

## **Sr. Embedded Software**

**POSITION SUMMARY:** Design and develop real time embedded applications for medical devices

### **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

- Design and develop firmware for low power, battery powered medical devices consisting of a mixture of analog, digital and RF circuitry in highly integrated, low power embedded systems
- Contributes at all levels of the software development cycle including architecture, detailed design, implementation, testing (unit, integration and system), risk and configuration management, including required documentation at all levels.
- Support verification and validation testing. Work closely with software/hardware QA to develop test plans and protocols
- Ensure compliance with Food and Drug Administration (FDA) requirements for medical device software
- Adheres to high quality coding and testing practices: coding conventions, static code analysis, unit/integration testing, code refactoring and code reviews.
- Performs testing of software components individually and in system form
- Works directly with end users concerning maintenance and enhancement of software systems

**EDUCATION/CERTIFICATION:** BS degree in Computer Science, Computer Engineering, Electrical Engineering or related field

### **EXPERIENCE REQUIRED:**

- 5+ years' experience in development of real time embedded applications
- Demonstrated ability to solve problems independently
- Experience developing applications which run a variety of OS/RTOS targets
- Experience in a structured development environment with source control and bug tracking systems

### **REQUIRED KNOWLEDGE:**

- Design and development experience using the following: C, RT Linux, DSP/BIOS, RTOS, Hardware peripherals (I2C, SPI, Flash, DMA), device drivers, multi-core processors.
- Low power real-time embedded programming.
- Strong written and verbal communication skills

### **PREFERRED KNOWLEDGE:**

- Experience developing software for medical devices
- Use of lab equipment, e.g. Oscilloscopes, Logic Analyzers etc.
- Experience with CUnit or another unit testing framework
- Experience working in an agile development environment