Postdoctoral position at the University of California, Los Angeles

We are looking for a postdoctoral fellow to work at the intersection of **robotics and mechanics**. The selected candidate will join the Structures-Computer Interaction Laboratory, a new group in the Department of Mechanical and Aerospace Engineering. Visit our website: https://structures.computer

The research project aims to use collaborative robots to investigate the mechanics of structures (slender/flexible structures in particular). Our lab is equipped with a **Sawyer collaborative robot** from Rethink Robotics. We will explore how continuum mechanics simulations can be used to train robots to perform simple tasks, e.g. tying knots in ropes. Details of the project will be determined after consultation with the candidate.

Qualifications:

- Experience with computer programming (C/C++/Fortran/similar, or at the very least, Python) and Unix-based operating systems
- Experience with or interest in hands-on robotics. Experience with collaborative robots and Robot Operating System (ROS) is a plus
- Experience with or interest in machine learning and artificial intelligence
- Experience with or interest in mechanics of solids and structures. The project is expected to produce publications in high-impact journals in the field of mechanics. We use tools from distinct fields (e.g. robotics, machine learning, and computation) towards the ultimate goal of learning the mechanics of structures or designing smart/programmable structures

The appointment is for two years (initial one year appointment with possible extension for a second year). Start date is flexible (tentatively April 1 - September 1, 2018).

Applications should be emailed to khalidjm@seas.ucla.edu. Please submit the following documents as a single pdf: (i) one page cover letter, (ii) detailed CV, and (iii) two sample publications.

UCLA is located in the Westwood district of Los Angeles, close to the Pacific Ocean, mountains, forests as well as the hubs for aerospace and entertainment industries. The engineering school is in a major expansion phase: http://newsroom.ucla.edu/releases/ucla-engineering-dean-announces-major-expansion-plan. The postdoctoral fellow will work directly with the PI and supervise graduate and undergraduate students.

This announcement is subject to change. Please check https://structures.computer/join-us for the most recent version.