Occupational Summary

Postdoctoral associate position in the laboratory of Dr. Mustafa Bashir in the Department of Radiology at Duke University Medical Center. The Bashir Lab for Liver Imaging Research focuses on advanced methodologies in abdominal imaging, particularly applications of machine learning and deep learning to medical image analysis. The lab aims to advance existing imaging techniques and develop novel imaging methods, in part through a rich group of collaborations across the Medical Center and University. The associate will conduct independent research activities under the guidance of Dr. Bashir in preparation for a full time academic or research career. Associates will be co-mentored by PhD faculty with extensive technical experience with machine learning and deep learning.

Lab website: https://radiology.duke.edu/research/lab/bashir-lab-liver-imaging-research-2/

Work Performed

The initial appointment will be for one (1) year, with opportunities for extension based upon funding.

The associate’s responsibilities include the following primary duties:

- Research data collection and management
- Image processing and algorithm development
- Data analysis
- Developing workflows and user interfaces to optimize the research practice in our lab

*This appointment is not part of a clinical training program, unless research training under the supervision of a senior mentor is the primary purpose of the appointment.

*Note for international candidates: Generally, immigration classifications (e.g., H-1B, J-1, etc.) require that the requisite degree be conferred before a petition can be filed or a visa document issued to sponsor the individual.

Required Qualifications

Education/Training: Minimum Requirement: PhD in biomedical engineering, physics or a related field or equivalent doctorate (e.g. Sc.D., M.D., D.V.M.)

*PhD in imaging science, computer science, biology/physiology, or a related field preferred.
English proficiency is required. PhDs graduated within the last 1-2 years are encouraged to apply.

*Candidates with non-US degrees may be required to provide proof of degree equivalency.

*If a postdoctoral fellow has completed all of the requirements for a degree, but the degree has not been formally conferred; the candidate may present evidence of completion of the degree requirements, together with a statement documenting the date on which the degree is to be conferred.

Experience: We are looking for a highly motivated individual who has practical experience with machine learning as applied to image processing (CT/MRI preferred, but not required). Applicants should have experience developing data processing algorithms, using conventional and machine learning techniques, implementing multiple algorithms in parallel and in series, and developing workflows and user interfaces. The candidate should also have experience/expertise in human biology and physiology.

Other Credential/Experiential Requirements

The incumbent must be a true post-doctoral fellow registered with the Post Doc Office and per the following requirements:

• The term of this appointment is limited (up to 5 years with a possible extension for an additional year)
• The appointment involves substantially full-time research or scholarship, which may include teaching responsibilities.
• The appointment is viewed as preparatory for a full time academic or research career.
• The appointment is not part of a clinical research training program, unless research training under the supervision of a senior mentor is a primary purpose of the appointment.
• The appointee works under the supervision of a scholar or a department at Duke University.
• The appointee has the freedom, and is expected to publish the results of his or her research or scholarship during the period of the appointment.

Application Process

Directly apply to one of the following links:

• For Internal applicants ONLY:  
  https://performancemanager4.successfactors.com/sf/jobreq?jobId=26761&company=dukeuniverP1&username=

• For External applicants ONLY:  
  https://career4.successfactors.com/sfcareer/jobreqcareer?jobId=26761&company=dukeuniverP1&username=
Duke University is an Affirmative Action/Equal Opportunity Employer committed to providing employment opportunity without regard to an individual's age, color, disability, gender, gender expression, gender identity, genetic information, national origin, race, religion, sex, sexual orientation, or veteran status.

Duke aspires to create a community built on collaboration, innovation, creativity, and belonging. Our collective success depends on the robust exchange of ideas—an exchange that is best when the rich diversity of our perspectives, backgrounds, and experiences flourishes. To achieve this exchange, it is essential that all members of the community feel secure and welcome, that the contributions of all individuals are respected, and that all voices are heard. All members of our community have a responsibility to uphold these values.

**Essential Physical Job Functions:** Certain jobs at Duke University and Duke University Health System may include essential job functions that require specific physical and/or mental abilities. Additional information and provision for requests for reasonable accommodation will be provided by each hiring department.