Jia Li 李嘉

Robot learning · Reinforcement learning · Whole-body control

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Education

Huazhong University of Science and Technology Sep 2024 – Jun 2028 (expected)

Undergraduate, Data Science and Big Data Technology

Overall score: 90.5/100 · Major rank: 1/70

Research interests

Robot learning, Reinforcement learning, Behavioral representation learning, Whole-body control, Loco-manipulation.

Selected research

MimicAll: Structured Embodiment Conditioning for Cross-Humanoid Whole-Body Motion Tracking

Jia Li, Lingyun Xu, Yitang Li, Hao Zhao

arXiv preprint, 2026 · First author · Project lead

Structured embodiment conditioning for a shared motion-tracking policy across 16 humanoid families. I led the method, training infrastructure, benchmark construction, experiments, and writing.

https://arxiv.org/abs/2610.33508

UFO: A General Unsupervised Reinforcement Learning Framework for Humanoid Control

Yitang Li*, Xue Wang*, Yaojie Shen, Zhihao Liu, Siqin Wang, Yiming Zhang, Haoyang Weng, **Jia Li**, Lei Ye, Yongqi Zhang, Ziqi Han, Hao Zhao

Technical report, 2026 · Research contributor

A framework for learning reusable humanoid skills without task-specific rewards. I contributed to the unsupervised RL research on forward-backward representations, temporal contrastive learning, and whole-body control.

https://roboparty.github.io/UFO/assets/UFO.pdf

SUGAR: A Scalable Human-Video-Driven Generalizable Humanoid Loco-Manipulation Learning Framework

Tianshu Wu*, Xiangqi Kong*, Yue Chen*, Qize Yu, Hang Ye, **Jia Li**, Yizhou Wang, Hao Dong

NeurIPS 2026 · Research contributor

Learning humanoid loco-manipulation from human videos. My work covered human–object interaction priors, physics-based demonstration refinement, and the hierarchical controller and evaluation pipeline.

https://arxiv.org/abs/2605.20373

I2E: From Image Pixels to Actionable Interactive Environments for Text-Guided Image Editing

Jinghan Yu, Junhao Xiao, Chenyu Zhu, Jiaming Li, **Jia Li**, HanMing Deng, Xirui Wang, Guoli Jia, Jianjun Li, Xiang Bai, Bowen Zhou, Zhiyuan Ma

ACL 2026 · Research contributor

Turning image editing into interactions with a decomposed environment. I worked on background inpainting, mask refinement, environment-aware semantic integration, and benchmark evaluation.

https://aclanthology.org/2026.acl-long.2076/

* Equal contribution. Jia Li is highlighted in the author lists.

Research experience

RoboParty Lab May 2026 – Present

Research intern

Research mentor: Yitang Li. Academic advisor: Hao Zhao. Cross-embodiment reinforcement learning and behavioral foundation models; MimicAll and UFO.

Peking University · PKU-Agibot Lab Feb – May 2026

Research intern

Advised by Hao Dong. Human-video-driven humanoid loco-manipulation; SUGAR.

HUST · MAIR Oct 2025 – Feb 2026

Undergraduate research intern

Research advisor: Zhiyuan Ma. Academic advisor: Jianjun Li. Text-guided image editing; I2E.

Engineering projects

Academic Skills Market / ScholarSkill Mar – Jun 2026

Core contributor

Built research-skill tagging and retrieval, automated ingestion with retries and idempotent database updates, and deployment with systemd and Nginx.

- Designed multi-dimensional research tags and confidence scores for contextual search and structured recommendations.
- Built ingestion, targeted retry and idempotent update pipelines; deployed persistent services with systemd and Nginx.
- The project report records 20,852 processed skill items and 1,505 displayed entries.

LingShu · General-purpose AI assistant Jun – Aug 2025

Project contributor

Helped build a reusable library of 368 atomic actions across 29 apps, with structured action definitions and tests for cross-app task execution.

- Contributed reusable action definitions, requirements analysis, technical documentation, and functional tests.
- Supported cross-app task planning and evaluation using the 29-app, 368-action library.

Shuzheng e-Station · Government-service AI agent Jun – Aug 2025

Project contributor

Contributed domain knowledge integration, structured SFT data and benchmarks, vLLM inference, and API/database integration for a government-service agent on the Jiutian platform.

- Built reusable data-processing steps from domain documents to question–answer pairs and database records.
- Supported knowledge access, policy question answering, and evaluation of the early agent prototype.

Awards and honors

2026 National Scholarship; Merit Student, HUST

2026 National First Prize ×2, 28th China Robotics and AI Competition

2026 National Merit Award, Computer System Competency Competition · DBMS Design

2026 Outstanding Participant, Tsinghua AIR Summer Camp

2026 Provincial First Prize, 19th Chinese Collegiate Computing Competition

2026 Provincial Second Prize, China Collegiate Computing Competition · Network Technology Challenge

2026 Campus Silver Award, 12th China International College Students' Innovation Competition

2025 National Grand Prize (特等奖), 19th Challenge Cup · Open Challenge Competition

2025 Freshman Academic Excellence Scholarship (top 10%), HUST

2025 Self-Improvement Scholarship, HUST

2025 National-level project selection, Undergraduate Innovation and Entrepreneurship Training Program

2025 Provincial Second Prize, 7th Global Campus AI Algorithm Elite Challenge

2025 Provincial Third Prize, 17th Chinese Mathematics Competition for College Students

2025 Merit Award, 16th Lanqiao Cup · Visual Art Design

2025 Outstanding Student Cadre Scholarship, HUST

Leadership, volunteering and independent study

- Served as the academic affairs representative of class CS2404 (2024–2025), and joined the School of Computer Science alumni affairs center and Yuhui Workshop in 2025.
- More than 66 hours of volunteer service, including school outreach, campus events, botanical-garden volunteering, hospital guidance, and community activities.
- Self-directed study includes CS231n and CS285, alongside hands-on reproduction of robot-learning and reinforcement-learning methods.

Selected coursework

Selected coursework: Machine Learning (95), Introduction to NLP (95), Algorithm Design and Analysis Practice (97), Database Systems Practice (97), and Computer Systems Lab (99).

Technical skills

Python, C/C++, PyTorch, Isaac Lab / mjlab, Unitree RL Lab, Git, SQL, LaTeX