

## Software Developer

### General Summary

MolecuLight Inc. is a Medical device company in Toronto, specializing in point-of-care diagnostic imaging, developing a handheld optical imaging platform. MolecuLight's first product is an imaging system with primary applications in bacterial imaging for wound care, cancer imaging and preclinical animal model analysis.

MolecuLight Inc. is seeking a talented and experienced Software Engineer to join their downtown office. Individuals with Java, IOS, Windows, Linux & Android development and experience in front-end web and thick medical client applications and understanding of Patient data flow in healthcare are encouraged to apply. The successful candidate will work on browser-based and mobile applications. This is an opportunity to contribute to an innovative high-impact healthcare project from its earliest stage of development.

### The incumbent will embrace the MolecuLight core values:

- Merit and performance based recognition and advancement.
- Build value for customers and investors.
- Innovation without ego.
- Relentlessly seek continuous improvement opportunities.
- Achieve results with a sense of urgency.
- Find how we can, not why we can't.
- We value a profitable growing company; growth creates opportunities, profit allows pursuit of opportunities
- We are intolerant of bureaucracy that adds no value to our customers.

### Key Accountabilities and Responsibilities

- Design and implement software integration with electronics of an optical imaging device
- Design and implement cross-platform clients for a variety of mobile devices (including IOS, Windows, Linux Android)
- Design and implement browser-based user interfaces in GWT, HTML5, CSS and/or JavaScript
- Design back-end interfaces to talk to existing clinical systems for diagnostic imaging, electronic medical records, etc.
- Design digital signal processing software for the device. Assist with the selection and definition of the electronic hardware for use in implementation of the design
- Understand digital electronic boards and subsystems to satisfy the signal processing requirements of the device
- Develop standard interfaces for software
- Comply with ISO 13485 regulations and established corporate Quality System
- Research ideas/problems and implement prototypes quickly to demonstrate proofs-of-concept
- Develop and implement imaging analysis software
- Provide training and support to company personnel, clinicians and researchers
- Perform unit tests on developed modules
- Fix defects found in developed modules
- Write proper design documentation as required by the QA software development process and participate in documentation reviews
- Work closely with other team members to ensure architectural integrity and product quality
- Observe clinical uses of the software and identify areas of improvement and new avenues of development
- Ensure that all systems meet appropriate levels of regulatory compliance
- Comply with current MolecuLight process development requirements and associated documents
- Take all reasonable precautions to protect MolecuLight corporate assets, including proprietary and confidential information
- Provide recommendations about current trends, processes, and innovations in the software industry to aid in improving the effectiveness, efficiency, for the product

- Working effectively in collaboration with other members of the department, or with managers and staff across the organization
- Complying with all legal requirements, all corporate policies and procedures, and with generally accepted business and ethical practices

## Relationships

The position reports directly to CEO/CSO or designated management team member. The Software Developer must promote positive and effective working relationships internally and externally including outside vendors and consultants.

## Knowledge, Skills, and Experience Required

### Education:

- Undergraduate Degree in Computer Science, Electronics Engineering, Computer Engineering or related field or equivalent experience.

### Knowledge and Experience:

- Minimum of 7 years' experience designing and developing software in 'c', 'c++', objective 'c', and Java for Web Applications, MS Windows, Linux, iOS and Android Platforms.
- Experience with writing interface applications for medical devices
- Experience with inter-systems communication with real time constraints (e.g. achieving memory transfers within a specific time window, operating system interactions with embedded processors and memory locations)
- Knowledge of Image Signal Processing using OpenCV or equivalent signal processing libraries.
- Knowledge of Machine learning/Artificial Intelligence software techniques.
- Ability to work independently and self-manage within a dynamic team environment.
- Ability to work within ISO 134985 regulations and an established Quality System
- Ability to work within IEC 62304 Medical device – Software Life cycle Processes
- Excellent written and oral communication skills.
- Experience in a clinical or research environment is an asset
- Experience with medical software development under FDA, EU GMP, and ISO 13485, HIPPA, DICOM

### Skills:

- Excellent English communication skills, both verbal and written.
- Excellent interpersonal communication skills and judgment.
- Excellent presentation skills.

### Attributes:

- Ability to prepare high quality and reliable deliverables while working quickly, calmly, and effectively under pressure from time constraints and deadlines.
- Ability to work effectively as part of a team, as well as independently when necessary.
- Ability to respond to urgent situations appropriately by prioritization.
- Ability to follow-up on issues without guidance.
- Accuracy and strong attention to detail
- Ability to take initiative

## Disclaimer

The above information on this job description and specification has been designed to indicate the general nature and level of work performed by employees within this job. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of employees assigned to this job.