



Senior Software Engineer

Job Description

Intelon Optics is a rapidly expanding world class technology and innovation company.

This position offers an opportunity to contribute to the Medical Technology business and help shaping the future of intelligent medical devices for ophthalmology. If you are excited about solving complex, multivariate technical and systems challenges in the medical domain, and passionate about developing modern, robust, safety-critical software that serves a meaningful purpose, then this role could be for you. You will work as a member of our software development team and participate in creation of innovative optical products and technologies.

This role offers continuous exposure to the latest developments in an exciting field poised for growth, as well as the wide spectrum of programming languages, cutting edge technologies, and people who are passionate about the future of technology in healthcare.

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

Responsibilities

Apply your software development skills to the entire product development lifecycle of intelligent, automated medical devices.

- Develop software interfaces to devices comprising the medical instruments designed by Intelon Optics using 3d party drivers and API's.
- Integrate the devices into overall instrument operational workflow using USB, COM ports and other connectivity and control methods and techniques.
- Use TCP and other protocols for inter-process communications.
- Apply image and video processing and rendering techniques for comprehensive instrument data visualization, as well as mathematical data processing algorithms.
- The above assumes in-deep understanding and experience with inter-process interaction, synchronization, multithreading, transactions, performance, implementation of both asynchronous and real-time calls and operations; strong, recent, hands-on, practical C++ programming skills.
- Contribute to the full software DevOps cycle, including requirements gathering, architecture, design, coding, unit testing, deployment, maintenance, writing design documentation, etc.

- Collaborate with team members across engineering disciplines including mechanical engineering, electronics, clinical and regulatory affairs, and technical and scientific consultants.
- Participate in all stages and workflows of the Agile development cycle.

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.

The software tool chain includes: C++ as a primary programming language (with Visual Studio as IDE) SQL (SQLite), Python. OOP skills, proper use and understanding of design patterns, ability to document design solutions, including UML are a must.

Our Agile development process implies deep understanding of such concepts as Test Driven Development, Continuous Integration, as well as practical skills with Dev Ops tools such as: JIRA, Git, Bitbucket, Bamboo, SonarQube or equivalent.

Additional skills in the following are a plus:

- Release engineering, s/w versioning, deployment, and maintenance aspects
- Understanding of Windows OS aspects (services, processes, Windows IoT, applications installation and configuration, kiosk mode, etc.)
- Full stack Java (version 11 and up), Java FX, Spring/Spring Boot, Hibernate, Liquibase, TCP/IP, Jaxon/JAXB data serialization. C++, C# programming skills
- Experience in SaaS, big data analysis, AI, Elastic Search

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 and have the strong initiative and drive to work independently. You should have excellent self-organization, communication, and presentation skills.

Benefits

Competitive salary and benefits with company incentive plan.

As part of our dedication to the diversity of our staff, Intelon Optics, Inc. is committed to Equal Employment Opportunity without regard for race, color, national origin, ethnicity, gender, protected veteran status, disability, sexual orientation, gender identity, or religion.

To Apply

Please email team@intelon.com with your resume and a cover letter attached.

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