

Student Assistant –Mapping of Brain Connectivity using functional MRI

SUMMARY:

This is an exciting opportunity for a student assistant with an engineering, computer science or physics background to participate in an NIH funded research project to develop novel functional Magnetic Resonance Imaging (fMRI) methods for presurgical mapping in patients with brain tumors. Responsibilities include the development of signal and image processing tools for mapping resting state connectivity in human brain, the analysis of high-speed fMRI data in healthy controls and patients with brain tumors using ICA and seed-based correlation methods, and the preparation of results for international conferences and manuscripts. The candidate is also expected to assist with Linux workstation maintenance and data backup. The laboratory offers a stimulating and challenging research environment, and training in advanced biomedical imaging. This is a part-time position. The salary will be commensurate with experience.

MINIMUM JOB REQUIREMENTS:

- Majoring in engineering, computer science or physics
- Must have 2+ years of experience in MATLAB software development
- Must have more than 6 months of experience with signal and image processing
- Experience with Unix/Linux script programming

PREFERRED QUALIFICATIONS:

- Experience with C++ software development.
- Excellent debugging skills
- Ability to work independently in a team oriented environment
- Excellent communication skills

DISTINGUISHING CHARACTERISTICS:

CONDITIONS OF EMPLOYMENT:

- None.

WORKING CONDITIONS AND PHYSICAL EFFORT:

- Work is normally performed in a typical interior/office work environment.
- No or very limited physical effort required.
- No or very limited exposure to physical risk.

The University of New Mexico provides all training required by OSHA to ensure employee safety.

Inquiries may be made to Stefan Posse at: SPosse@salud.unm.edu