

The ESRF, the European Synchrotron, an international research facility based in Grenoble, is currently seeking to have a:

Trainee in software engineering **“Internship (3 months)”**

INTERNSHIP DESCRIPTION

Within the Beamline Control Unit and the Structural Biology Group and under the supervision of Marcus Oskarsson, the topic of the internship is the following:

Design and implementation of a data acquisition user interface for cryo electron microscopy. The ESRF Structural Biology Group operates a state-of-the-art cryo electron microscope (Titan Krios) and needs to develop a user-friendly interface for data acquisition and processing. The application will be used by scientists of ESRF’s international user community to start data acquisition and image processing.

The user interface will be built upon an existing application framework, based on a client-server architecture written in Python and ES6. The backend is built on a Flask micro web framework and the front end is built with React and Redux.

PROFILE, SKILLS

- You are a student in computer science (BAC+3), software engineering or similar field with:
 - Demonstrated User Interface design skills
 - Demonstrated Python and Javascript programming skills
 - Strong communication skills and team spirit and quickly adapt to new technologies
 - Knowledge of contemporary programming environment skills including for instance: REST APIs, GitHub, Slack, Express, React, Angular, React, state management libraries (redux/other), Node, HTML/HTML5, Javascript, git (or use of other repository)
 - IDE familiarity and usage
 - Code repository usage, build system (i.e. webpack)
 - Knowledge of current technology industry trends

If you are interested in this position, please send your CV and cover letter to: marcus.oscarsson@esrf.fr