S A I L
Structures and Artificial Intelligence Lab

PhD/MS 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 graduate 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

- Deep learning and computer vision for condition assessment
- Structural health monitoring and system identification
- Cyber-modeling and digital twins/Physics-based modeling
- Path planning for inspections
- Robotic inspections of civil infrastructure
- Augmented and virtual reality for inspections
- Built environment analytics and smart cities
- Disaster risk assessment
- Machine learning for structural engineering

Preferred qualifications

- BS/MS 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 programming experience (may include links to reports or github repositories if any). Prior research experience in the aforementioned or similar topics, or any relevant research in structural engineering should be articulated. Admission is highly competitive, successful PhD applicants will receive full tuition support and stipend for the duration of their study through research and teaching assistantships. Multiple openings exist as early as Fall 2020 and into Spring/Fall 2021.

Applications may be submitted at http://www.cive.uh.edu/admissions/civil-engineering/application-forms. For further inquiries, please send a cover letter expressing your interest (detailing relevant experience and career objectives), and a CV (including GPA, test scores and with subject "Prospective Graduate Student") to Prof. Vedhus Hoskere (vhoskere -at- central.uh.edu).

ENGINEERING EXCELLENCE STARTS HERE

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.