



THE UNIVERSITY OF TEXAS AT AUSTIN
Cockrell School of Engineering

Fariborz Maseeh Department of Civil, Architectural and Environmental Engineering
301 E. Dean Keeton Street • Stop C1700 • Austin, TX 78712 • 512-471-4921

Description:

A post-doctoral research position in the area of “Robotics for Construction and Inspection” is available effective immediately in the Fariborz Maseeh Department of Civil, Architectural and Environmental Engineering (CAEE) at The University of Texas at Austin. The successful applicant will work within the Construction Engineering and Project Management (CEPM) program on research focused on advancing robotics applications for construction and infrastructure systems. The initial appointment is expected to be for one year, with the possibility of extension based on performance and funding availability.

The successful applicant will conduct research at the intersection of robotics, automation, sensing, and industrialized construction workflows, with a focus on the deployment of robotic systems for construction-related applications. Research topics include robotic inspection systems, material handling, robotic assistance for industrialized construction, and the integration of robotics for deconstruction and circularity.

Applications of this work include field-deployable robotic systems, automated inspection and sensing workflows, human-robot collaboration, and robotic-enabled construction operations. The position will involve both experimental robotics research and practical deployment-oriented systems development, including laboratory-scale testing and industry-engaged research activities.

The post-doctoral researcher will also contribute to supervising graduate students, supporting research project execution, publishing scholarly work, and helping develop externally funded research initiatives.

Application Instructions:

- Interested applicants should send their CV, cover letter, sample publications, and GitHub/portfolio (if available) to Prof. Chris Rausch (c.rausch (at) utexas.edu). Please ensure your email has the title “Post-Doc – Robotics for Construction”.
- Information regarding CAEE can be found here: caee.utexas.edu
- Review of applications will begin immediately and continue until the position is filled.

Qualifications:

- A Ph.D. in civil engineering, mechanical engineering, robotics, computer science, mechatronics, or a related field is **required**.
- A demonstrated record of publication in peer-reviewed journals and conferences is **required**.
- Experience with robotics systems integration and experimental setup is **required**.
- Experience with cobots/robotic arms, UGVs, or mobile robotic systems is strongly desired.
- Experience with ROS/ROS2, Isaac Sim, RoboDK, and robotic software workflows is highly desirable.
- Experience with computer vision, sensing systems, and sensor integration is strongly desired.

- Strong programming skills (e.g., Python, C++, machine learning/computer vision frameworks) are preferred.
- Demonstrated ability to independently lead research projects and mentor graduate students is expected.
- Strong communication skills and the ability to engage with industry collaborators are highly desirable.
- Experience working on applied robotics or field deployment projects is a strong plus.

About CAEE:

The Fariborz Maseeh Department of Civil, Architectural and Environmental Engineering in the Cockrell School of Engineering is one of the largest, most comprehensive departments of its kind in the U.S. With 10 graduate specialties, over 10,000 living alumni, more than 1,200 undergraduate and graduate students, and over 50 faculty members, CAEE offers a highly collaborative and impactful research environment focused on solving critical infrastructure challenges.

About CEPM:

The Kumar Construction Engineering and Project Management (CEPM) graduate program integrates the technical rigor of engineering with the strategic and operational competencies of project management. The program prepares graduates to lead and transform the capital projects industry through innovation in delivery methods, digital technologies, and systems-level thinking.

CHRIS RAUSCH, Ph.D., Aff.M.ASCE, Assistant Professor

Director, Enabling Technologies for Housing Innovation Center ([ETHIC](#))

Assistant Specialty Editor, Construction Materials and Methods | [ASCE Journal of Construction Engineering and Management](#)

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