

Xinyao Li

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EDUCATION

Shanghai Jiao Tong University(SJTU), Shanghai, China

Sep 2022 - Jul 2026

BS in Computer Science, ACM Honor Class (a selective program for 30 students only)

GPA(overall): 89.3/100

Selected Courses: Linear Algebra: 97/100, Principle and Practice of Computer Algorithms: 97/100, Computer Architecture: 95/100, Advanced Compiler Designing: 95/100, Machine Learning: 93/100, Computer Vision: 100/100, Reinforcement Learning: 93/100, Image Generation: 93/100

RESEARCH EXPERIENCE

ContactMimic: Humanoid Object Interaction via Contact Control

Advisor: Prof. Saurabh Gupta, RoboVision @ Illinois Lab, UIUC, USA

June 2025 – May 2026

- Proposed a contact-conditioned keypoint-tracking policy that lets a humanoid make or suppress physical contact at test time by toggling per-body-part binary contact labels under the same reference motion.
- Designed two contact-following rewards and a trajectory-augmentation scheme to break the spurious correlation between keypoints and contact.
- Enabled task-specific object interaction (wiping, sitting, leaning on a backrest, box lifting) without any task-specific rewards.
- Trained in Isaac Lab and deployed on a real Unitree G1 humanoid.
- Took a leading role as the primary contributor; submitted to CoRL 2026.

Building a cost-effective and efficient generalizable VLA for robots

Supervisor: Minghuan Liu, Robotics Group, ByteDance Research, Beijing

Jan 2025 - May 2025

- Achieved comparable performance with a $16\times$ smaller model by distilling pretrained VLA backbone, enabling shorter inference time and lower cost for deployment.
- Distilled pretrained VLA backbone by matching the hidden state latent space in Transformer layers, then finetuned with the action head.
- Validated with the CALVIN benchmark, OXE dataset (for pretraining) and the SIMPLER benchmark.
- Implemented the training and validation infra as the independent developer.

Learning Real-Time Humanoid-Human-Object Interaction from Human Demonstrations

Advisor: Prof. Weinan Zhang, APEX Lab, SJTU, China

Jun 2024 - Jan 2025

- Proposed the first real-time humanoid interaction framework capable of learning from human demonstrations, enabling dynamic task-switching and immediate responses to human instructions.
- Trained models directly from human demonstration videos via Human Pose Estimation and Retargeting.
- Developed a fully open-sourced 3D-printed motion capture system for easy reproduction of the pipeline.
- Developed the complete training pipeline and real-world deployment as a primary contributor.
- 2nd author with equal contribution. Accepted by IROS 2026.

SKILLS

Robotics	Simulators(IsaacLab, Mujoco, IsaacGym, etc.), 3D-printing, Real-world Deployment
Control	MPC, robot kinematics, adaptive control
Coding	Python, Pytorch, ROS2, C++