Embedded Software Engineer

There's an evolution happening in Avon, CT. iDevices, a preeminent brand in the smart home industry, is building "The Silicon Valley in the Farmington Valley". With a comprehensive product line of both plug-and-play and in-wall solutions, iDevices manufactures connected power, lighting, and climate control solutions for homeowners, professional installers, and builders alike. iDevices seamlessly connects people to their worlds with sophisticated technology that enhances everyday life. If you thrive at the intersection of Technology and Creativity – then we want you to join our evolution!

We are seeking an Embedded Software Engineer to work within our Embedded Software Group. This role is responsible for developing embedded software for a wide range of IoT applications using real-time operating systems, embedded Linux, and a variety of communication protocols.

Responsibilities

- Build embedded software solutions for IoT devices, including firmware for low power embedded sensor and application interface electronics and software tools for supporting development and test.
- Perform all aspects of software development. This includes, but is not limited to, requirements and specifications, design and development, coding and debugging, testing, and integration of embedded devices and systems. The result is intended for production and commercial deployment and must meet quality objectives, engineering methodologies, and company guidelines.
- Develop scripts to aid in automated unit, regression, and integration tests to meet quality expectations. Understand appropriate verification practices and tools.
- Write device drivers for various sensors and other small peripherals
- Support hardware/software integration and software validation
- Interpret, understand, and provide feedback on software requirements for active projects
- Work and interface with cross-functional design teams
- Analyze and enhance efficiency, stability, and scalability of system resources
- Develop code that is consistently well documented and maintainable
- Assess, utilize and integrate third party and open source software
- Support system integration and quality assurance and provide post production support
- Evaluate and recommend tools, technologies, and processes

Required Qualifications

- BS or MS in either Computer Science or Computer Engineering
- Proficiency with C/C++
- Understanding of real-time software concerns like multi-threading and concurrency

- Knowledge and understanding of network protocols, including TCP and UDP
- Understanding of object-oriented development
- Familiarity with microcontrollers, with or without a RTOS
- Experience working on low-power, memory-constrained target environments
- Experience with Unix shell scripting
- Excellent written and oral communication skills

Desired Qualifications
- Prior work experience in embedded software development
- Proficiency with Python
- Experience with Linux configuration and application development
- Experience interfacing with peripherals over UART, SPI and I2C
- Knowledge of Bluetooth and Wi-Fi communications protocols
- Knowledge and understanding of network security concepts and cryptography
- Ability to read schematics and data sheets for electrical components
- Comfortable with instrumentation such as oscilloscopes, logic analyzers, digital multimeters, etc.

This is a full-time, on-site position in Avon, CT.