

Multiple PhD positions in mechanics and/or materials at Northeastern University (Spring/Fall 2021)

Information: The group of Dr. Ruobing Bai in the Department of Mechanical and Industrial Engineering at Northeastern University has multiple fully funded PhD positions, starting Spring/Fall 2021. Under special circumstances, Fall 2020 can also be considered. Successful candidates will be working in the broad area of mechanics and/or materials, including but not limited to biomimetic and biological materials, soft active materials, soft robotics, multiphysics characterization, design, and functionalization. Research will be focused on the combination of theory and experiment.

Qualification and how to apply: We are looking for highly motivated students with Bachelor's or Master's degree from any relevant science and engineering background, such as mechanics, materials science, mechanical engineering, aerospace engineering, physics, chemistry, etc. Interested candidates can visit the personal website of Dr. Ruobing Bai for more information about his background and research interests (<https://sites.google.com/view/ruobingbai/home>). Candidates are welcome to directly contact Dr. Ruobing Bai via his current email (rbai@caltech.edu) to discuss further details of the position.

About Northeastern University: Northeastern University is a private research university in Boston, Massachusetts, established in 1898. It is ranked by US News in 2020 as #31 in Best Graduate Engineering School, #40 in National Universities, and #1 in Best Co-op/Internships. This ranking is expected to continue growing in the near future. The University currently has an increasing endowment in research and expands rapidly. The famous Co-op program by connecting students with industrial companies also make Northeastern graduates very attractive in the industrial job market. Students at Northeastern also have the great opportunity to build connections with other neighboring universities such as Harvard, MIT, Boston University, Boston College, Tufts University, and so on. The city of Boston is one of the oldest cities in the US, and is currently a major center of education, biomedical, IT, and other high technology industries. Boston is a great place for living and working.

About Dr. Ruobing Bai: Ruobing Bai will join the Department of Mechanical and Industrial Engineering at Northeastern University in January 2021. He is currently a postdoctoral fellow in the Department of Mechanical and Civil Engineering at California Institute of Technology. He received his B.S. in Theoretical and Applied Mechanics at Peking University in 2012, and his Ph.D. in Engineering Sciences under the program of Materials Science & Mechanical Engineering at Harvard University in May 2018. His research interest lies in theory and experiment of soft active materials (hydrogels, liquid crystal elastomers, and biomaterials), large deformation, fracture, adhesion, and complex rheology of materials, as well as multiphysics and functionalities of materials combining mechanics, thermodynamics, chemistry, optics, and electromagnetism. Applications include soft robotics, sensors, biomimetic and biological materials for human health, human-machine interfaces, human augmentation, and biohybrid machines.