

Huayi Wang

✉ why618188@sjtu.edu.cn | 🏠 why618188.github.io | 📧 why618188 | 🎓 Huayi Wang

Education

Shanghai Jiao Tong University

B.ENG. IN ARTIFICIAL INTELLIGENCE

• GPA: 3.90/4.3; Rank: 22/92

Shanghai, China

Aug. 2022 - Present

Research Interests

My current research is centered on **Robot Learning and Control**, with a specific focus on Humanoid Whole-Body Control. I am dedicated to developing effective robot learning-based training methods that prioritize agility, robustness, and safety.

Research Experience

Shanghai Jiao Tong University

RESEARCH ASSISTANT AT APEX LAB, ADVISED BY PROF. WEINAN ZHANG

• Research Topics: Reinforcement Learning, LLM Agent.

Shanghai, China

Dec.2023 - Jul.2024

Shanghai Artificial Intelligence Laboratory

INTERN AT INTERN ROBOTICS, ADVISED BY DR. JIANGMIAO PANG AND DR. JINGBO WANG

• Research Topics: Robot Learning, Humanoid Locomotion Control, Reinforcement Learning.

Shanghai, China

Aug.2024 - Present

Publications

(*Equal Contribution, †Corresponding Author)

CONFERENCE PROCEEDINGS

[C3] BeamDojo: Learning Agile Humanoid Locomotion on Sparse Footholds

Huayi Wang, ZiRui Wang, Junli Ren, Qingwei Ben, Tao Huang, Weinan Zhang†, Jiangmiao Pang†

Robotics: Science and Systems (RSS), 2025 (Oral Presentation) [Paper] [Website]

[C2] Learning Humanoid Standing-up Control across Diverse Postures

Tao Huang, Junli Ren, Huayi Wang, ZiRui Wang, Qingwei Ben, Muning Wen, Xiao Chen, Jianan Li, Jiangmiao Pang†

Robotics: Science and Systems (RSS), 2025 (Outstanding Systems Paper Award Finalist - Top 4) [Paper] [Website] [Code]

[C1] Diversity-Aware Self-Paced Data Selection for LLM Fine-Tuning

Yingxuan Yang, Huayi Wang, Muning Wen, Xiaoyun Mo, Qiuying Peng, Jun Wang, Weinan Zhang†

European Conference on Artificial Intelligence (ECAI), 2025 [Paper]

PREPRINTS

[P4] PhysHSI: Towards a Real-World Generalizable and Natural Humanoid-Scene Interaction System

Huayi Wang*, Wentao Zhang*, Runyi Yu*, Tao Huang, Junli Ren, Feiyu Jia, Zirui Wang, Xiaojie Niu, Xiao Chen, Jiahe Chen,

Qifeng Chen†, Jingbo Wang†, Jiangmiao Pang†

Under Review, 2025 [Paper] [Website][Code]

[P3] Towards Adaptable Humanoid Control via Adaptive Motion Tracking

Tao Huang, Huayi Wang, Junli Ren, Kangning Yin, Zirui Wang, Xiao Chen, Feiyu Jia, Wentao Zhang, Junfeng Long, Jingbo

Wang†, Jiangmiao Pang†

Under Review, 2025 [Paper] [Website] [Code]

[P2] Humanoid Goalkeeper: Learning from Position Conditioned Task-Motion Constraints

Junli Ren*, Junfeng Long*, Tao Huang, Huayi Wang, Zirui Wang, Feiyu Jia, Wentao Zhang, Jingbo Wang†, Ping Luo†,

Jiangmiao Pang†

Under Review, 2025 [Paper] [Website] [Code]

[P1] VB-Com: Learning Vision-Blind Composite Humanoid Locomotion Against Deficient Perception

Junli Ren, Tao Huang, Huayi Wang, ZiRui Wang, Qingwei Ben, Jiangmiao Pang†, Ping Luo†

Under Review, 2025 [Paper] [Website]

Honors & Awards

RSS Best Systems Paper Award Finalist	Top 4 of accepted papers. [Link]	2025
SenseTime Scholarship	30 undergraduate AI researchers nationwide. [Link]	2025
Guozhi honor class	Top 20% of AI honor class, held by Prof. Xiaou Tang . [Link]	2024
SJTU undergraduate C-level scholarship		2023
Outstanding members of the Communist Youth League		2022

Skills

Programming	Python, C/C++, LaTeX, JAVA, MATLAB
Frameworks	PyTorch, NumPy, Git, Anaconda, ROS, OpenCV, Linux
Languages	Mandarin (Native), English