Position for a Postdoctoral Fellow in Human Motor Control and Human-Robot Interaction

We are seeking a highly motivated postdoctoral fellow to work in the area of computational neuroscience and physical human-robot interaction. Our lab’s research is on human motor control and learning with extensions to clinical populations and rehabilitation. Our recent extension is to robot control and human-robot interaction with a new line of research on “Robots with human dexterity”. This research is a collaboration with Prof. Neville Hogan at MIT.

Our interdisciplinary research program addresses questions in motor control from the perspective of dynamical system, bridging disciplinary approaches from nonlinear dynamics, biomechanics and engineering, neuroscience and psychology. The overall goal of our research is to understand the generation of perceptually controlled behavior in human systems.

Our lab is equipped with state-of-the-art experimental equipment, ranging from three virtual reality set-ups with a robot manipulandum, 3D motion analysis system, force plates and wireless EMG. We also use brain measurement and stimulation techniques, such as EEG and TMS.

Our laboratory is currently supported by the National Science Foundation and the National Institutes of Health. For more information about ongoing projects please visit our website.

Candidates should have a Ph.D. in one of the following disciplines: Computational Motor Neuroscience, Physics, Mechanical, Electrical or Computer Engineering, the latter with an emphasis on Robotics and interest in human motor control. The applicant should demonstrate an academic record of scientific excellence, independent research, and a strong interest in an interdisciplinary approach to human and robotic motor control. Experience in programming is expected (Matlab, C++, Statistics packages, etc.). He/she is expected to get involved in existing research projects, but is also encouraged to bring to bear his/her expertise into the research project.

The Action Lab is located in the Departments of Biology, Electrical and Computer Engineering, and Physics at Northeastern University as well as the Center for Interdisciplinary Research in Complex Systems. Northeastern University is located in the heart of Boston, which provides a stimulating environment for interdisciplinary research.

Applicants should submit a curriculum vita, including a list of publications, and two letters of recommendation. Hiring will start as soon as possible.

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