

Siyu Ma

siiyuma@outlook.com | <https://bell0o.github.io/> | +1-310-709-4689

Research Interests

I am interested in building generalizable, agentic robot manipulation systems that learn at scale in simulation and continuously improve through an autonomous real-to-sim-to-real loop.

Education

University of California, Los Angeles	Sep 2026 – Jun 2029
<i>Ph.D. in Computer Science, advised Chenfanfu Jiang</i>	
University of California, San Diego	Jan 2026 – Jun 2026
<i>Ph.D. in Computer Science, advised by Hao Su and Chenfanfu Jiang</i>	
University of California, San Diego	Sep 2023 – Dec 2024
<i>M.S. in Computer Science</i>	
University of Electronic Science and Technology of China	Sep 2019 – Jun 2023
<i>B.Eng. in Software Engineering</i>	

Publications

Skill2Real: Agentic Skill Learning for Zero-Shot Sim-to-Real Robot Manipulation

In Submission

Xincheng He, **Siyu Ma**, Chang Yu, Yunuo Chen, Yanjia Huang, Ying Nian Wu, Yin Yang, Chenfanfu Jiang

TacCoRL: Integrating Tactile Feedback into VLA via Simulation

Conference on Robot Learning (CoRL), 2026; RSS 2026 Workshop on Tactile Sensing for Robotic Foundation Models

Siyu Ma*, Yuqi Liang*, Chang Yu*, Yunuo Chen, Hao Su, Yixin Zhu, Yin Yang, Chenfanfu Jiang

Sparse2Act: Learning Action-Aligned Sparse 3D Representations for Cross-Domain Robot Manipulation

NeurIPS 2026 Workshop on From Pretrained Representations to Acting Agents

Yu Guo*, Chang Yu*, **Siyu Ma***, Yunuo Chen, Yin Yang, Ying Nian Wu, Chenfanfu Jiang

Right-Side-Out: Learning Zero-Shot Sim-to-Real Garment Reversal

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

Chang Yu*, **Siyu Ma***, Wenxin Du, Zeshun Zong, Han Xue, Wendi Chen, Cewu Lu, Yin Yang, Xuchen Han, Joseph Masterjohn, Alejandro Castro, Chenfanfu Jiang

GRIP: A General Robotic Incremental Potential Contact Simulation Dataset for Unified Deformable-Rigid Coupled Grasping

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

Siyu Ma*, Wenxin Du*, Chang Yu*, Ying Jiang*, Zeshun Zong, Tianyi Xie, Yunuo Chen, Yin Yang, Xuchen Han, Chenfanfu Jiang

Embedded IPC: Fast and Intersection-free Simulation in Reduced Subspace for Robot Manipulation

IEEE International Conference on Robotics and Automation (ICRA), 2025

Wenxin Du*, Chang Yu*, **Siyu Ma**, Ying Jiang, Zeshun Zong, Yin Yang, Joseph Masterjohn, Alejandro Castro, Xuchen Han, Chenfanfu Jiang

Experience

LightSpeed Studios, Tencent America

Jun 2026 – Aug 2026

Research Intern, advised by Kui Wu

Los Angeles, USA

Researched and prototyped an agentic 3D scene-generation pipeline that uses foundation-model agents to plan and synthesize structured, editable environments for scalable simulation and world generation

CoRe Lab at Peking University

Oct 2025 – Dec 2025

Visiting Student, advised by Yixin Zhu

Beijing, China

Developed simulation-based post-training methods for visuo-tactile VLA policies, combining sim-real co-training and reinforcement learning to improve contact-rich bimanual manipulation in the real world.

MVIG Lab at Shanghai Jiao Tong University

Visiting Student, advised by Cewu Lu

Jun 2025 – Sep 2025

Shanghai, China

Researched deformable-object manipulation and sim-to-real policy learning for cloth/garment interaction and real-robot validation.

Skills

- **Robotic Hardware:** ALOHA/Piper, UR5e, Franka, LeapHand, FlexiTac (tactile sensing)
- **Simulation Platforms:** Isaac Gym, Isaac Sim, Isaac Lab, Newton, MuJoCo, PhysX
- **Robot Software & Systems:** ROS1, ROS2, MoveIt, URDF, Data Collection & Teleoperation Pipelines