

Research Assistant (RA) position

Job Summary

The Department of Radiology at Michigan Medicine of the University of Michigan has an immediate opening at the assistant level for individuals interested in the development and application of advanced image-based analytical techniques in the field of thoracic radiology. Our group has a long history of algorithmic development of translatable MRI and CT-based biomarkers for disease phenotyping and prediction of therapeutic response and survival. The mission of our group is to fully exploit the spatial and functional information within clinical imaging data with the goal of advancing personalized medicine, both in terms of optimizing disease management, and tailoring treatment to the individual patient. On-going projects include topological feature extraction for improved COPD subtyping, optimized radiation planning to minimize lung injury in lung cancer patients, and improve detection of deployment related small airways disease in post-combat military personnel. These studies are performed in a multi-disciplinary environment which include scientists, physicians, statisticians and engineers, as well as large clinical trials and industrial partners. We seek individuals with the motivation and initiative to expand the successes of the group. A commitment of 2 years or more to the lab is recommended.

Responsibilities

The individual will assist in image processing tools in order to perform three-dimensional reconstructions, image segmentation, image registration, and pattern recognition and image classification tasks on quantitative imaging (i.e. CT and MRI).

Required Qualifications

Excellent written and oral communication skills are required for success in our collaborative research environment. The applicant must be ambitious, talented, and self-motivated with an interest in leveraging our research interests, as this position emphasizes the ability to learn new concepts and skills quickly.

Desired Qualifications

Applicants with a proficiency in programming languages like Matlab, Python, C++, or R are highly desired. Students currently studying Computational Biology, Bioinformatics, Machine Learning, Computer Vision, Computer Science, Statistics, or Electrical, Biomedical or Computer Engineering are preferred.

To apply to this position please supply the following material to Aleksa Fortuna (abfortun@med.umich.edu) with "Research Assistant Position" in the subject line. Material should include: 1) cover letter and 2) CV. Review of applications will begin immediately and will continue until the position is filled.