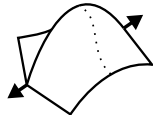


PhD openings in solid/structural mechanics and structural dynamics at Stony Brook University



Two fully funded Ph.D. positions are available in the [Dynamic Structures Laboratory](#) at Stony Brook University. The intended starting semesters for both is either **Spring 2024** or **Fall 2024**.

- One position is on **shape-morphing structures for geotechnical robotics applications**. The student involved in this project will develop models to understand such systems, perform some experiments, and collaborate with [Prof. Ali Khosravi](#) and his team at Auburn University. This research is funded by the NSF ([Link to the award page](#)).
Minimum qualifications: Bachelor's degree in Mechanical, Civil Engineering, Physics or related field; Solid background in nonlinear mechanics; Experience with finite element modeling.
Preferred qualifications: Some familiarity with granular mechanics and discrete element modeling; Research experience in mechanics, soft robotics or soft matter physics.
- One position is related to **fundamental explorations on the mechanics of switching structures** – structures with connections that can be turned on/off dynamically – and on their application to vibration attenuation. The student involved in this project will perform a combination of numerical modeling and experimental work, and collaborate with [Prof. Maurizio Porfiri](#) and his team at New York University. This research is funded by the NSF ([Link to the award page](#)).
Minimum qualifications: Bachelor's degree in Mechanical, Civil Engineering, Applied Mathematics or related field; Some knowledge of structural dynamics and finite element modeling; Excellent at using MATLAB or coding.
Preferred qualifications: Knowledge of nonlinear dynamics and controls; Research experience in experimental structural dynamics; Master's degree.

Working with me, you will be part of multi-disciplinary research projects and will be leading modeling, fabrication and experimental efforts. Moreover, you will have the chance to expand/perfect your mechanics knowledge, to grow as an academic and to improve your communication and problem-solving skills, in an environment where the students' personal and professional growth is the top priority.

Why join us? [Stony Brook University](#) is a flagship school in the State University of New York system. It is located on Long Island, a few miles away from the ocean and 60 miles away from New York City. The University has a strong legacy in Mathematics and Physics, it co-manages the [Brookhaven National Laboratory](#), and is the anchor institution for the [NY Climate Exchange](#). Our [Civil Engineering Department](#), housed in the College of Engineering and Applied Sciences, is relatively new and unbound by tradition, with a strong core of motivated young faculty looking to re-define civil engineering research.

For more information, please contact me (**Paolo Celli**, Assistant Professor) at paolo.celli@stonybrook.edu, specifying why you are interested in the position and attaching your CV, transcripts and the names and contact information of at least three references. Selected candidates will be contacted to schedule a video interview. Generic emails not specifically pertinent to this call will not receive a response.