**POSITION – Software developer in C & Python – Research in Neuroscience**

**CONTEXT and OBJECTIVES**
The « Brain Dynamics and Cognition » Team of the Lyon Neuroscience Research Center (INSERM/CNRS/Université Lyon 1) investigates the neuronal mechanisms supporting perceptual and cognitive functions in humans, in the healthy and pathological brain. In particular, we use non-invasive recordings of brain activity: electroencephalography (EEG) and magnetoencephalography (MEG).

We are looking for a **software developer** to integrate a human-size team of researchers and engineers involved in the analysis and visualization of EEG and MEG signals. You will participate **to the development of tools for signal processing and, more particularly, for visualization of these data** (brain activity dynamics, topographies, time-frequency plots). This project is in continuity with the ELAN software that has been developed and updated in our laboratory for more than 20 years (https://www.ncbi.nlm.nih.gov/pubmed/21687568). This project will benefit from a close collaboration with the MNE-Python development team (https://martinos.org/mne/stable/index.html). You will participate to a state of the art of the already available visualization tools, in order to propose and develop a new graphic interface to visualize brain data, in line with the recent changes in human electrophysiology (EEG/MEG). To better sense the future users' needs, regular interactions with researchers and students of the team will be organized. Moreover, different data sets (EEG, MEG) corresponding to various experimental conditions will be available to test the developed tools.

You will be involved in all the software development steps: conception, specification, development, validation.

**PROFIL DU CANDIDAT**
**Education:**
* Education level: Master 1 or 2 in computer science (engineer school / master)
**Required skills:**
* Strong experience in C/C++, Python programing
* Knowledge or experience in Qt
* Knowledge in signal processing (Fourier, wavelets …)
* Reading English level: European level B2 or more
**Personal skills:**
* Integration, organisation and communication
* Autonomy, motivation and rigor
* Team work
**Plus:**
* Knowledge in human electrophysiology (EEG/MEG) would be a plus.

**DURATION**
12 months starting from January 1st 2019 (could be extended depending on funding).

**LOCATION**
Lyon Neuroscience Research Centre, Hôpital du Vinatier, 95 Bd Pinel, 69500 Bron

**SALARY**
According to education level and work experience, and following the University de Lyon (employer) rules: between 1800 and 2500 euros net/month.

**CONTACT**
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