

# Software Developer

## Medical Imaging Equipment

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*2/3 of the world population have still no access to medical imaging yet...*

*Do you have the passion, determination and enthusiasm for being part of the solution?*

*Do you have the unique combination of leadership and expertise required for this challenging position, including outstanding skills in medical products development, industrialization and quality management?*

For its product development team, which designs and industrializes an extremely robust, cost-effective and digital medical X-ray system, Pristem is looking for highly motivated, proactive and talented software engineers with a good track record in the industry of medical devices.

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### Position Description

The Software Developer will **own the development and V&V of key medical imaging software components** including all modules/layers related to medical data management and the integration with 3<sup>rd</sup> party applications and systems (PACS/VNA/RIS/HIS/EMR), according to usual standards and protocols such as IHE, DICOM, HL-7, etc.

He/She will combine strong **software delivery** capabilities with knowledge of recent architectures and deployment models (**Docker, Cloud, IoT**), agile methodologies and continuous delivery/**DevOps** processes to implement a comprehensive software solution in accordance with evolutive market needs and strict **quality and compliance/regulatory requirements**.

As a member of the software engineering team, the Medical Imaging Software Developer will report directly to the CIO.

## Main Tasks and Responsibilities

- Liaise with key stakeholders, end-users and partners, understand their needs and translate them into appropriate software requirements, including (but not limited to) data intercommunication standards and protocols and integration within 3rd party healthcare IT infrastructures.
- According to the architecture and technologies defined by/with the Software Architect, design, develop, code, debug, document, test, maintain and verify the software, in collaboration with internal and external software developers and in strict alignment with Medical Devices Regulation and standards.
- Identify, qualify, validate and integrate 3rd party medical software components with our software solution.
- Ensure the connectivity (local/remote) and the secure transfer of medical data, following relevant medical standards and protocols.
- Ensure appropriate planning and execution of **Software Verification and Validation** as part of software development projects.
- Author and maintain technical documentation required for CE marking and/or FDA approvals in compliance with regulatory requirements. With the support of the Quality manager, ensure the Medical Software Certification (CE mark), Risk Management (EN ISO 14971), SW development processes and lifecycle management (IEC 62304), usability (IEC 62366), and post-market surveillance.
- Participate to the integration, configuration and customization of Pristem's products and services at client sites.
- Contribute to the design and implementation of the company's support model and directly participate to customer support.
- Participate to a culture of continuous improvement and high quality, safety and reliability, required by the extremely high dependability, security and safety of Pristem systems.

## Required Skills and Qualification

### **Absolute must (please do *not* apply if you don't recognize yourself in these)**

- At least 5 years of experience software development **applied to medical imaging devices**.
- Profound **passion for software**: delivering well-designed software, automating testing and deployment, integrating existing components, learning and applying new technologies.

If your goal is to quickly become a team lead, project manager or equivalent then this job is not for you!

### **Required**

- Strong experience in medical imaging and the DICOM format, PACS systems and knowledge of IHE/HL-7/FHIR and other related medical imaging standards and protocols
- Expertise in development practices following IEC62304 medical software lifecycle and usability assessment (IEC 62366)
- Expertise in medical devices SW certification including integration of COTS, open source or SOUP modules (“build” vs. “reuse” vs. “buy”)
- The right mindset to work in a growing startup: ownership & accountability, ready to go the extra mile, collaboration, customer focus and support.
- Full-stack software development:
  - o Programming language: Java or C# or the like
  - o Front-end: AngularJS or the like.
  - o Back-end: REST web services, API management
  - o Database: RDBMS MySQL or the like
  - o Deployment: Cloud (Azure or AWS) or Docker containers
- Tools:
  - o Version control (Git or the like)
  - o Automated testing frameworks
  - o Continuous integration and delivery (Jenkins or the like)
  - o Requirements management and bug tracking (JIRA or the like)
- Able to produce outstanding quality and reliability required for our solutions to work durably in the most challenging contexts.

### **Recommended**

- Master's Degree in Software Engineering
- At ease in agile cross-functional teams
- Experience with medical data privacy, encryption techniques and related standards
- Ability to interact with a wide variety of internal/external stakeholders

### **A plus**

- Linux advanced scripting and administration
- Experience with Software Design for Reliability (SDFR)
- Understanding of Internet Of Things (IoT) environments and technologies
- Understanding of NoSQL databases

- Languages:** French and English full proficiency (written and spoken).
- We offer:** A multicultural, open-minded, highly dynamic and stimulating work environment. A disruptive approach combining best-in-class medical technologies with heavy-duty industrial quality. An opportunity to address a global health issue in a practical and effective manner.
- Activity Rate:** 100%
- Duration:** permanent contract
- Start Date:** as soon as possible
- Work place:** Pristem Switzerland
- How to apply:** Send email applications including motivation letter, resume and work certificates/references to [hr@pristem.com](mailto:hr@pristem.com)
- More information:** [www.pristem.com](http://www.pristem.com)