Zhao-Heng Yin

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Document Name: Zhaoheng Yin

Education

University of California, Berkeley   **2023 - 2028 (Expected)**
Doctor of Philosophy (Ph.D.) - Computer Science
○ Advisor: Prof. Pieter Abbeel.

Hong Kong University of Science and Technology   **2021 - 2023**
Master of Philosophy (M.Phil.) - Electronic and Computer Engineering
○ GPA: 4.00/4.00. Advisor: Prof. Qifeng Chen.

Nanjing University   **2017 - 2021**
Bachelor of Science (B.S.) - Computer Science (Honored Class) and Mathematics
○ 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.

5. **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.

University of California, Berkeley with Prof. Pieter Abbeel.   2023–present
Hong Kong University of Science and Technology 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

Nanjing University with Prof. Wu-Jun Li. 2019–2021

Skills

- **Language:** English, Chinese.
- **Programming:** C, C++, Python, Java, MATLAB, Verilog HDL, HTML/CSS/Javascript, Shell, TEX.
- **Toolsets:** Docker, Kubernetes, Git, Linux.
- **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