

TINA XU

• Email: tx21@illinois.edu • Phone: (217) 800-2910 • Homepage: <https://tamphie.github.io>

EDUCATION

University of Illinois Urbana-Champaign, MS in Computer Science Urbana, IL
Related courses: Mobile Robotics, Database System Aug 2025 – May 2027(expected)

Xi'an Jiaotong University, BS in Electrical Engineering, Mechanical Engineering (Double major) Xi'an China
GPA: 3.90/4.0; Rank: 2/27 in Honors Engineering Program Sep 2021 – Jun 2025
Related courses: Program Design Method; Computer Network Theory; Data Science; Artificial Intelligence

University of California – Berkeley, visiting student Berkeley, CA
Courses: Mechatronics Design; Introduction to Embedded Systems; Advanced Control Systems Aug 2023 – Dec 2023

SKILLS

Programming: Python, C/C++, MATLAB, SQL

Frameworks & Tools: ROS, PyTorch, TensorFlow, OpenCV, Solidworks, Gazebo, Rviz, Git, LaTeX

Hardware: Arduino, Raspberry Pi, Nvidia Jetson

OS: Linux

ACTIVITIES & LEADERSHIP

- **Best Research Paper Award**, EEML 2025 – Sarajevo, Bosnia and Herzegovina Jul 2025
- **Best Paper Prize**, IEEE 2024 Global Reliability & PHM Conference Sep 2024
- National University Intelligent **Robotics Contest 1st Prize**, Shaanxi, China Aug 2024
- **Leader** of the Hsue-shen Tsien Academic Study Assistance Group Aug 2022 – Aug 2023

EXPERIENCE

Siebel School of Computing & Data Science Champaign, IL
Graduate Teaching Assistant Aug 2025 – Present

- Lead weekly Python labs and facilitate discussions for up to 60 students.
- Grade assignments and provide constructive feedback via Canvas.
- Collaborate with professors to design lesson plans, lab materials, and assignments.

National University of Singapore Singapore
Research Intern with Dr. David Hsu [academic poster](#) Jul 2024 – Apr 2025

- Developing **object-centric imitation learning models** for robotic manipulation (Fetch robot).
- Conducting **ablation studies & benchmarking** to evaluate policy learning design choices.
- Advancing **3D representation learning** with RLBench to improve generalization across views/objects.
- Presented work as an **academic poster at EEML 2025**.

Xi'an Jiaotong University Xi'an, China
Research Assistant with Dr. Xiang Li [published paper](#) Nov 2022 – May 2024

- Applied **event cameras** and **PointNet++** for machine fault diagnosis with point cloud representations.
- Built novel **geometric data structure** for event streams; achieved robust classification under variables.
- Published at **2024 IEEE Global Reliability & PHM Conference**.

Theia IoT Technology Co. Ltd. Xi'an, China
Software Engineer Intern Dec 2023 – Jan 2024

- Deployed **real-time object detection** on Nvidia Jetson with C++/OpenCV in Linux.
- Implemented algorithms (Gaussian Mixture, Optical Flow, KCF) for **embedded** detection applications.

UC Berkeley – EECS149: Embedded & Cyber-Physical Systems Project Berkeley, CA
Project Participant Fall 2023

- Awarded **Second Prize** in Mobile Robot Design Social Impact competition.
- Programmed **embedded C++** systems on Raspberry Pi for Bluetooth-based motion control.
- Designed and implemented **localization and control algorithms** with gyroscopes, motors, and color sensors.
- Achieved adaptive path following, line tracking, obstacle avoidance using a **finite state machine**.