Electronics engineer

Job description

The engineer will be responsible to follow all the steps from the conception to the production of the electronics of medical devices for radio-guided surgery (surgery, utilizing radioactive markers and miniature particle detectors for localizing malignant tissues). He or she will be particularly in charge of coordinating design of front-end and digital acquisition electronics, development of the firmware for CPLD/FPGA and microcontrollers, and graphical user interfaces (GUI) with external devices. He (she) will be in charge of design documentation in accordance with the ISO-13485 quality system endorsed in the company. The engineer will also contribute to maintenance and technical support of the systems installed at the hospitals, and participate in demo sessions and clinical tests.

Place of work

Forimtech SA Laboratory in Zimeysa (Satigny, GE, Switzerland)

Company background

Forimtech S.A. (Geneva, Switzerland) was founded in 2004 with the main goal to implement novel developments in the field of particle detection and microelectronics into medical applications based on radiation detection, primarily – into so-called "radio-guided surgery", i.e. surgical procedures utilizing radiopharmaceuticals for precise localizations of malignancies. The main product of Forimtech is RadPointer® - intra-operative probe for radio guided surgery that has been developed in the framework of joint CTI-Medtech project (Commission for Technology and Innovation of Switzerland) with EPFL (Swiss Federal Institute of Technology in Lausanne) and CHUV (University Hospital of Lausanne).

Required skills

- Good practical experience in particle detectors and fast front-end electronics
- Ability to design electronics schematics and to handle the project from the specifications to the acceptance tests
- Ability to negotiate and establish specifications with users and collaborators
- Good knowledge of digital signal processing (FPGA, microcontrollers)
- Good knowledge of several programming languages (LabVIEW, VHDL, C++, PYTHON)
- Knowledge of wireless communication standards (Bluetooth, Wi-Fi, etc.)
- Ability to present work in collaboration meetings within an international context

Experience: 3 to 10 years hands-on experience in detector and electronics development

Contract start and duration: from March 2022, permanent

Required qualification: PhD or qualified High school engineering degree

Salary range: 65'000-85'000 CHF per year, depending on qualifications and experience

Contact: grigoriev@forimtech.ch or eugene.grigoriev@cern.ch