

## Internship for Master student, Geneva, Switzerland

### Development of a Neuroimaging Containerized Pipeline Engine with Python & Docker

The Campus Biotech in Geneva is a Swiss center of excellence in biotechnology and life sciences research focusing on three domains: Neuroscience & Neurotechnology, Digital Health and Global Health.

The Campus houses neuroscience laboratories from the Lausanne institute of technology (EPFL), the University of Geneva and from the Geneva University Hospitals (HUG). Within this framework, the Methods & Data facility (<https://hnp.fcbg.ch/home/methods-data>) as part of the Human Neuroscience Platform, provides state-of-the-art neuroimaging data science and expertise to the housed labs.

In the line of the continuous development and improvement of our services, the Methods & Data facility wants to develop and deploy processing pipelines to facilitate neuroimaging research automation and reproducibility with Python & Docker.

Consequently, the Methods & Data facility offers a 6-month Master internship. The candidate should be engaged in a **computer science university curriculum at Master level, or equivalent**.

**Goal:** Develop neuroimaging data science modules to integrate within pipelines, using existing tools and technologies based on Python and Docker

#### Tasks:

- Help implement Python interfaces to commonly used neuroimaging software (no pre-existing neuroimaging experience required)
- Test pipeline prototypes locally or/and in the cloud
- Be open to both learn basic neuroimaging / dev ops within a team of neuroimaging experts and developers
- Document the resulting code and implementation process

#### Skills

- [Required] Experience with Python
- [Required] Experience with Git
- [Optional] Experience with Docker
- [Optional] Experience with commonly used neuroimaging software
- [Optional] Experience with cloud technologies
- [Optional] Experience with Flask / Javascript
- [Required] Proficiency in English

**Application:** send a resume and a cover letter to [methods\(at\)fcbg.ch](mailto:methods(at)fcbg.ch)

**Starting date:** February 2021 at the earliest, exact starting date flexible

