

# Zhao-Heng Yin

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Document Name: Zhaoheng Yin

## Education

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| <b>University of California, Berkeley</b><br><i>Doctor of Philosophy (Ph.D.) - Computer Science</i>   | <b>2023 - 2028 (Expected)</b> |
| <b>The Hong Kong University of Science and Technology</b><br><i>Master of Philosophy (M.Phil.) - Electronic and Computer Engineering</i><br>○ GPA: 4.00/4.00. Advisor: Prof. Qifeng Chen. | <b>2021 - 2023</b>            |
| <b>Nanjing University</b><br><i>Bachelor of Science (B.S.) - Computer Science (Honored Class) and Mathematics</i><br>○ GPA: 4.45/5.00. Advisor: Prof. Wu-Jun Li.                          | <b>2017 - 2021</b>            |

## 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.

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

## Skills

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- **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

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**National Elite Scholarship**, China

2020, 2021