Postdoc Positions in Prosthesis Control at the UNC/NC State Joint BME Department

The Neuromuscular Rehabilitation Engineering Laboratory (NREL) within the UNC/NC State Joint Department of Biomedical Engineering invites applications for one or two Postdoctoral Research Associates to advance robotic prosthetics.

Required Qualifications

1. A recent Ph.D. degree in Electrical, Mechanical, Computer, or Biomedical Engineering or related fields.
2. Research experiences in one or more of the following areas: robotic manipulation and haptics, musculoskeletal modeling, lower limb exoskeleton control, EMG control of robotic upper limb/lower limb prostheses, signal processing and machine learning, and skeletal muscle physiology.
3. Excellent oral and written communication skills.

Additional Preferred Qualifications

- Experience in human-related experiments, human motor control and learning, design and control of assistive devices, embedded system design, mobile app development, and musculoskeletal modeling.
- Programming skills (MATLAB, C++, LabVIEW etc.)
- Record of peer-reviewed publications

The NREL directed by Dr. He (Helen) Huang, Professor, Joint Department of Biomedical Engineering. This is a great opportunity to work in a highly multidisciplinary research lab. Here in the NREL at NC State and UNC-Chapel Hill, we investigate the control mechanism of neuromuscular systems in normal and neurologically disabled individuals, develop advanced neural-machine interfacing technologies, and apply these techniques toward neural control of prosthetics, orthotics, computers, and other assistive devices.

The NREL is part of the Joint Department of Biomedical Engineering at UNC-Chapel Hill and NC State University. The nationally ranked UNC Hospitals and School of Medicine at UNC-Chapel Hill provide an excellent clinical environment for trainees to gain experience in medicine, while the College of Engineering at NC State, one of the finest engineering and computer science schools in the world, offers state-of-the-art facilities for students and faculty engaged in vital areas of research and technology transfer. As a researcher in our joint department, you will have excellent opportunities to leverage and expand on our existing collaborations with faculty at both NC State and UNC-Chapel Hill, and with clinicians at the UNC School of Medicine. We are located in the vibrant Research Triangle area of North Carolina, one of the fastest-growing tech regions in the US.

Interested candidates are encouraged to submit curriculum vitae, a 1-page research statement, selected publications, and three references. To learn more about our research or to submit an application, please contact Dr. Helen Huang at nrel.ncsu@gmail.com