Associate Specialist Position

An Associate Specialist position is available in the UCSF/SFVAMC Cardiovascular Imaging Research Center to work with Drs. Mitsouras and Hope. The incumbent will be responsible for developing advanced MR image computational post-processing methods for evaluation of abdominal aortic aneurysm disease as part of a recently funded VA Merit Review Award.

This includes development of software and pipelines that utilize MR imaging to extract advanced anatomic, flow, and mechanical information, including dynamic contrast enhanced, displacement encoding, and 4D flow imaging, using highly accelerated compressed sensing and reduced field-of-view acquisitions.

The candidate will be responsible for helping develop optimized MRI protocols and for analyzing imaging studies of human subjects acquired using these protocols. This will include the development of advanced image analysis pipelines using both signal processing and machine learning techniques, and application of postprocessing tools for evaluating hemodynamic and biomechanical data that result from these studies.

The incumbent will have the opportunity to work and interact with renowned clinical and imaging science colleagues and will have the opportunity to work on identifying viable MR imaging and analysis methods for addressing topics of high clinical relevance in vascular diseases.

Required Qualifications:
• Doctoral degree in biomedical imaging, physics, bioengineering, engineering, or related field.
• Ability to write technical documents and research publications.
• >=2 years experience in medical image analysis including at least two of the following: image segmentation, image registration, computational fluid dynamics, mechanical simulations, radiomics, machine learning.
• Programming experience (e.g., Matlab, python)
• Candidate must meet the qualifications by the time of hire.
• Candidate’s CV and/or cover letter must list qualifications (or if pending) upon application submission.

Preferred Qualifications:
• Familiarity with the properties and underlying principles of MRI.
• Demonstrated proficiency in mechanical and fluid dynamic simulation packages (e.g., ANSYS, ABAQUS)
• Proficiency in the principles of hemodynamics, and the associated biomechanical forces including wall shear stress.

UC San Francisco seeks candidates whose experience, teaching, research, or community service that has prepared them to contribute to our commitment to diversity and excellence. The University of California 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, disability, age or protected veteran status.

Please apply online at https://aptrkr.com/1903996, with a CV and cover letter.