



Research position in neural engineering

Dynamic brain networks in brain-computer interface learning

A research position in the area of neural engineering is available at the ARAMIS Lab (www.aramislab.fr) at the Brain and Spine Institute (icm-institute.org/en) in Paris.

The successful candidate will work with Dr. Fabrizio De Vico Fallani (Inria, France) and Prof. Danielle Bassett (Penn University, US) in the collaborative project “Modeling and Predicting Brain-computer Interface Learning from Dynamic Networks” (NETBCI), funded by the ANR and NIH.

The project aims to develop innovative methods to model and analyze **temporally dynamic brain connectivity networks**, and to apply these tools to establish **predictive models of brain-computer interface (BCI) skill acquisition** that can be used to improve performance by taking into account subjects’ neural plasticity.

The successful candidate will have strong quantitative skills about **EEG/MEG source imaging**, **functional brain connectivity**, and **BCI classification**. The main responsibilities consist in coordinating longitudinal BCI experiments, performing data analysis, and writing scientific/technical reports. Additionally, supervision of graduate students and international activity coordination will be required.

The position will be integrated closely with the existing collaborative environment. The successful candidate must be capable of **working independently and taking initiatives**. The candidate is expected to be a team-player with excellent communication and writing skills.

Applicants should have strong analytical skills and experience with tools for EEG/MEG analysis (eg Brainstorm, Eeglab, Fieldtrip). Proficiency in relevant programming languages (eg MATLAB, R, Python) is required. Working experience with BCI-related software (eg BCI2000) is desirable.

Specific requirements:

- PhD/doctorate in eg Electrical/Biomedical Engineering, Statistics, Computer Science, Applied Physics, Neuroscience, Psychology (or any other relevant field)
- Evidence of published peer-reviewed research / data analysis software development
- Very good skills in written and spoken English
- Strong motivation

Terms and conditions:

- Position is to start 1 April 2016
- Position is available for 2 years, with possible 1-year extension
- Gross salary 2500-2600 euros/month depending on experience
- Financial support from INRIA to catering and transportation expenses

Application:

To apply, please e-mail (fabrizio.devicofallani@gmail.com) your cover letter and CV (in one pdf file) including names of 2-3 referees and up to 3 reprints (also in pdf format).

ARAMIS Team

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