Two positions open in UMSOM for image reconstruction and fMRI processing

A brief introduction to University of Maryland School of Medicine (UMSOM): UMSOM locates in the Inner Harbor Area, which is the most beautiful and the safest part of Baltimore. UMSOM is consistently growing in US News ranking (nearly one step up per year from #42 in 2006 to #27 in 2020). The total funding increased by 74%. Our center: Center for Advanced Imaging Research (CAIR) was newly launched in 2018. The number of faculty and the total amount of fundings both nearly doubled in the past two years. In synchrony with the success of both SOM and CAIR, my laboratory is also rapidly expanding with a more than 2x increase of total funding since I started here 2.5 years ago.

Positions open in Wang lab (PI: Ze Wang). We have two positions to be supported by two new NIH R01s in two different but related categories. We will start to review CVs in Jan 2022 but the positions will be open until filled by strong candidates. The positions can start in Feb 2022 but can be slightly delayed to June 2022. Meanwhile, we expect to have another position open in related fields in the fall of 2022. That means we will keep receiving CVs throughout 2022. More information about Dr. Wang’s lab can be found in: https://www.medschool.umaryland.edu/pi/Ze-Wang-PhD/

Position 1: MR image reconstruction. This project will be supported by a multi-site R01 for up to five years. The project is a joint effort between UMSOM, University of Pennsylvania, and Siemens Healthineers for developing advanced Arterial Spin Labeling (ASL) Perfusion MRI sequence and post processing packages. The position in UMSOM will focus on image reconstruction using deep learning and ASL image processing. The ideal candidate should have background in one or more of the following fields: image reconstruction, machine learning, MR physics, electrical engineering, computer science, or mathematics. Research experience of MR image reconstruction is highly preferred. Programming experience in ICE/IDEA is a plus. C++ programming experience will be preferred but not a necessary condition.

Position 2: fMRI processing. This position is supported by a new R01 for up to 4 years or longer. Our overarching goals are to develop and evaluate deep learning-based method and new resting state fMRI processing strategies. We are particularly interested in machine learning (including deep learning), time series analysis, and graph analysis (graph network and graph spectral processing). Related projects ongoing in the lab include deep learning-based ASL perfusion MRI processing, brain entropy and coherence mapping. The ideal candidates should have method development experience in fMRI or neuroimaging signal processing. Background in electrical engineering, computer science, or mathematics is highly preferred. Python or Matlab programming skills are required. Experience on multi-band fMRI data processing is considered a plus.

Candidates for these positions are expected to have good communication skills and have good writing skills. We are willing to provide competitive salary. Interested candidates should send CV, personal statement (including research statement), and future plan to Dr. Ze Wang: ze.wang@som.umaryland.edu.