Senior Medical Software Engineer - Embedded

Job ref: 158

Do you want to apply your software development skills to the entire product development lifecycle of intelligent, automated and connected medical devices? If so, this is the position for you....

Full Details

Main Role

Cambridge Consultants is a rapidly-expanding world class technology and innovation company, with offices in North America, Europe, Singapore and India. For the last 55 years we have been developing breakthrough products and technology for our global client base.

This position offers the opportunity to contribute to the Medical Technology business and help shape the future of intelligent, connected medical devices. If you are excited about solving complex, multivariate technical and systems challenges in the medical domain, are passionate about developing robust, safety-critical software that serves a meaningful purpose, and have excellent interpersonal and leadership skills, then this role could be for you. You will work with our clients and lead the creation of innovative multidisciplinary products and technologies in the medical space.

This role offers continuous exposure to the latest developments in an exciting field poised for growth, as well as the variety of working with many companies, technologies, and people who are passionate about the future of the role of technology in healthcare.

This role is based in our new state-of-the-art innovation center, located in Boston, MA.

Type of Work

The Medical Technology Division undertakes the development of innovative new medical devices and systems from concept, through prototype manufacture, to new product introduction, often surmounting considerable technical challenges.

We undertake development projects across a wide range of categories including surgical tools, drug delivery devices, diagnostic instruments, and critical care.

We combine highly creative lateral thinking with excellent technical skills and broad industry experience to form powerful development teams. Our work ranges from complete product developments to providing consulting services for our clients on their technology, strategy or development processes. Every project is a unique technical challenge, and provides a rich learning experience.

Typical development project examples include:

- Cloud-connected disease management product with crowd sourced data analytics
- Point of care diagnostic instrument with sample handling, optics and microfluidics
- Embedded systems for remote patient monitoring applications
- Wireless pacemaker implant, including ASIC development
- Novel surgical tool involving machine vision, automation, and complex UI
**Responsibilities**

You will apply your software development skills to the entire product development lifecycle of intelligent, automated and connected medical devices. Your primary role will be to specify, design, develop and test embedded software for complex medical systems for diagnostics, surgical, drug delivery and connected health applications.

Many of the systems you will be working on will include complex algorithms, electronics, optics, fluidics, robotics, wireless connectivity to the cloud, and companion apps.

Contribute to the full software development lifecycle, including requirements gathering, architecture, design, coding, and verification

Delivery of medical-grade software designs and code that meet defined requirements

Collaborating with team members across engineering disciplines including mechanical engineering, electronics, informatics, regulatory affairs, life sciences and manufacturing

Playing a role in the on-going improvement of our company’s technical offerings by learning new skills and tools.

**Requirements**

To meet the demanding requirements of this role you will have an excellent undergraduate degree in a relevant engineering field (e.g. Electrical or Computer Engineering or Computer Science); an advanced degree (Master’s or Ph.D.) in a related field is a plus. You will have greater than 5 years of experience in hands-on software development for complex, multi-disciplinary products. Prior experience with device development in the medical (or other regulated) environment is preferred.

We are looking for someone who is adaptable, self-motivated, and able to work under pressure. We will expect you to be able to work collaboratively as part of a team, but also have the initiative to work independently. You should have excellent interpersonal, communication, and presentation skills. You will also have strong client-facing skills and must be willing to travel from time to time.

Experience in the consulting or contract design and development industries would be an advantage, as would a demonstrable track record of getting medical products through regulatory approvals.

Your skill set must include:

- Strong hands-on software/firmware development expertise in C
- Multithreaded development experience on at least one Real Time Operating Systems (RTOS)
- Strong command and detailed knowledge of popular embedded microcontroller families such as the Microchip PIC, ARM, and TI MSP430
- Proficiency with debug tools such as logic/protocol analyzers and oscilloscopes
- A good understanding of the development principles applicable to regulated product development
- Experience with major source code revision control and issue tracking systems
- The ability to read electronic design documentation (schematics, assembly drawings) and understand the function of common electronic circuits

Additional skills of interest include:

- Experience in development for mobile computing platforms (Android and iOS)
- Wireless communication standards and protocols for devices such as Bluetooth Smart and NFC

**Benefits**

- Choice of medical dental and vision plans
- Flexible spending accounts
- 18 vacation days for full time employees
- Competitive base salary
Pay for performance
Profit share bonus plan based on company and individual performance
401K with discretionary company match
Life Insurance
Relocation assistance, if applicable

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Location

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