Development of graphical user interface for medical applications

IRCAD and IHU Strasbourg are two partner institutes aiming at creating new tools for the surgery of the future, notably through a common Research and Development team.

IRCAD (Institut de Recherche contre les Cancers de l'Appareil Digestif) constitutes a reference in the domain of assisted digestive surgery, specifically in the area of minimally invasive surgery, via the use of Augmented Virtuality and Augmented Reality.

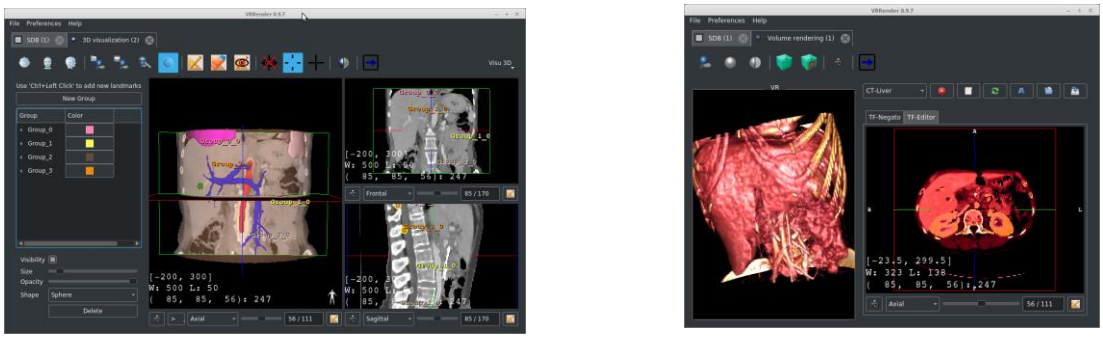
The IHU (Institut de Chirurgie Guidée par l'Image) in Strasbourg develops an innovative surgery to improve medical care of the patients, with a personalized approach combining the best minimally invasive technologies with the latest progress in medical imaging.

The IRCAD/IHU R&D team develops applications for image guided surgery. These applications are based on an internally-developed Open-Source framework: Sight, previously named *fw4spl* [1], written in C++. The team works on converting the graphical user interface based on Qt Widgets to the Qt Qml language [2].

The purpose of this internship is to improve the graphical user interface of the applications. It will be necessary to consider how to:

- convert Qt Widgets to Qml
- simplify the interfaces to be easily used by surgeons

The student will have good knowledge in C++ development and Qt library. He must also be able to develop into a large code base, work independently and be proactive.



Sample of IRCAD/IHU R&D applications

[1] https://github.com/fw4spl-org

[2] https://doc.qt.io/qt-5.11/qmlapplications.html

Tutors :
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Gross salary: 1100 € brut/month
Internship duration : 6 month
Beginning of the internship : 1st quarter of 2019
Place: IHU – Strasbourg – City center

Skills :
C++
Qt/Qml