

We have open postdoctoral scholar positions in the Biomedical Imaging Lab within the Signal and Image Processing Institute in the Ming Hsieh Department of Electrical and Computer Engineering at the University of Southern California. We are looking for postdocs in the area of neuroimaging with an emphasis on machine learning, time-series modeling and connectivity analysis applied to electrophysiology (EEG, MEG, SEEG) and MRI data. We are particularly interested in applications of these techniques to the following problems: (i) the treatment and understanding of epilepsy; (ii) studies of depression and suicidal ideation, (iii) simultaneous fMRI/EEG at low (0.55T) fields.

Candidates should have a PhD degree in Engineering, Neuroscience, Computer Science, Math or Physics and a good publication record. If you are interested, please contact Richard M. Leahy, (leahy@sipi.usc.edu) to discuss potential research projects.

We have a substantial and growing program in biomedical applications of sensing, imaging, analysis and control in USC, with multiple faculty in Electrical and Computer Engineering (Richard Leahy, Krishna Nayak, Anand Joshi, Shri Narayanan, Maryam Shanechi, Yasser Kahn and Justin Haldar) with research interests that include medical imaging, signal processing and machine learning applied to the brain. We have access to 3T and 0.55T MRI with simultaneous EEG on the main university park campus where the ECE dept is housed as well as 7T and 3T research and clinical scanners at USC's Health Science Campus and Childrens' Hospital LA. There is excellent potential to collaborate with neuroimaging faculty in USC's Brain Creativity Institute as well as the gerontology, psychology and neuroscience programs and the medical school. We also have active collaborations with the Neurological Institute at McGill University and the epilepsy programs at the Cleveland Clinic and the University of Texas, Houston. We are particularly interested in candidates with interests in statistics, computer vision, machine learning and graph-based analysis and their application to medical image analysis.

USC is an equal opportunity, affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, disability, or any other characteristic protected by law or USC policy. USC will consider for employment all qualified applicants with criminal histories in a manner consistent with the requirements of the Los Angeles Fair Chance Initiative for Hiring ordinance. Please refer to <u>https://postdocs.usc.edu/</u> for information about USC's Office of Postdoctoral Affairs.

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