skilled Embedded Software Engineer to join our engineering team. In this role, you'll be responsible for designing, developing, testing and optimizing embedded software that powers our innovative hardware products. You'll work closely with hardware engineers, system architects, and QA teams to ensure seamless integration and performance of embedded systems.

Key Responsibilities

- Design and implement robust and efficient embedded software in C/C++ or similar low-level languages.
- Develop firmware and drivers for microcontrollers (e.g., ARM Cortex, STM32, ESP32) and other embedded platforms.
- Interface with hardware through peripherals (UART, SPI, I2C, CAN, USB, etc.).
- Perform system debugging and root-cause analysis using oscilloscopes, logic analyzers, and JTAG tools.
- Contribute to systems architecture design and hardware/software co-design discussions.
- Write clean, modular, and well-documented code following coding standards.
- Create and maintain unit, integration, and system-level tests for embedded code.
- Collaborate with cross-functional teams on product design, prototyping, and validation.

Required Qualifications

- Bachelor's or Master's degree in Electrical Engineering, Computer Engineering, Computer Science, or related field.
- 3+ years of hands-on experience with embedded systems development.
- Strong proficiency in C/C++ and real-time programming techniques.
- Familiarity with RTOS (e.g., FreeRTOS, Zephyr) or bare-metal development.
- Experience with embedded development tools (e.g., GCC, Keil, IAR, GDB).
- Proficient in debugging embedded systems using hardware tools or simulators.
- Comfortable reading schematics and using lab equipment for validation.
- Knowledge of mobile testing frameworks and CI/CD pipelines.

Preferred Qualifications

- Experience with wireless communication protocols (UART, SPI, I2C).
- Familiarity with secure boot, OTA updates, and embedded security.
- Knowledge of scripting languages (Python, Bash) for automation testing.
- Experience in version control systems (e.g., Git) and CI/CD workflows.
- Contributions to open-source embedded projects or platforms.
- Working with electric vehicles (EVs), including knowledge of EV systems, components, and evolving market trends.

Job Type & Schedule

- Full-time / Part-time

Why Join Us?

- Opportunity to lead high-impact projects
- Collaborative, mission-driven work culture
- Career development and growth opportunities
- Competitive salary, benefits, and flexibility