CROSS Lab is seeking passionate students to join the group! We have one fully funded Ph.D. position in the Department of Civil Engineering at Stony Brook University available starting in Spring or Fall 2025. The selected students will be working with Dr. Ci-Jyun (Polar) Liang in the following areas:

- Human-Robot(s) Collaboration in Workplaces
- Digital Twins, Building Information Modeling, and Robotics
- Sustainable Development for Construction Robotics

Candidates with B.S. or M.S. degrees in Civil Engineering, Construction Engineering and Management, Mechanical Engineering, Computer Science, or related fields are encouraged to apply. Experience and skills in programming (Python, C++, C#, MATLAB) and robotics (ROS, Gymnasium, any robotics simulator, hardware integration) are preferred.

**How to apply?**

Please email Dr. Liang (ci-juan.liang@stonybrook.edu) your CV, a brief description of your research experience and interests and how you can contribute your expertise to CROSS lab (one-page or in the email), and contacts of three references. The review process will start in late August. Applicants must also submit a formal application to the department. For more information, please visit [https://www.stonybrook.edu/commcms/civileng/graduate/generalinformation.php](https://www.stonybrook.edu/commcms/civileng/graduate/generalinformation.php)

**About CROSS Lab**

The Collaborative Robots for Occupational Safety and Sustainability Laboratory (CROSS Lab) at Stony Brook University conducts research on collaborative robots to promote safety and sustainability in future workplaces and built environments such as construction sites, manufacturing plants, and warehouses. Dr. Liang is the director of CROSS Lab. He is an assistant professor in the Department of Civil Engineering at Stony Brook University. His current research involves (1) developing a computer vision and sensor fusion system for identifying safety hazards in human-robot collaboration, (2) developing collaborative robots, extended reality, and imitation learning algorithms for sustainable construction and built environments, (3) investigating reinforcement learning methods, BIM, and digital twins for closing sim-to-real gaps in unstructured construction environments. For more information and current research projects, please visit [https://you.stonybrook.edu/crosslab/](https://you.stonybrook.edu/crosslab/) and [https://polarliang.net/](https://polarliang.net/)