HAI ZHANG

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EDUCATION

THE UNIVERSITY OF HONG KONG, HONGKONG, CHINA 2025.07 – 2029.06 (expected)
DOCTOR OF PHILOSOPHY, EMBODIED ARTIFICIAL INTELLIGENCE

TONGJI UNIVERSITY, SHANGHAI, CHINA 2022.09 – 2025.03
ACADEMIC MASTER, COMPUTER SCIENCE AND TECHNOLOGY

TONGJI UNIVERSITY, SHANGHAI, CHINA 2018.09 – 2022.06
BACHELOR, COMPUTER SCIENCE AND TECHNOLOGY
with GPA of 4.76/5.0, general ranking of 8/155, top 5.16%

AWARDS

- NeurIPS 2025 Top Reviewer Award 2025.10
- SHANGHAI Excellent Graduate Award 2025.04
- Graduate National Scholarship (top 0.2%) 2024.12
- Tongji University Distinguished Student Honor (top 5%) 2024.12
- Outstanding Undergraduate Thesis 2022.06
- Outstanding Undergraduate Student Scholarship for three consecutive years 2018.09 – 2021.08

SELECTED PAPERS

For a full list of my publications, please refer to Hai's Google Scholar profile.
** means co-first author*

- **Sparse Video Generation Propels Real-World Beyond-the-View Vision-Language Navigation.** **Zhang. H***, Liang. S*, Chen. L, Li. Y, Xu. Y, Zhong. Y, Zhang. F, Li. H. *Under Review*
- **Scrutinize What We Ignore: Reining In Task Representation Shift In Context-Based Offline Meta Reinforcement Learning.** **Zhang. H**, Zheng. B, Ji. T, Liu. J, Guo. A, Zhao. J, Li. L. *In International Conference on Learning Representations (ICLR) 2025*
- **How to Fine-tune the Model: Unified Model Shift and Model Bias Policy Optimization.** **Zhang. H**, Yu. H, Zhao. J, Zhang. D, Huang. C, Zhou. H, Zhang. X, Ye. C. *In Advances in Neural Information Processing Systems (NeurIPS) 2023*
- **Towards an Information Theoretic Framework of Context-Based Offline Meta-Reinforcement Learning.** Li. L* (supervisor), **Zhang. H***, Zhang. X, Zhu. S, Yu. Y, Zhao. J, and Heng. P. *In Advances in Neural Information Processing Systems (NeurIPS) 2024* ***Spotlight(top 2%)***
- **KineDex: Learning Tactile-Informed Visuomotor Policies via Kinesthetic Teaching for Dexterous Manipulation.** Zhang. D, Yuan. C, Wen. C, **Zhang. H**, Zhao. J, Gao. Y. *In Conference on Robot Learning (CoRL) 2025* ***Spotlight***

RESEARCH EXPERIENCE

QIZHI INSTITUTE SHANGHAI, CHINA 2024.06 – up to now
RESEARCH INTERN supervised by Prof. Yang Gao

- Explore the generalization ability towards robotic manipulation via VLA architecture.

ZHEJIANG LAB HANGZHOU, ZHEJIANG, CHINA 2023.07 – 2024.05
RESEARCH INTERN supervised by Prof. Lanqing Li & Prof. Pheng-Ann Heng

- Explore generalization ability towards offline meta-reinforcement learning with model-based techniques.

Projects

OpenVLA-PLUS. 2024.06 – up to now

- Role: Substitute the backbone of OpenVLA from Llama2 7B to a small model with only 0.2B parameters to achieve computational and communication reduction. (FSDP → torch.compile + accelerate + deepspeed)
- Performance improvement on LIBERO-Long benchmark is 53.7% -> 75.6% with only 1.5 hours training on 8 × A800 GPUs.

Distributed Complete Vehicle Cloudization 2022.05 – 2023.01

- Invention Patent (Patent Number: 202310899331.2)
- National Key R&D Program
- Role: Use the distributed framework to achieve cloud-based transmission of vehicle information.

NIO, SHANGHAI, CHINA 2021.10 – 2022.03

- Intern for Backend Development Engineer
- Role: Use MongoDB and Redis database, Kafka consumer group to solve distributed events.

Unknown Environment Exploration and Application Device Based on Deep Reinforcement Learning 2020.05 – 2021.03

- Innovation and Entrepreneurship Program for SHANGHAI University Students.
- Role: Use representation learning combined with RL to achieve end-to-end vehicle driving on CARLA.

Competitions

RLChina Intelligent Agent Challenge Nonin Spring Season Curling Challenge

- Second Place in finals, Sixth Place in total scores
- Role: Optimize PPO and rule-based agent to complete curling strikes in a POMDP environment

WAIC: Meta-verse Lights Up Autonomous Driving, AI Simulation Driving Competition

- Second Place (Unique), won 40 thousand RMB
- Role: Process the perceptual information and Design the code of the decision state machine

Intel Cup National College Students Embedded System Invitational Competition

- National Second Prize
- Role: Design the overall architecture and complete the full-view image stitching

Professional Service

- Reviewer: Reinforcement Learning Conference (RLC) 2026
- Reviewer: IEEE Robotics and Automation Letters (RA-L) 2026
- Reviewer: Robotics, Science and Systems (RSS) 2026
- Reviewer: Annual AAAI Conference on Artificial Intelligence (AAAI) 2026
- Reviewer: International Conference on Learning Representations (ICLR) 2025, 2026
- Reviewer: Advances in Neural Information Processing Systems (NeurIPS) 2025