



Radiology and Imaging Sciences
National Institutes of Health Clinical Center
U.S. Department of Health and Human Services



Post-doctoral Fellowship

Medical Image Processing – Machine Learning & Computer-Aided Diagnosis

A post-doctoral fellowship is available for 2D/2.5D/3D/4D radiology image processing in Bethesda, Maryland, USA. Specific interest areas are [deep learning](#), image segmentation, modeling, visualization, pattern recognition, computer-aided diagnosis, multi-organ models, atlases and registration. In particular, advanced skills in image processing (computer vision, mathematical modeling, optimization, machine learning) are sought. The researcher will work closely with staff scientists, imaging specialists and clinicians and have access to state-of-the-art whole body MRI, MRI-PET, low-dose CT scanners, advanced graphics workstations and parallel processing/GPU clusters.

Basic Qualifications: Ph.D. in Computer Science, Electrical Engineering, or related discipline with experience in Computer Vision, Machine Learning, or Image Understanding domain, along with successful demonstration of key responsibilities.

Desirable Qualifications: Strong theoretical and practical background in computer vision, image and video analysis, such as object detection and recognition, statistical pattern recognition, machine learning, sparse methods and applied optimization. Prior knowledge about medical imaging is a plus but not a must. Enthusiasm in solving real world clinical imaging problems using large datasets, and hands-on coding skills and ability in Python, C++ and Matlab and one or more deep learning frameworks (ie. PyTorch, TensorFlow, Keras).

This appointment is for one year and is renewable thereafter on a periodic basis (up to five years). Applications should include a CV, brief statement of research interests and three letters of reference. DHHS and NIH are Equal Opportunity Employers.

Application Instructions:

Email application materials to Dr. Ronald Summers at rms@nih.gov.

Ronald Summers, M.D., Ph.D.

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<https://www.cc.nih.gov/meet-our-doctors/rsummers.html>