

Postdoctoral Position in Computational Neuroimaging at Stanford University

A full-time postdoctoral position is available in computational neuroimaging, connectomics and cognitive intervention in Dr. Hosseini's group within the Center for Interdisciplinary Brain Sciences Research (CIBSR) at Stanford University.

The postdoctoral fellow will lead neuroimaging projects involving multimodal MRI (functional, diffusion) and NIRS imaging to understand the effect of cognitive and neurofeedback training on brain networks in children and older adults. The postdoctoral fellow will participate in collecting and analyzing multimodal neuroimaging data, training and supervising students and research assistants, preparing manuscripts for publication, as well as assisting with grant applications. The position provides a unique training opportunity in advanced neuroimaging, graph theoretical and connectomics methods, and neurocognitive intervention.

Requirements:

- PhD (or MD) or equivalent in neuroscience, computer science, psychology, statistics, engineering or a related field.
- Familiarity with neuroimaging data collection and related analysis packages
- Experience with programming languages such as Matlab, python, R, etc.
- Strong writing skills demonstrated by peer reviewed publications
- Strong interpersonal, organizational and mentoring skills
- Familiarity with advanced data analysis methods, multivariate statistics, machine learning, data mining and visualization, and cloud computing is a **plus**.

The research in Dr. Hosseini' group crosses multiple disciplines including computational neuropsychiatry, cognitive neuroscience, multimodal neuroimaging and neurocognitive rehabilitation. The computational neuropsychiatry research mainly involves investigating alterations in the organization of connectome in health and disease (ADHD, Alzheimer's, Stroke, etc.) using state of the art neuroimaging techniques (fMRI, sMRI, DWI, functional NIRS) combined with novel computational methods (graph theoretical and multivariate pattern analyses). The ultimate goal is to translate the findings from computational neuropsychiatry research toward developing personalized interventions. Dr. Hosseini's group have been developing personalized interventions that integrate computerized cognitive rehabilitation, real-time functional brain imaging and neurofeedback, as well as virtual reality (VR) tailored toward targeted rehabilitation of the affected brain networks in patients with neurocognitive disorders.

To apply: Applicants are invited to send a CV, names of three references with contact information, representative publications (up to 3), and a cover letter (optional) to study_brain@stanford.edu.