Zhao-Heng Yin

Education

University of California, Berkeley

2023 - 2028 (Expected)

Doctor of Philosophy (Ph.D.) - Computer Science

The Hong Kong University of Science and Technology

2021 - 2023

Master of Philosophy (M.Phil.) - Electronic and Computer Engineering

O GPA: 4.00/4.00. Advisor: Prof. Qifeng Chen.

Nanjing University

2017 - 2021

Bachelor of Science (B.S.) - Computer Science (Honored Class) and Mathematics

O GPA: 4.45/5.00. Advisor: Prof. Wu-Jun Li.

Publications

The information of the following publications can be found on my website. * indicates equal contribution.

- 1. **Zhao-Heng Yin***, Binghao Huang*, Yuzhe Qin, Qifeng Chen, Xiaolong Wang. "Rotating without Seeing: Towards In-hand Dexterity through Touch". In *Robotics: Science and Systems (RSS)*, 2023.
- 2. Jialei Huang, **Zhao-Heng Yin**, Yingdong Hu, Yang Gao. "Policy Contrastive Imitation Learning". In *International Conference on Machine Learning (ICML)*, 2023.
- 3. Ke Cheng, Sheng Zhang, Chenghong Tu, Xiaohang Shi, **Zhao-Heng Yin**, Sanglu Lu, Yu Liang; Qing Gu. "ProScale: Proactive Autoscaling for Microservice With Time-Varying Workload At the Edge". In *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 2023.
- 4. **Zhao-Heng Yin**, Weirui Ye, Qifeng Chen, Yang Gao. "Planning for Sample Efficient Imitation Learning". In *Neural Information Processing Systems (NeurIPS)*, 2022.
- Zhao-Heng Yin, Lingfeng Sun, Hengbo Ma, Masayoshi Tomizuka, Wu-Jun Li. "Cross Domain Robot Imitation with Invariant Representation". In *IEEE International Conference on Robotics and Automation (ICRA)*, 2022.
- 6. **Zhao-Heng Yin**, Yang Gao, Qifeng Chen. "Spatial Generalization of Visual Imitation Learning with Position-Invariant Regularization". In *Conference on Robot Learning (CoRL)* workshop on Aligning Robot Representation with Humans (Long Paper), 2022.
- 7. Yuzhe Qin*, Binghao Huang*, **Zhao-Heng Yin**, Hao Su, Xiaolong Wang. "DexPoint: Generalizable Point Cloud Reinforcement Learning for Sim-to-Real Dexterous Manipulation". In *Conference on Robot Learning (CoRL)*, 2022.
- 8. **Zhao-Heng Yin***, Lingfeng Sun*, Liting Sun, Masayoshi Tomizuka, Wei Zhan. "Diverse Critical Interaction Generation for Planning and Planner Evaluation". In *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2021.
- 9. **Zhao-Heng Yin**, Wu-Jun Li. "TOMA: Topological Map Abstraction for Reinforcement Learning". *arXiv* preprint:2005.06061, 2020.

Research Experience

Below are some of my previous research affiliations.

HKUST with Prof. Qifeng Chen.	2022-2023
Tsinghua University with Prof. Yang Gao.	2021-2023
University of California, San Diego with Prof. Xiaolong Wang.	2022-2023
University of California, Berkeley with Prof. Masayoshi Tomizuka.	2020

Skills

- o Language: English, Chinese.
- o **Programming:** C, C++, Python, Java, MATLAB, Verilog HDL, HTML/CSS/Javascript, Shell, TEX.
- O Toolsets: Docker, Kubernetes, Git, Linux.
- O Physics Simulation: MuJoCo, PyBullet, SAPIEN, IsaacGym.
- General Engineering Skills: 3D Modeling (Solidworks and Blender), Embedded System Design (STM32 and Arduino), ROS, FPGA, Analog Circuit.

Honors and Awards

National Elite Scholarship, China

2020, 2021