

EMPLOYMENT

- **Amazon - Frontier AI & Robotics (FAR)**
Applied Scientist

San Francisco, CA
July. 2025 - Present

PUBLICATIONS & PREPRINTS

Lead Author Works

- [1] **EgoVLA: Learning Vision-Language-Action Models from Egocentric Human Videos**
Ruihan Yang*, Qinxu Yu*, Rui Yan, An-Chieh Cheng, Xueyan Zou, Yunhao Fang, Xuxin Cheng, Ri-Zhao Qiu, Hongxu Yin, Sifei Liu, Song Han, Yao Lu, Xiaolong Wang
Arxiv, 2025
- [2] **Harmonic Mobile Manipulation**
Ruihan Yang, Yejin Kim, Rose Hendrix, Aniruddha Kembhavi, Xiaolong Wang, Kiana Ehsani
IROS 2024 (Best Paper on Mobile Manipulation)
- [3] **Generalized Animal Imitator: Agile Locomotion with Versatile Motion Prior**
Ruihan Yang*, Zhuoqun Chen*, Jianhan Ma*, Chongyi Zheng*, Yiyu Chen, Quan Nguyen, Xiaolong Wang
CORL 2024, Workshop Best Paper @ CORL 2023 Deployable Workshop
- [4] **Neural Volumetric Memory for Legged Locomotion Control**
Ruihan Yang, Ge Yang, Xiaolong Wang
CVPR 2023 (Highlight)
- [5] **Learning Vision-Guided Quadrupedal Locomotion End-to-End with Cross-Modal Transformers**
Ruihan Yang*, Minghao Zhang*, Nicklas Hansen, Huazhe Xu, Xiaolong Wang
ICLR 2022 (Spotlight)
- [6] **Multi-Task Reinforcement Learning with Soft Modularization**
Ruihan Yang, Huazhe Xu, Yi Wu, Xiaolong Wang
NeurIPS 2020 / ICLR BeTR-RL workshop, 2020 (Oral)

Collaborative Works

- [1] **Dex1B: Learning with 1B Demonstrations for Dexterous Manipulation**
Jianglong Ye*, Keyi Wang*, Chengjing Yuan, Ruihan Yang, Yiquan Li, Jiyue Zhu, Yuzhe Qin, Xueyan Zou, Xiaolong Wang
RSS, 2025
- [2] **WildLMA: Long Horizon Loco-MANipulation in the Wild**
Ri-Zhao Qiu*, Yuchen Song*, Xuanbin Peng*, Sai Aneesh Suryadevara, Ge Yang, Minghuan Liu, Mazeyu Ji, Chengzhe Jia, Ruihan Yang, Xueyan Zou, Xiaolong Wang
ICRA, 2025
- [3] **SpatialRGPT: Grounded Spatial Reasoning in Vision-Language Models**
An-Chieh Cheng, Hongxu Yin, Yang Fu, Qiushan Guo, Ruihan Yang, Jan Kautz, Xiaolong Wang, Sifei Liu
NeurIPS, 2024
- [4] **Visual Whole-Body Control for Legged Loco-Manipulation**
Minghuan Liu*, Zixuan Chen*, Xuxin Cheng, Yandong Ji, Ruihan Yang, Xiaolong Wang
CORL, 2024 (Oral)
- [5] **Visual Manipulation with Legs**
Xialin He*, Chengjing Yuan*, Wenxuan Zhou, Ruihan Yang, David Held, Xiaolong Wang
CORL, 2024
- [6] **ACE: A Cross-Platform Visual-Exoskeletons System for Low-Cost Dexterous Teleoperation**
Shiqi Yang, Minghuan Liu, Yuzhe Qin, Runyu Ding, Jialong Li, Xuxin Cheng, Ruihan Yang, Sha Yi, Xiaolong Wang
CORL, 2024

- [7] **Bunny-VisionPro: Real-Time Bimanual Dexterous Teleoperation for Imitation Learning**
Runyu Ding*, Yuzhe Qin*, Jiyue Zhu*, Chengzhe Jia, Shiqi Yang, **Ruihan Yang**, Xiaojuan Qi, Xiaolong Wang
IROS, 2025 (Oral)
- [8] **Expressive Whole-Body Control for Humanoid Robots**
Xuxin Cheng*, Yandong Ji*, Junming Chen, **Ruihan Yang**, Ge Yang, Xiaolong Wang
RSS, 2024
- [9] **Learning Generalizable Feature Fields for Mobile Manipulation**
Ri-Zhao Qiu*, Yafei Hu*, Ge Yang, Yuchen Song, Yang Fu, Jianglong Ye, Jiteng Mu, **Ruihan Yang**,
Nikolay Atanasov, Sebastian Scherer, Xiaolong Wang
IROS, 2025 (Oral)
- [10] **DexMV: Imitation Learning for Dexterous Manipulation from Human Videos**
Yuzhe Qin*, Yueh-Hua Wu*, Shaowei Liu, Hanwen Jiang, **Ruihan Yang**, Yang Fu, Xiaolong Wang
ECCV 2022
- [11] **Vision-Guided Quadrupedal Locomotion in the Wild with Multi-Modal Delay Randomization**
Chieko Sarah Imai*, Minghao Zhang*, Yuchen Zhang*, Marcin Kierebiński, **Ruihan Yang**,
Yuzhe Qin, Xiaolong Wang
IROS 2022
- [12] **Suphx: Mastering Mahjong with Deep Reinforcement Learning**
Junjie Li, Sotetsu Koyamada, Qiwei Ye, Guoqing Liu, Chao Wang, **Ruihan Yang**, Li Zhao, Tao Qin,
Tie-Yan Liu, Hsiao-Wuen Hon
Arxiv 2020

EDUCATION

- **UC San Diego** San Diego, CA
Ph.D in ECE / M.S in CS *Sep. 2021 - June.2025 / Sep. 2019 - Mar. 2021*
- **Nankai University** Tianjin, China
B.E in Software Engineering *Sep. 2015 - Jul. 2019*

INTERNSHIP

- **Robotics and AI Institute (Boston Dynamics AI Institute)** Cambridge, MA
Research Intern @ DMM. *Dec. 2024 - Mar.2025*
- **Allen Institute for AI (AI2)** Seattle, WA
Research Intern @ PRIOR. Work with Dr. Kiana Ehsani *Jun. 2023 - Dec 2023*
- **Adobe Research** San Jose, CA(Remote)
Research Intern. Work with Dr. Ruben Villegas, Dr. Duygu Ceylan *Jun. 2021 - Dec. 2021*
- **Microsoft Research Asia** Beijing, China
Research Intern at Machine Learning Group. Work with Qiwei Ye, Dr. Tao Qin *Mar. 2018 - Jun. 2019*
 - Built **Suphx**, Best AI for Mahjong (One of the hardest imperfect-information game, **most popular board game in East Asia**, well matched to the **top professional human player**)

HONORS & AWARDS

- Best Paper on Mobile Manipulation @ IROS 2024 (1 out of 2000+) *Oct, 2024*
- Best Workshop Paper @ CORL 2023 Deployable Workshop *Nov, 2024*

PROFESSIONAL SERVICE

Conference Reviewer	ECCV / CVPR / ICCV / NeurIPS / ICLR / ICML
Journal Reviewer	AAAI / ICRA / IROS / Humanoids / RSS / CORL RA-L / TRO

SELECTED PROJECTS

- **TorchRL** *Dec. 2018 - Dec. 2021*
Personal implementation of various RL algorithms
 - Implemented various RL methods: off-policy and on-policy methods.
 - Earned over 200 stars on github.