



UNIVERSITY of HOUSTON

CULLEN COLLEGE of ENGINEERING

Department of Civil & Environmental Engineering



SAIL

Structures and Artificial Intelligence Lab

PhD Student Positions

<https://sail.cive.uh.edu/positions/>

The Structures and Artificial Intelligence Lab (SAIL) at the University of Houston invites applications from highly motivated students for research in the broad area of artificial intelligence applications in structural engineering. Research will be highly interdisciplinary, at the intersection of civil engineering, computer science and robotics.

Research topics of interest include

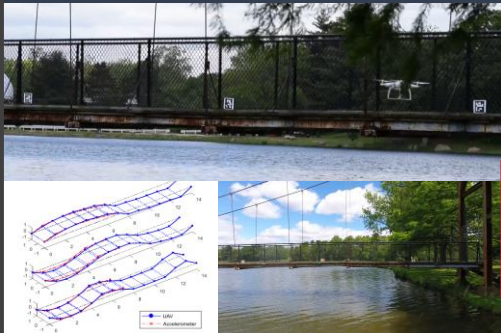
- AI for condition assessment
- Structural health monitoring and system identification
- Cyber-modeling and digital twins
- Path planning and robotic inspections
- Augmented and virtual reality for inspections
- Disaster risk assessment
- Machine learning for structural engineering

Preferred qualifications

- Bachelors in Engineering or CS
- Excellent programming skills (C/C++/Python/Matlab)
- Strong foundation in linear algebra
- Research experience in structural engineering and/or machine learning
- Strong writing and communication skills

Application statements should directly address the applicant's (i) research and, (ii) programming experience. Admission is highly competitive, successful PhD applicants will receive full tuition support. We have one opening starting Fall 2021. Applications may be submitted at <http://www.cive.uh.edu/admissions/civil-engineering/application-forms>. To express your interest in the open positions before submitting a full application, students are encouraged to fill out this optional pre-application interest form. <https://forms.gle/nZsGJX4sZCAcNNHR9>. For further inquiries, please contact Prof. Vedhus Hoskere (vhoskere -at- central.uh.edu) with subject "Prospective Graduate Student".

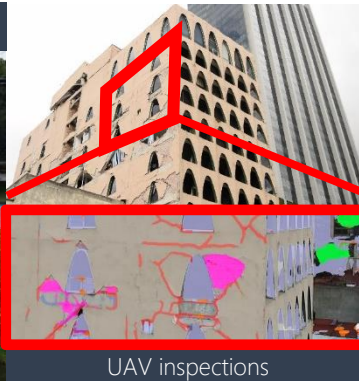
Vision-based System Identification



Vision-based assessments



UAV inspections



The University of Houston is located in a picturesque 667 acre campus a few minutes from downtown Houston with over 45,000 students. The CEE program at the University of Houston is home to 22 tenured or tenure-track faculty members with over 270 undergraduates, and 130 graduate students.

Houston is the fourth largest city in the U.S. and the "energy capital of the world". The city of Houston is home to the world's largest medical center, NASA, the Port of Houston and the second-most Fortune 500 headquarters of all major U.S. cities. The greater Houston area offers state-of-the-art recreational facilities, world-class arts and cultural activities, excellent schools, and affordable housing.

