

Tao Huang

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EDUCATION

- The Chinese University of Hong Kong, Hong Kong, China** Aug. 2022 – Present
M.Phil. in Computer Science and Engineering, advised by Qi Dou
- **Research focus:** Robot Learning, Reinforcement Learning
- ShanghaiTech University, Shanghai, China** Sep. 2018 – July 2022
B.E. in Computer Science and Technology, GPA: 3.75 (5/253)
- **Coursework:** Machine Learning (A+), Reinforcement Learning (A+), Convex Optimization (A+), Numerical Optimization (A), Matrix Computation (A+), Linear Algebra (A+), Probability and Mathematical Statistics (A+), Mathematical Analysis (A), Discrete Mathematics (A), Communication Systems (A), Signals and Systems (A-)

PUBLICATIONS

- **Tao Huang***, Guangqi Jiang*, Yanjie Ze, Huazhe Xu (2023). Diffusion Reward: Learning Rewards via Conditional Video Diffusion. ([In submission to CVPR](#))
- **Tao Huang***, Kai Chen*, Wang Wei, Jianan Li, Yonghao Long, Qi Dou (2023). Value-Informed Skill Chaining for Policy Learning of Long-Horizon Tasks with Surgical Robot. IEEE/RSJ International Conference on Intelligent Robots and Systems ([IROS 2023](#))
- **Tao Huang**, Kai Chen, Bin Li, Yun-Hui Liu, Qi Dou (2023). Demonstration-Guided Reinforcement Learning with Efficient Exploration for Task Automation of Surgical Robot. IEEE International Conference on Robotics and Automation. ([ICRA 2023](#))
- Yonghao Long, Wang Wei, **Tao Huang**, Yuehao Wang, Qi Dou (2023). Human-in-the-loop Embodied Intelligence with Interactive Simulation Environment for Surgical Robot Learning. IEEE Robotics and Automation Letters ([RA-L 2023](#))
- **Tao Huang***, Jiachen Wang*, Xiao Chen (2022). Accelerating Representation Learning with View-Consistent Dynamics in Data-Efficient Reinforcement Learning. ([Preprint 2022](#))
- Yinxu Tang, **Tao Huang**, Xi Huang, Ziyu Shao, and Yang Yang (2022). Learning-Aided Stable Matching for Switch Controller Association in SDN Systems. IEEE International Conference on Communications. ([ICC 2022](#))

WORKING EXPERIENCES

- Shanghai AI Laboratory**, Remote Research Intern, advised by Jiangmiao Pang Sep. 2023 – Present
Shanghai Qi Zhi Institute, Research Intern, advised by Huazhe Xu Aug. 2023 – Present
Tencent Robotics X, Summer Research Intern, advised by He Zhang June. 2023 – Aug. 2023

HONORS AND AWARDS

- Graduate Scholarship, CUHK Aug. 2022
Outstanding Graduates Award, Shanghai July. 2022
Outstanding Graduates Award, ShanghaiTech University July. 2022
Second Prize in Chinese Undergraduate Mathematical Contest in Modeling, China Dec. 2020
First Class Scholarship (Top 2%) of ShanghaiTech University Nov. 2019, 2020, 2021
Outstanding Student (Top 5%) of ShanghaiTech University Nov. 2019, 2020, 2021

SKILLS

- Language:** [TOFEL 109](#): reading 30, listening 28, speaking 23, writing 28; [CET6 609](#)
Programming: Python, MatLab, PyTorch, ROS (little)
Data Analysis: Seaborn, Matplotlib, Pandas, Numpy
Developer Tools: Linux, LaTeX, Github