XIAOMENG XU

https://xxm19.github.io/ | xuxm@stanford.edu

EDUCATION

Stanford University

09/2023-now

PhD Student in Electrical Engineering

Stanford University

09/2023-06/2025

Masters in Electrical Engineering

Tsinghua University

08/2019-06/2023

Bachelor of Engineering in Automation, Bachelor of Arts in Product Design

GPA: 3.96/4.0

PUBLICATIONS

- 1. **Xiaomeng Xu***, Yifan Hou*, Zeyi Liu, Shuran Song, Compliant Residual DAgger: Improving Real-World Contact-Rich Manipulation with Human Corrections. [Paper]
- 2. Haoyu Xiong, **Xiaomeng Xu**, Jimmy Wu, Yifan Hou, Jeannette Bohg, Shuran Song, *Vision in Action: Learning Active Perception from Human Demonstrations.* [Paper]
- 3. **Xiaomeng Xu**, Dominik Bauer, Shuran Song, *RoboPanoptes: The All-Seeing Robot with Whole-body Dexterity*. Robotics: Science and Systems (RSS 2025). [Paper]
- 4. Xiaomeng Xu, Huy Ha, Shuran Song, Dynamics-Guided Diffusion Model for Sensor-less Robot Manipulator Design. Conference on Robot Learning (CoRL 2024), Best Machine Learning Paper at the Morphology-Aware Policy and Design Learning Workshop (CoRL 2024). [Paper]
- 5. **Xiaomeng Xu***, Yanchao Yang*, Kaichun Mo, Boxiao Pan, Li Yi, Leonidas Guibas, *JacobiNeRF:* NeRF Shaping with Mutual Information Gradients. Conference on Computer Vision and Pattern Recognition (CVPR 2023). [Paper]
- 6. Yun Liu*, Xiaomeng Xu*, Weihang Chen, Haocheng Yuan, He Wang, Jing Xu, Rui Chen, Li Yi, Enhancing Generalizable 6D Pose Tracking of an In-Hand Object with Tactile Sensing. Robotics and Automation Letters (RAL 2023), IEEE International Conference on Robotics and Automation (ICRA 2024). [Paper]
- 7. Xueyi Liu, **Xiaomeng Xu**, Anyi Rao, Chuang Gan, Li Yi, *AutoGPart: Intermediate Supervision Search for Generalizable 3D Part Segmentation*. Conference on Computer Vision and Pattern Recognition (CVPR 2022). [Paper]
- 8. Guanhong Liu, Tianyu Yu, Zhihao Yao, Haiqing Xu, Yunyi Zhang, Xuhai Xu, **Xiaomeng Xu**, Mingyue Gao, Qirui Sun, Tingliang Zhang, Haipeng Mi, *ViviPaint: Creating Dynamic Painting with a Thermochromic Toolkit.* Multimodal Technologies and Interaction (MTI 2022). [Paper]

AWARDS

Stanford Interdisciplinary Graduate Fellowship (Awarded to outstanding doctoral students engaged in interdisciplinary research at Stanford University) 05/2025-now

Best Machine Learning Paper at the Morphology-Aware Policy and Design Learning Workshop (Conference on Robot Learning 2024)

11/2024

Outstanding Graduate (Awarded to top 2% graduates at Tsinghua University)

06/2023

^{*} authors with equal contribution

Comprehensive Excellence Award (Scholarship awarded by Tsinghua University, top 5%)	10/2022
National Scholarship (Highest scholarship awarded by Chinese Government, top 0.1%)	10/2021
129 Scholarship (Highest scholarship for sophomores at Tsinghua University, top 1%)	10/2020

SERVICES

Teaching assistant of EE/CS227: Robot Perception

Organizer of RSS 2025 1st Workshop on Robot Hardware-Aware Intelligence

Reviewer of RSS, CoRL, RAL, ICRA, IROS, ICLR, Neurips, ICML, CVPR

TECHNICAL SKILLS

Computer Languages Python, C/C++, MATLAB, Verilog/VHDL

Software SolidWorks, AutoCAD, Rhino, Qt Creator, Multisim, Quartus Hardware 3D Printing, FPGA, Microcontroller, mechanical design, woodcraft

Tools PyTorch, ROS, MuJoCo, IsaacGym