A Research Lab Specialist position is open in the Functional MRI Laboratory in the Department of Radiology at the University of Michigan in Ann Arbor, Michigan. The University of Michigan Department of Radiology is a top-rated Department in an outstanding University with demonstrated excellence in medicine, engineering, arts and sciences, and business.

The Functional MRI Laboratory is dedicated to supporting research on the structures and functions of the brain that underlie cognitive and affective processes, and research on functional MRI and associated research tools. The Laboratory’s mission is to maintain an environment that will enhance the excellence of research using fMRI and associated technologies by providing a well-equipped physical facility and appropriate intellectual support services for investigators.

The Functional MRI Laboratory provides scanning services to University faculty and students performing research. The unit is seeking a motivated and independent individual to perform research and analysis on neuroimaging data for multiple projects in collaboration with multiple principal investigators, and will also help guide grad students and staff analysts with the processing they will be responsible for.

Responsibilities

Analyze collected MRI data using a variety of pipelines and packages for multiple researchers at the University of Michigan:
- Statistical analysis of fMRI data using mixed-effects and other statistical models, along with careful details of steps used, this includes creating illustrations, screenshots, and/or code.
- Editing papers and grant proposals.
- Attending relevant lab meetings with the fMRI lab, Anesthesiology department, Psychiatry department, and others, to stay abreast with current techniques.

Help to create, test, and maintain fMRI data processing pipelines. This includes:
- Maintain and organize a version-controlled software repository of processing pipelines for multiple MRI applications (fMRI, anatomical, DTI).
- Apply publicly available pipelines and packages (fMRIPrep, SPM, FSL, etc) for data processing and analysis
- Continuously expand processing software’s capabilities to fit the needs of researchers.
- Provide updates to code when other events occur (e.g. MRI software upgrades, server replacement, package updates, etc.).

Analyze and process quality control and reproducibility data. This includes:
- Analysis of reproducibility of fMRI metrics across repeat visits, scanners and sites.
- Implement pipelines for quality control (MRIQC, etc)

Other miscellaneous duties. This includes:
- Develop and implement scripts for applications within the lab as needed.
- Help maintain scripts and routines to automatically and dependably backup MRI data
• Assist with neuroimaging data collection, including troubleshooting equipment and helping research groups with running the scans.

Additional duties include:
• Functional supervision of GSRA’s and Staff Analysts to help guide grad students and staff analysts in both the fMRI Lab and in the shared lab (Pain group) regarding the processing they will be responsible for.

Required Qualifications
• Bachelor’s degree in a field of science or learning which is directly related to the duties of the position.
• Four to five years of experience in research and analysis on neuroimaging data, specifically MRI and/or Functional MRI.
• An equivalent combination of education and experience may be accepted, including relevant undergraduate and graduate student work experience.
• The ability to prioritize needs from and work collaboratively with multiple investigators is essential.
• Experience with statistical analysis of MRI data using univariate, mixed-effects and other statistical models.
• Good computing and programming skills are required, including shell scripts, Matlab and Python.
• Able to work independently with minimal direction or supervision and is self-motivated.
• Excellent verbal and written communication skills.
• Flexible and adapts to change.

Desired Qualifications
• Master’s degree in a field of science or learning which is directly related to the duties of the position.
• Experience in implementation of fMRI pipelines using packages such as fMRIPrep.
• Experience with analysis of reproducibility of fMRI metrics across repeat visits, scanner and sites.
• Experience with analysis of diffusion tensor data and analysis of quality control (QC) data.
• Experience with neuroimaging packages such as SPM, AFNI, FSL, fMRIPrep, BIDS, CONN and/or Free Surfer.

Work Schedule
Monday through Friday, 8:00 am - 5:00 pm.

What Benefits can you Look Forward to?
• Excellent medical, dental and vision coverage effective on your very first day.
• 2:1 Match on retirement savings.

TO APPLY: Please apply directly at https://careers.umich.edu/, enter 232343 in the Keywords box, click on Research Lab Specialist Intermediate and then Apply Now. A cover letter is required and should be attached as the first page of your resume.