

Jinhan Li

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EDUCATION

Tsinghua University

Beijing, China

Bachelor's Degree in Engineering, Institute for Interdisciplinary Information Sciences

Sep. 2021 - Jun. 2025 (Expected)

✧ Yao Class, directed by Turing Award laureate Andrew Chi-Chih Yao.

✧ Cumulative GPA: 3.84/4.0

University of Texas at Austin

Austin, US

Visiting Student, Department of Computer Science

Feb. 2024 - Aug. 2024

PUBLICATIONS (* Equal Contribution)

- [1] Jinhan Li, Yifeng Zhu*, Yuqi Xie*, Zhenyu Jiang*, Mingyo Seo, Georgios Pavlakos, Yuke Zhu. OKAMI: Teaching Humanoid Robots Manipulation Skills through Single Video Imitation. *The 8th Annual Conference on Robot Learning (CoRL)*, 2024. [Oral Presentation](#).
- [2] Yunfei Li, Jinhan Li, Wei Fu, Yi Wu. Learning Agile Bipedal Motions on a Quadrupedal Robot. *2024 IEEE International Conference on Robotics and Automation (ICRA)*. [ICRA EXPO Best Demo Finalist](#).
- [3] Zhuorui Ye*, Jinhan Li*, Rongwu Xu. Sing it, Narrate it: Quality Musical Lyrics Translation. *In Findings of the Association for Computational Linguistics: EMNLP*, 2024.
- [4] Yutao Ouyang*, Jinhan Li*, Yunfei Li, Zhongyu Li, Chao Yu, Koushil Sreenath, Yi Wu. Long-horizon Locomotion and Manipulation on a Quadrupedal Robot with Large Language Models. *Technical report arXiv: 2404.05291*, April 2024.
- [5] Zhenyu Jiang*, Yuqi Xie*, Jinhan Li, Ye Yuan, Yifeng Zhu, Yuke Zhu. Harmon: Whole-Body Motion Generation of Humanoid Robots from Language Descriptions. *The 8th Annual Conference on Robot Learning (CoRL)*, 2024.

RESEARCH EXPERIENCE

Humanoid Robots Learning from Single Human Videos

Austin, US

Advisor: Yuke Zhu | RPL Lab at UT Austin

Feb. 2024 - Aug. 2024

- ✧ Developed an algorithm for humanoids to imitate from single human videos and perform diverse manipulation tasks, without any teleoperation. **First-authored paper accepted at CoRL 2024 as an oral presentation (top 5%)**.
- ✧ Extracted a reference manipulation plan from the human video with open-world vision models, then generated humanoid motions at test time through an object-aware retargeting algorithm. Enabled a humanoid to perform bimanual dexterous manipulation tasks in diverse visual and spatial conditions.

Long-Horizon Loco-Manipulation of Quadrupedal Robots

Beijing & Shanghai, China

Advisor: Yi Wu | IIS at Tsinghua University

Sep. 2023 - Feb. 2024

- ✧ Developed a hierarchical system for long-horizon task and motion planning, which allowed a quadruped to perform long-horizon loco-manipulation tasks in daily environments, such as delivering a package and turning off lights. **Co-first authored paper in submission for ICRA 2025**.
- ✧ Using three LLM agents to collaboratively reason and decompose long-horizon tasks into a code plan, which calls a sequence of parameterized primitive skills trained with reinforcement learning.

Large Language Model for Musical Translation

Beijing, China

Advisors: Zhilin Yang, He Cheng | IIS at Tsinghua University

Sep. 2023 - Feb. 2024

- ✧ Motivated by the real-world problem of musical translation. Developed a method for English-to-Chinese lyric translation, generating lyrics that are high quality and satisfy singability constraints. **Co-first authored paper accepted at EMNLP 2024 (Findings)**.

- ✧ Collected an evaluation dataset for training reward models that reflect human preferences. Developed a two-stage training and an inference-time optimization framework to balance multiple aspects, surpassing baselines in both quantitative and human evaluations.

Bipedal Motion Generation on Quadrupedal Robots

Beijing & Shanghai, China

Advisor: Yi Wu | IIS at Tsinghua University

Jun. 2023 - Sep. 2023

- ✧ Enabled a quadruped to stand on two hind legs and perform complex bipedal dancing, such as ballet, boxing, and greetings, based on multi-modal human commands. **Second-authored paper accepted at ICRA 2024 and awarded ICRA EXPO Best Demo Finalist (5/81).**
- ✧ Trained a task-agnostic motion controller in simulation using reinforcement learning, with domain randomization for sim-to-real transfer. Task-specific motions are generated by either retargeting from human video or interpreting natural language inputs with LLM.

PRESENTATION

- ✧ *OKAMI: Teaching Humanoid Robots Manipulation Skills through Single Video Imitation*

Yao Seminar Presentation

Oct. 2024

CoRL 2024 Oral Presentation

Nov. 2024

SELECTED AWARDS

National Scholarship | The Highest Honor for Undergraduate Students in China (Top 0.4%)

Oct. 2024

Tsinghua - TikTok Scholarship | Academic Excellent Award, Tsinghua University

Oct. 2024

Yao Award | The Highest Honor in Yao Class (Top 20%)

Aug. 2024

Tsinghua - Geru Zheng Scholarship | Comprehensive Excellent Award, Tsinghua University

Oct. 2023

China National Olympiad in Informatics (NOI) 2020 | Silver Medal in Competitive Programming

Aug. 2020

OTHERS

Community Service: Pacer of Tsinghua student running club; Department vice-president of IIS student union.

Programming Languages: Python, C++, C.

Libraries and Tools: PyTorch, Git, LaTeX, Isaac Gym, MuJoCo.

Languages: Chinese (Native), English (Fluent, TOEFL 112).