

# HAI ZHANG

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## 🎓 EDUCATION

**TONGJI UNIVERSITY, SHANGHAI, CHINA** 2022.09 – 2025.03 (expected)

MASTER, COMPUTER SCIENCE AND TECHNOLOGY  
with GPA of 85.19/100

**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%

## 📖 SKILLS AND AWARDS

- National Scholarship 2023.09 – 2024.08
- TOEFL: 93 2024.03
- Outstanding Undergraduate Thesis 2022.06
- Scholarship for outstanding students for three consecutive years 2018.09 – 2021.08

## 📄 SELECTED PAPERS

\* means co-first author, † means corresponding author

- **Scrutinize What We Ignore: Reining In Task Representation Shift In Context-Based Offline Meta Reinforcement Learning.** Hai Zhang, Boyuan Zheng, Tianying Ji, Jinhang Liu, Anqi Guo, Junqiao Zhao†, Lanqing Li†. *Under review in ICLR 2025*
- **How to Fine-tune the Model: Unified Model Shift and Model Bias Policy Optimization.** Hai Zhang, Hang Yu, Junqiao Zhao†, Di Zhang, Chang Huang, Hongtu Zhou, Xiao Zhang, and Chen Ye. *In NeurIPS 2023*
- **Towards an Information Theoretic Framework of Context-Based Offline Meta-Reinforcement Learning.** Lanqing Li\* (supervisor), Hai Zhang\*, Xinyu Zhang, Shatong Zhu, Yang Yu, Junqiao Zhao†, and Pheng-Ann Heng. *In NeurIPS 2024 Spotlight*
- **Safe Reinforcement Learning with Dead-Ends Avoidance and Recovery.** Xiao Zhang, Hai Zhang, Hongtu Zhou, Chang Huang, Di Zhang, Chen Ye†, Junqiao Zhao†. *In IEEE Robotics and Automation Letters 2023 (Oral in ICRA 2024)*
- **Focus On What Matters: Separated Models For Visual-Based RL Generalization.** Di Zhang, Bowen Lv, Hai Zhang, Feifan Yang, Hongtu Zhou, Chang Huang, Hang Yu, Chen Ye, Junqiao Zhao†, and Changjun Jiang. *In NeurIPS 2024*

## 👥 RESEARCH EXPERIENCE

**QIZHI INSTITUTE(Tsinghua University IIIS) 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(CUHK) HANGZHOU, ZHEJIANG, CHINA** 2023.07 – 2024.05

RESEARCH INTERN supervised by Prof. Lanqing Li & Prof. Pheng-Ann Heng

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

## PROJECTS

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**OpenVLA-InternVL2.** 2024.06 – up to now

- Role: Substitute the backbone of OpenVLA from Llama2 7B to InternVL2 1B to achieve computational and communication reduction while retaining the performance. (FSDP → DDP)

**Distributed Complete Vehicle Cloudization** 2022.05 – 2023.01

- Invention Patent (Submitted, 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

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**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

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- Reviewer: ICLR 2025