Yiwen Hou

☐ (+86) 153 1978 7828 | @ houyiwen@mail.ustc.edu.cn

RESEARCH INTERESTS

Reinforcement Learning; Robot Learning;

EDUCATION

University of Science and Technology of China   09/2021 − 06/2024 (expected)
M.S. in Computer Science and Technology; **GPA: 3.84/4.3** *(Ranking: Top 10%)*
Advisor: Prof. Feng Wu

University of Science and Technology of China   09/2017 − 06/2021
B.S. in Computer Science and Technology; **GPA: 3.63/4.3** *(Ranking: Top 30%)*

PUBLICATIONS AND PRE-PRINTS

1. **Yiwen Hou***, Jinming Ma*, Haoyuan Sun, Feng Wu. Effective Offline Robot Learning with Structured Task Graph, IEEE Robotics and Automation Letters (**RA-L**), 2024. [pdf]

2. **Yiwen Hou**, Haoyuan Sun, Jinming Ma, Feng Wu. Improving Offline Reinforcement Learning with Inaccurate Simulators, IEEE International Conference on Robotics and Automation (**ICRA**), 2024. (accepted)

3. Yueyang Wen, **Yiwen Hou**, Feng Wu. Interactive Point Cloud Segmentation with Click Region Refinements, International Joint Conference on Artificial Intelligence (**IJCAI**), 2024. (Under Review)

4. Tianjian Yang, Hao Zhou, Shuo Liu, Kaiwen Guo, **Yiwen Hou**, Haohua Du, Zhi Liu, Xiang-Yang Li. SGSM: Semi-generalist Sensing Model as a Novel Sensing Scheme, ACM International Conference on Mobile Systems, Applications, and Services (**IWQoS**), 2024. (Under Review)

RESEARCH EXPERIENCE

USTC Robotics Lab (Formerly Multi-Agent Systems Laboratory) [web]   Hefei, China
Master Student, Advisor: Prof. Feng Wu   *09/2021 − Present, Full-time*
Working on offline reinforcement learning, sim-to-real transfer, and applications in robotic manipulation.

- By extracting the structured information in the offline datasets as a task graph, we combined the techniques of dataset augmentation and subtask relabeling to learn a subtask-conditioned policy. We further deployed and demonstrated the effectiveness of our method in complex real-world manipulation tasks.
- To improve offline reinforcement learning, we utilize the inaccurate simulator to supplement the limited offline dataset by leveraging a GAN model. We further validate the proposed method on real-world kinova arm.

AWARDS

First Prize Academic Scholarship, University of Science and Technology of China   2021, 2022, 2023
Outstanding Student Scholarship, University of Science and Technology of China   2018, 2019, 2020

TEACHING EXPERIENCE

Computer Programming A   Fall 2021
Teaching Assistant, University of Science and Technology of China

C Language Programming II   Spring 2021
Teaching Assistant, University of Science and Technology of China

SKILLS

Python, C/C++, PyTorch, Git, Mujoco, ROS, LaTeX.