The Neuroimage Analytics Laboratory (NAL) and the Biggs Institute Neuroimaging Core (BINC) are recruiting a postdoctoral fellow in neuroimaging

-University of Texas Health San Antonio-

We are looking for a postdoctoral fellow who is willing to research more advanced neuroimaging and machine learning methods in large-scale cohort-based studies. Alzheimer’s disease and other dementias are heterogeneous conditions, which makes differentiating between them and their subtypes very challenging. Our goal is to use multimodal neuroimaging data together with state-of-the art techniques to help uncover and detect specific pathologies and patterns emerging in early Alzheimer’s disease. In this position, your challenge will be to build early markers of the disease that allow current pathology detection and prediction of possible future disease trajectories. Your work environment will be the Neuroimage Analytics Laboratory (NAL) and the Biggs Institute Neuroimaging Core (BINC). We build advanced neuroimage analytical techniques to derive discovery. Data-driven approaches are of special interest in our lab, as machine learning and machine intelligence will guide the scientist towards the finding. On a broader goal, our tools help deliver precise diagnostics on an individual’s level and ultimately could guide treatment progress.

We are part of the Biggs Institute (https://biggsinstitute.org), which is being established as a flagship, free-standing institute within the University of Texas Health San Antonio (UTHSA), with the mission of establishing an interdisciplinary, integrated program to provide comprehensive clinical care and undertake innovative and important research into the prevention and treatment of Alzheimer’s Disease and other neurodegenerative conditions, including vascular contributions to dementia, Parkinson’s disease, and frontotemporal dementia. It has strong institutional and community support and will benefit from existing resources within UTHSA such as the Barshop Institute for Longevity and Aging Studies, the Center for Biomedical Neuroscience, the School of Nursing, the Cancer Center, and the Research Imaging Institute, along with the San Antonio campus of the UT Health Houston School of Public Health.

Responsibilities

- Develop, test, and validate novel methods with multimodal neuroimaging data
- Apply your validated methods to large scale research and real-life everyday clinical routine neuroimaging data
- Willingness to work in teams, within NAL, BINC, and Biggs and with national and international collaborators
• Communicate your research results to the larger communities through publications in international conferences and journals
• Work with a great deal of independence in achieving research goals

Requirements

• A Ph.D. degree in Neuroscience, Artificial Intelligence, Machine Learning, Computer Vision, or Medical Image Analytics with solid experience in deep learning; Experience in Neuroimaging and Dementia Research is a plus.
• Experience with neuroimage analytics packages like spm, fsl, itksnap etc.
• Great eagerness to solve scientific problems
• Strong programming skills, e.g., in Python, R, C++, and Java. Experience with Python deep learning toolboxes and high-performance computational facilities could be a plus;
• Excellent record of publishing in relevant, high-quality journals in the above fields
• Excellent communication abilities in English; spoken and written.

If interested, please send a copy of your CV to Dr. Habes (habes@uthscsa.edu)