



b
**UNIVERSITÄT
BERN**

**ARTORG CENTER
BIOMEDICAL ENGINEERING RESEARCH**

Job Position- Software Developer

The Image-Guided Therapy Group of ARTORG Center for Biomedical Engineering Research of the University of Bern together with the Department of Neurosurgery of the University Hospital, Inselspital Bern is working on a collaborative project for pre-operative training of microsurgical procedures.

The Software Developer is responsible for architect/ design, coding, testing based on project and business requirements, reviewing, and delivery on time. He or she also develops technical and conceptual specifications in support of the overall application design. In this role, you will also be part of the product development team to manage & deliver new product functionalities, modify existing product functionalities, or improve product functionalities as required.

Eligible Department:

Bachelors, Masters in Computer Science/ Medical Software / Imaging Technologies / Software Engineering

Years of Experience: 3 Year (Minimum)

Roles and Responsibilities:

- Designing and building GUI programming in C++ using the QT framework, QML.
- Can handle project/task independently as well as be a team member.
- Good understanding of AWS.

Tools and Languages:

- C++ QT framework user interfaces desktop application.
- Very good experience in C++, OOM/OOD, STL.
- NoSQL / relational database skills.
- Optimising Qt applications for Performance and memory on embedded systems (other than PC).
- QML Profiler, UI Creation with QML, Custom C++ Components, QML rendering and rendering optimisations, C++ Integration, States and Transitions, Animations, Shaders.
- Knowledge in JavaScript, Electron, React & above, and/or Typescript languages.
- Strong Web UI development fundamentals.

Minimum requirements for working experience:

- Extensive hands-on experience in Desktop application development using QT technology and QT, QML.
- Experience with GUI implementation and debugging desktop applications using Qt.
- Experience in real-time communications software development and related build environments, with a focus on mission-critical, multithreaded applications.
- Experience designing, developing and debugging networked client/server applications.
- Experienced with source/version control software, including Git.
- Strong proficiency in C++, with a fair knowledge of the language specification.
- Preferable to have DICOM and medical regulatory awareness.
- Strong abstraction, analytical and problem-solving skills.
- Special interest to work on Virtual/mixed reality 3D environment.
- Ability to work as an individual contributor.

**ARTORG Center
Murtenstrasse 50
CH-3008 Bern**

fredrick.joseph@artorg.unibe.ch



^b
UNIVERSITÄT
BERN

ARTORG CENTER
BIOMEDICAL ENGINEERING RESEARCH

Application (Single PDF) should consist of:

1. Letter of Motivation (1-page, font size 10) [Format- About me, Past and Motivation, How I fit for the role?]
2. CV (Academic Track Record, Professional Experience)
3. Any other supporting documents

Send applications to fredrick.joseph@artorg.unibe.ch