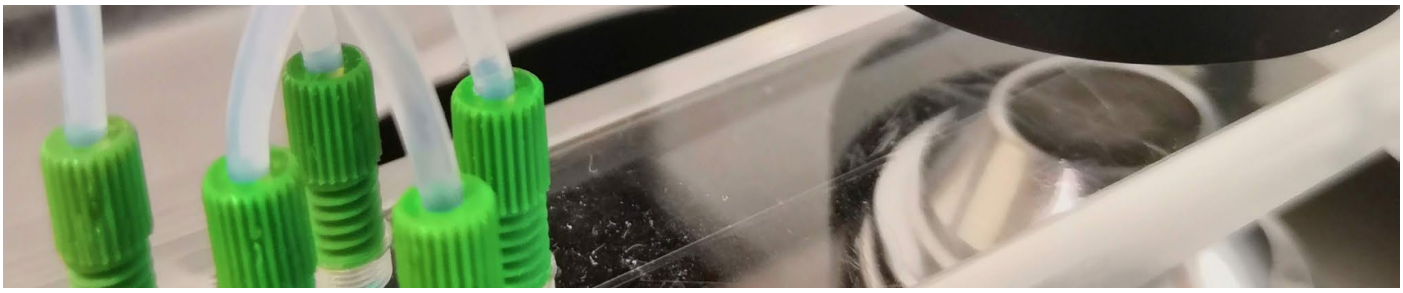
Working Student Job

User Interface Development for Digital Holographic Microscope Data



CellFace

CellFace aims to establish digital, holographic flow cytometry as a label-free platform technology for cellular diagnostics. We are an interdisciplinary project of TU Munich coordinated by the Chair for Biomedical Electronics and the Chair for Data Processing in cooperation with several departments of the University Hospital Klinikum rechts der Isar.

Project Description

The goal of this project is to develop an intuitive user interface (UI) for the measurement personnel which simplifies their workflow and maintains our data standard. Therefore, the microscope data must be packed into containers and enriched with meta data. Since the microscope is used by different people throughout the day the UI must integrate a queueing mechanism to save containerization tasks and wait for an idle time slot to start the packaging process.

Task Description

- Designing a requirement catalogue with the different research groups at TranslaTUM
- Build a Continuous Integration and Development Pipeline in our Gitlab System (CI/CD) to ship released versions to the individual measurement PCs
- Perform unit and integration testing as well as finalizing user experience tests
- (Optional) implement a supervised data upload to our data center (up to 1TB per day)

Requirements

- **Very good knowledge of Python and PyQt or PySide**
- Experience with version management (Git)
- (Optional) Experience with SQL databases
- Work amount ~ 10h per Week

Our offerings

- Integration in an aspiring team of interdisciplinary researchers, engineers, and entrepreneurs.
- A unique environment for developing new IVD products with access to all benefits from the clinical, biomedical, and engineering domains at TranslaTUM.
- Unlimited access to newest information in the biotechnology industry as you will be working with multiple stakeholders that all are experts in their fields.
- Payment is within the usual range for student assistants.

Further Information

- CellFace
- Go-Bio initial
- Software Campus

Contact CellFace
cellface@ei.tum.de
wiki.tum.de/display/cellface/