

YUNSHUANG LI

📞 215-397-8150 ✉ yunshuan@usc.edu 🌐 li-yunshuang.github.io

Education

University of Southern California, Ph.D. in Computer Science **09/2024 – present**

Department of Computer Science, Advisor: Daniel Seita & Gaurav Sukhatme

University of Pennsylvania, M.S. in Robotics **09/2022 – 05/2024**

Department of Computer and Information Science, Advisor: Dinesh Jayaraman

Zhejiang University, B.S. in Automatic Control **09/2018 – 06/2022**

Chu Kochen Honors College, Dual degree in Mechanical Engineering

Publication

- 1 **Learning Geometry-aware Dexterous Nonprehensile Manipulation**
Yunshuang Li, Yiyang Ling, Gaurav Sukhatme, Daniel Seita
RSS Dexterous Manipulation Workshop, 2025 [PDF] [Website]
- 2 **Task-Oriented Hierarchical Object Decomposition for Visuomotor Control**
Jianing Qian, Yunshuang Li, Bernadette Bucher, Dinesh Jayaraman
8th Annual Conference on Robot Learning (CoRL), 2024 [PDF] [Website]
- 3 **DROID: A Large-Scale In-the-Wild Robot Manipulation Dataset**
Alexander Khazatsky*, Karl Pertsch* (et al., including Yunshuang Li)
RSS 2024 [PDF] [Website]
- 4 **Universal Visual Decomposer : Long-Horizon Manipulation Made Easy**
Zichen Zhang*, Yunshuang Li*, Osbert Bastani, Abhishek Gupta, Dinesh Jayaraman,
Yecheng Jason Ma[†], Luca Weihs[†]
CoRL Learning Effective Abstractions for Planning workshop (**Oral, Best Paper Award**), 2023;
NeurIPS Foundation Models for Decision Making workshop (**Oral**), 2023;
ICRA 2024 (**Best Paper Finalist in Computer Vision**) [PDF] [Website]
- 5 **Open X-Embodiment: Robotic learning datasets and RT-X models**
Large collaboration (et al., including Yunshuang Li)
ICRA 2024 (**Best Conference Paper Award**) [PDF] [Website]
- 6 **Im2Contact: Vision-Based Contact Localization Without Touch or Force Sensing**
Leon Kim, Yunshuang Li, Michael Posa, Dinesh Jayaraman
7th Annual Conference on Robot Learning (CoRL), 2023 [PDF] [Website]
- 7 **PEg TRAnsfer Workflow recognition challenge report: Does multi-modal data improve recognition?**
Arnaud Huauilmé, Kanako Harada, (et al., including Yunshuang Li)
Computer Methods and Programs in Biomedicine, 2023 [PDF]
- 8 **Control of Pneumatic Artificial Muscles with SNN-based Cerebellar-like Model**
Yunshuang Li*, Hongbo Zhang*, Yipin Guo*, Xinyi Chen, Qinyuan Ren
International Conference on Social Robotics (ICSR), 2021 [PDF]
- 9 **Collaborative Recognition of Feasible Region with Aerial and Ground Robots through DPCN**
Yunshuang Li, Zheyuan Huang, Zexi Chen, Yue Wang, Rong Xiong

IEEE International Conference on Real-time Computing and Robotics (RCAR), 2021
[PDF]

Awards

| | |
|--|-------------|
| USC Fellowship Award | 2024 |
| CoRL Travel Grant | 2023 & 2024 |
| Best Paper Finalist in Computer vision, ICRA | 2024 |
| President Gutmann Leadership Award, administered by GAPSA, UPenn | 2023 |
| Best Paper Award at CoRL LEAP workshop | 2023 |
| GAPSA Career Services Summer Funding at University of Pennsylvania | 2023 |
| Chiang Chen Oversea Graduate Scholarship | 2022 |
| National Scholarship issued by Ministry of Education of the People's Republic of China | 2021 |
| Champion of International Robotic Workflow Recognition Challenge in MICCAI 2021 | 2021 |

Service

| | |
|--|-------------|
| Reviewer for CoRL, RSS Dexterous manipulation workshop | 2025 |
| Reviewer for NeurIPS FMDM workshop | 2023 |
| Teaching Assistant for CIS 5200 - Machine Learning. | Fall 2023 |
| Teaching Assistant for MEAM 5200 - Introduction to Robotics. | Spring 2023 |

Industry Experience

| | |
|--|-------------|
| Research Scientist Intern, Research Institute of HIKVISION | Summer 2022 |
| Research Scientist Intern, 2012 Lab, HUAWEI Co. Ltd | Summer 2019 |

Miscellaneous Experience

| | |
|---|-------------|
| Board Member of Penn Chinese Dance Club | 2023 |
| Volunteer for 5th Annual Learning for Dynamics & Control Conference (L4DC) | June 2023 |
| Instructor of Python Club at Carver Engineering and Science High School, Philadelphia | Spring 2023 |
| Volunteer for GRASP ROBO Master's Student Open House | March 2023 |
| Volunteer Instructor for a Rural High School, Yunnan, China | Summer 2020 |

Technical Skills

Languages: Python, MATLAB, C, C++, HTML/CSS, L^AT_EX

Developer Tools: VS Code, Anaconda, Docker

Technologies/Frameworks: Linux, ROS, PyTorch, Tensorflow, AutoCAD, Solidworks, GitHub