

Yushan Liu

Shenzhen, China | liu-ys24@mails.tsinghua.edu.cn | +86 13631159578
scpsyl.github.io | github.com/scpsyl | [Google Scholar](#)

Research Interests

Vision-Language-Action (VLA) Models, World Action Models (WAMs), Embodied Manipulation
End-to-End Autonomous Driving, Agentic Multimodal Large Language Models (MLLMs)

Education

Shenzhen International Graduate School, Tsinghua University Shenzhen, China
M.S. in Artificial Intelligence *Sep. 2024 – Jun. 2027 (expected)*

Advisor: Prof. Xiao-Ping Zhang, Prof. Wenbo Ding.

College of Electronic Science and Engineering, Jilin University Changchun, China
B.S. in Electronic Engineering, GPA: 3.67/4.00 (top 20%) *Sep. 2020 – Jun. 2024*

Publications & Manuscripts

AVR: Active Vision-Driven Robotic Precision Manipulation with Viewpoint and Focal Length Optimization.

Yushan Liu*, Shilong Mu*, Xintao Chao, Zizhen Li, Yao Mu, Tianxing Chen, Shoujie Li, Chuqiao Lyu, Xiao-Ping Zhang, Wenbo Ding[†]

IEEE International Conference on Robotics and Automation (ICRA), 2026, accepted.

OA-WAM: Object-Addressable World Action Model for Robust Robot Manipulation.

Yushan Liu, Peibo Sun, Shoujie Li, Yifan Xie, Lingfeng Zhang, Xintao Chao, Shiyuan Dong, Fang Chen, Xiao-Ping Zhang, Wenbo Ding[†]

Conference on Neural Information Processing Systems (NeurIPS), 2026, under review.

Aligned Action Chunking with Visual Foresight for Robot Manipulation.

Jingjing Fan*, Yushan Liu*, Shoujie Li, Botao Ren, Siyuan Li, Xiao-Ping Zhang, Wenbo Ding[†], Zhidong Deng[†]

ACM International Conference on Multimedia (ACM MM), 2026, under review.

ALARMbot: Autonomous Laboratory Safety Inspection and Operable Hazard Intervention Robot Enabled by Foundation Models.

Shoujie Li*, Yushan Liu*, Xintao Chao*, Yan Huang, Xiao-Ping Zhang, Wenbo Ding[†]

IEEE Transactions on Automation Science and Engineering (T-ASE), under review.

Exo-ViHa: A Cross-Platform Exoskeleton System with Visual and Haptic Feedback for Efficient Dexterous Skill Learning.

Xintao Chao*, Shilong Mu*, Yushan Liu, Shoujie Li, Chuqiao Lyu, Xiao-Ping Zhang, Wenbo Ding[†]

IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2025, accepted.

Research Experience

Visiting Research Student Shanghai Jiao Tong University
Advisor: Prof. Fang Chen *Apr. 2026 – Present*

Research Intern Amap CV Lab, Alibaba
Research Focus: World Action Models for Autonomous Driving *Mar. 2026 – Present*

Embodied AI Algorithm Intern JD Technology
Research Focus: Vision-Language-Action (VLA) Models for Bimanual Manipulation *Sep. 2025 – Feb. 2026*

Honors

Second Prize, National Student Robotics Competition (RoboMaster) 2023

Second-Class Scholarship, Jilin University 2021–2023

Academic Service

Reviewer, ICRA, IROS, RA-L, ICML, ACM MM, NeurIPS 2025–2026