

Postdoc Research position

Job Summary

The Department of Radiology at Michigan Medicine of the University of Michigan has an immediate opening at the postdoctoral 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 function 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. The position is fully funded for 2 years with visa assistance available for international applicants.

Required Qualifications

- Ideal candidate will have a Ph.D. in Electrical Engineering, Biomedical Engineering, Applied Mathematics, Computer Science, Bioengineering, Biomedical Informatics or a related discipline.
- Strong communication skills in written and verbal english are required.
- Experience in research topics including signal / image processing & analysis, computer vision, pattern recognition & machine learning, and algorithm design & software development is required.
- Experience with Deep Learning for medical imaging applications is required.
- Proficiency in one or more programming languages, especially C++, Python, MATLAB, R.
- Familiarity with Linux and image processing and analysis skills.
- Demonstrated record of high quality publications.
- Qualified candidates should be self-motivated and possess the ability to work independently and collaboratively.

Desired Qualifications

We are seeking a dynamic individual with a demonstrated track record of technical innovation, scientific excellence, and participation in multi-disciplinary team projects. 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. The candidate should have demonstrated expertise with state-of-the-art computational methods and their application to imaging data. The candidate will be involved in contributing towards developing manuscripts for publication and needs to present research results within/outside University of Michigan.

To apply to this position please supply the following material to Prof. Craig J. Galbán (cgalban@med.umich.edu) with "Post-Doctoral Scholar" in the subject line. Material should include: 1) cover letter 2) CV, 3) a two-page statement of previous research experience and of future research interest in the Galbán lab, 4) a reprint of two representative publications and 5) at least three references including contact information. Reference letters will be requested only for highly qualified candidates. Review of applications will begin immediately and will continue until the position is filled.