Jiahui Zhang

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Education

University of Southern California

Los Angeles, CA, US Jan 2020 - Dec 2021

Beijing, China

Master of Science

Major: Electrical Engineering

Beijing University of Technology

Bachelor of Engineering Sept 2015 - Jul 2019

Major: Electrical Information Engineering

Research Experience

Duke General Robotics Lab Sept 2023 - Mar 2024

Advisor: Prof. Boyuan Chen

Durham, NC, US

· Leading project human-guided robot learning.

· Building a simulator for healthcare.

Advisor: Prof. Joseph J Lim

Horizon Robotics General AI Lab Jan 2023 - Jul 2023

Advisor: Dr. Haonan Yu, CEO. Wei Xu Cupertino, CA, US (Remote)

• Led project Cross Domain Imitation Learning Through MPC.

Cognitive Learning for Vision and Robotics Lab

Aug 2021 - Jul 2023

Los Angeles, CA, US

• Use large language model to help reinforcement learning to learn long-horizon tasks.

• Deploy reinforcement learning algorithms on the real robot.

USC Media Communications Lab Jan 2021 - May 2021

Advisor: Prof. C.-C. Jay Kuo Los Angeles, CA, US

• Co-led project Coarse-to-fine Image Deonsing with Spectrum Decomposition.

Beijing University of Technology Multimedia Information Processing and Imaging Lab Jul 2018 - Jun 2019

Advisor: Prof. Luheng Jia Beijing, China

• Independently completed project Video Rate Control via Saliency Detection.

Beijing University of Technology Artificial Intelligence and Robotics Research Center

Dec 2016 - Mar 2018 Beijing, China Advisor: Prof. Xiaoqing Zhu

• Designed and implemented a hexapod robot's structure and control algorithm.

Publication

- 1. Jesse Zhang, Jiahui Zhang, Karl Pertsch, Ziyi Liu, Xiang Ren, Minsuk Chang, Shao-Hua Sun, and Joseph J Lim. Bootstrap your own skills: Learning to solve new tasks with large language model guidance. In 7th Annual Conference on Robot Learning, 2023 [Website] [Arxiv]
- 2. Jesse Zhang, Karl Pertsch, **Jiahui Zhang**, and Joseph J Lim. SPRINT: Scalable Policy Pre-Training via Language Instruction Relabeling. 2023. CoRL 2023 Submission. Spotlight at LangRob Workshop at CoRL 2022 [Website] [Arxiv]
- 3. Xiaoqing Zhu, Dengyu Ran, Chentong Xiang, Jiahui Zhang, Ge Li, Zhicheng Chen, and Yuwen Fang. Design, Analysis and Experiments of Bionic Hexapod Robot with Multilayer C-shape Legs for Unstructured Terrain. In 2018 13th World Congress on Intelligent Control and Automation (WCICA), pages 438-443, 2018

Award and Scholarship

2018 **Principle Scholarship (Top 10 Teams)**, Beijing University of Technology Beijing, China Beijing, China

2017 Outstanding Research Achievement Award, Beijing University of Technology, Fan Gongxiu Honors College

Skills

Programming Python, PyTorch, Linux, TensorFlow, MATLAB, etc.

Report Keynote, PowerPoint, LaTeX, Word, Excel, etc.