

Job Title: Research Intern - EEG Experimenter 4-6 months

Educational Background: Master's in Neuroscience, Cognitive Sciences, Master in Biomedical Engineering

Mission: The research intern will be responsible for conducting EEG experiments for the control of a robotic arm. The selected individual will be trained in experimental protocols and preliminary analysis of EEG data. They must demonstrate expertise in handling EEG equipment and actively contribute to research on brain-machine interfaces.

Context: In the context of brain-machine interfaces, the use of new, more discriminative metrics for classification algorithms is essential to improve system performance. The NERV team approaches metrics from the field of complex systems studies. These metrics need to be validated through experimentation. The team has an experimental platform using a robotic arm, and the new metrics must be tested using this platform.

Responsibilities:

1. Plan and conduct EEG experiments for the control of a robotic arm.
2. Acquire and preprocess EEG data efficiently and accurately.
3. Preliminary analysis of data to identify trends and preliminary results.
4. Collaborate closely with the research team to optimize experimental protocols.
5. Ensure the maintenance and proper functioning of EEG equipment.
6. Actively participate in team meetings and scientific discussions.

Desired Skills:

1. Master's in Neuroscience, Cognitive Sciences, Biomedical Engineering.
2. Practical experience with EEG recording and analysis.
3. Skills in preprocessing and preliminary analysis of EEG data.
4. Ability to solve technical problems related to EEG equipment.
5. Basic skills in computer science and programming (e.g., Python, MATLAB).
6. Excellent verbal communication skills.
7. Ability to work independently and in a team.
8. Adaptability to varied and evolving situations.

Working Conditions:

- Location: Institute of the Brain and Spinal Cord (ICM)
- Type of Contract: Internship
- Benefits: Canteen, partial reimbursement of transportation

How to Apply: Interested candidates are invited to send their CV and cover letter to fabrizio.devicofallani@icm-institute.org or tristan.venot@icm-institute.org before 5/01/2024.