Faculty Position in Image Based Artificial Intelligence Research  
Dept. of Radiology, Northwestern University, Chicago, IL, USA

Faculty Position: The Department of Radiology at Northwestern University Feinberg School of Medicine in Chicago is seeking a full-time faculty member at the rank of Assistant or Associate Professor. The position can be offered as tenure-track contingent on candidate qualifications. The position will be in an active translational research environment blending clinical studies with developments of advanced radiologic imaging-based AI and Deep Learning research. Research activities based on computational modeling and application of innovative data analysis concepts such as AI and Deep Learning should broadly integrate with clinical research and imaging applications in neuroradiology, oncology, body imaging, MSK, thoracic and cardiovascular imaging, breast imaging, etc. Specific research areas include (1) advancing state-of-the-art computational methods to develop novel tools for automated image analysis, image interpretation, outcome prediction, and integration of multi-dimensional imaging; (2) application of AI and deep learning concepts to large and multi-modal (e.g., PET-MRI, PET-CT) in-vivo patient data sets, (3) developing new convolutional neural networks (CNNs) for the image based analysis of tissue structure and function.

Qualifications: Candidates should hold a PhD in physics, engineering, computer science, medical imaging, or a related field. Experience in AI and Deep Learning and concepts, imaging with MRI, PET, and CT, advanced mathematics, bio-imaging post-processing, and successful demonstration of extramural funding are essential. Also required is an exemplary record of peer-reviewed publications.

Facilities: The MR research group at Northwestern University is multidisciplinary, including MR physicists, engineers, computer scientists and diagnostic and interventional radiologists. Northwestern offers access to advanced imaging techniques including PET-MR and PET-CT, and a wide range of advanced imaging techniques in neuroimaging, body imaging, cardiovascular imaging, breast imaging, and other areas of research. Additional expertise spans the fields of computer science, biostatistics, imaging physics, nanoparticle research, oncology, neurodegenerative diseases, among others. The Center for Translational Imaging, an imaging core facility at Northwestern University's Chicago campus, houses five MR systems (full body 1.5T and 3T; pre-clinical 7T) fully dedicated to imaging research. Further, >15 clinical MR scanners located within Northwestern Memorial Hospital and a close research collaboration with Siemens MR R&D provide the unique opportunity to translate novel imaging and analysis techniques into clinical studies and applications.

This position is a continuing appointment, academic rank determined on qualifications, at the Northwestern University Feinberg School of Medicine. Depending on the candidate's qualification, the position can be offered as tenure-track. Salary and benefits are highly competitive.

To apply, please follow this link: [https://facultyrecruiting.northwestern.edu/apply/NTAz](https://facultyrecruiting.northwestern.edu/apply/NTAz). Only those applications submitted via this link will be considered.

Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women, racial and ethnic minorities, individuals with disabilities, and veterans are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.

Please direct question to: Michael Markl, Ph.D.  
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