



**SYRACUSE
UNIVERSITY
ENGINEERING
& COMPUTER
SCIENCE**



Ph.D. and Postdoctoral Researcher Openings

OVERALL DESCRIPTION:

The A-STAR Lab in the Department of Civil and Environmental Engineering at Syracuse University is seeking highly motivated researchers to join our growing team. Supported by several recently funded research projects and research support from NSF, NVIDIA, NYSERDA, NY-THRIVE, and OpenAI, we are currently recruiting two fully funded researchers. The openings are expected to be filled by either **two Ph.D. students** *or* **one Ph.D. student and one postdoctoral researcher**. The anticipated start date is Spring 2027 or Fall 2027.

The selected researchers will work with Dr. Yizhi Liu and other A-STAR Lab members on interdisciplinary research at the intersection of construction, robotics, and AI. Researchers will have chances to develop and evaluate intelligent robotic systems that can perceive, learn, interact with humans, and perform complex tasks in dynamic and unstructured construction environments.

QUALIFICATIONS:

We welcome applicants from diverse academic backgrounds, including Robotics, Mechanical Engineering, Electrical and Computer Engineering, Computer Science, Civil Engineering, and other closely related fields. Candidates with experience in robot control and motion planning, robotic manipulation, human-robot interaction, or robotic perception are particularly encouraged to apply. Experience with robotics and AI tools or related platforms would be beneficial.

Ph.D. applicants should meet the general requirements for doctoral admission to Syracuse University (<https://ecs.syracuse.edu/academics/graduate-programs>) and demonstrate strong motivation for interdisciplinary research. Candidates are also expected to have good programming, analytical, communication, and academic writing skills. Postdoctoral applicants should hold, or expect to receive before the starting date, a Ph.D. in the above-mentioned closely related field.

APPLICATION INSTRUCTION:

Interested candidates are encouraged to contact Dr. Yizhi Liu at yliu580@syr.edu. Please include an updated CV and a brief description of your research interests and relevant experience for joining the A-STAR Lab. Please indicate in your email whether you are interested in the **Ph.D.** or **Postdoctoral position** and your preferred start term (Spring 2027 or Fall 2027).

ABOUT THE A-STAR LAB:

The A-STAR Lab, directed by Dr. Yizhi Liu, provides an interdisciplinary research environment for students and researchers interested in advancing robotics and AI for construction worlds. The lab is equipped with advanced robotic platforms, multimodal sensing systems, and substantial computational resources to support both algorithm development and large-scale experimental research. Lab members have opportunities to work across the full research pipeline – from AI and robotics algorithm development and simulation to system integration and physical robot experiments – and to validate their research on real robotic systems. Located at Syracuse University's Center for Advanced Semiconductor Manufacturing (CASM), the A-STAR Lab provides opportunities for members to collaborate with researchers across civil and environmental engineering, mechanical and aerospace engineering, electrical engineering and computer science, and other related disciplines.