

The EEG-BCI facility of the *Fondation Campus Biotech Geneva* is offering a:

**Full-time software engineer/scientist position in brain computer interface for electroencephalography**

**Start date: As soon as possible**

The Campus Biotech houses numerous human neuroscience research groups of the Ecole Polytechnique Fédérale de Lausanne (EPFL) and of the University of Geneva. The EEG-BCI facility of the *Fondation Campus Biotech Geneva* (FCBG) offers state-of-the-art equipment and high-level expertise in EEG and BCI to these labs to give them the best possible environment to conduct their experiments.

The EEG-BCI facility is looking for an engineer/neuroscientist with strong experience in human electroencephalography (EEG), brain computer interface (BCI), software development and neuroscience in general. The main duty of the incumbent will be to implement and design EEG experimental protocols, EEG BCI/neurofeedback protocols and EEG data (off- and on-line) analysis pipeline for the users of the EEG-BCI facility. They incumbent will also advise researchers with little experience in EEG and conduct EEG research with them. The incumbent might also do MEG research and engineering in the near future as the Campus Biotech will acquire an MEG device in fall 2022. Work will be done in close collaboration with researchers of the Campus Biotech. The incumbent will report to the manager of the EEG-BCI facility.

**Duties**

- Development and maintenance of real-time EEG software based on Lab Streaming Layer
  - o implementation of real-time acquisition, processing and feedback
  - o provide a user interface
  - o provide up-to-date documentation
  - o provide compatibility with all EEG systems of the facility
  - o multi-stream/device acquisition
  - o publication of the source code in open format (Git)
  - o publication of the software in a peer review scientific journal
- Support to researchers
  - o support and consulting in EEG research
  - o support and consulting in BCI
  - o project-specific development
  - o implementation and design of EEG experimental protocols
  - o EEG data acquisition and analysis
  - o training and support to the developed software

**Qualifications**

- PhD in computer science, neuroscience or related field
- Strong experience in EEG BCI and/or neurofeedback
- Experience in human EEG research
- High skills with software development, including graphical interface and multi-OS porting
- High programming skills in Python. Matlab and C++ appreciated.
- Proficiency in English. French appreciated.

**Application:** Applications should include a CV, a cover letter and reference letters. The application should be sent by email to: [administration@fcbg.ch](mailto:administration@fcbg.ch)