Zhanyi Sun

zhanyis@stanford.edu — Website — Google Scholar — (832) 661-5087

Education

Stanford University, Stanford, CA

Sep 2024 — Present

 $Ph.D.\ in\ Electrical\ Engineering$

Advisor: Shuran Song

Carnegie Mellon University, Pittsburgh, PA

Aug 2022 — Jun 2024

Master of Science in Robotics

 $Advisors:\ David\ Held,\ Zackory\ Erickson$

Rice University, Houston, TX

Aug 2018 — May 2022

B.S. in Electrical Engineering and B.A. in Computer Science

Advisors: Lydia Kavraki, Vaibhav Unhelkar

Publications (* indicates equal contribution)

RL-VLM-F: Reinforcement Learning from Vision Language Foundation Model Feedback

Yufei Wang*, **Zhanyi Sun***, Jesse Zhang, Xian Zhou, Erdem Bıyık, David Held[†], Zackory Erickson[†] International Conference on Machine Learning (ICML), 2024 Project Website, Paper, code

Force-Constrained Visual Policy: Safe Robot-Assisted Dressing via Multi-Modal Sensing

Zhanyi Sun*, Yufei Wang*, David Held†, Zackory Erickson†

IEEE Robotics and Automation Letters (RA-L), 2024

Project Website, Paper

One Policy to Dress Them All: Learning to Dress People with Diverse Poses and Garments

Yufei Wang, **Zhanyi Sun**, Zackory Erickson[†], David Held[†]

Robotics: Science and Systems (RSS), 2023

Project Website, Paper

ViTCoD: Vision transformer acceleration via dedicated algorithm and accelerator co-design

Haoran You, **Zhanyi Sun**, Huihong Shi, Zhongzhi Yu, Yang Zhao, Yongan Zhang, Chaojian Li, Baopu Li, Yingyan Lin *IEEE International Symposium on High-Performance Computer Architecture (HPCA)*, 2023 Paper, Code

Supertickets: Drawing task-agnostic lottery tickets from supernets via jointly architecture searching and parameter pruning

Haoran You, Baopu Li, **Zhanyi Sun**, Xu Ouyang, Yingyan Lin European Conference on Computer Vision (ECCV), 2022

Paper, Code

Human-guided motion planning in partially observable environments

Carlos Quintero-Pena*, Constantinos Chamzas*, **Zhanyi Sun**, Vaibhav Unhelkar, Lydia E Kavraki *International Conference on Robotics and Automation (ICRA)*, 2022
Project Website, Paper

Work & Teaching Experience

Software Engineering Intern, Infrastructure Team

May 2020 - Aug 2020

Facebook, Inc.

- Designed and implemented a resource manager service that maintains life cycles of various internal testing platforms.
- Designed and implemented a flexible resource managing API that enables other teams to plug in their testing platforms.

Skills

- Programming: Python, C, C++, Julia, Java, MATLAB, Verilog, SQL, PHP
- Libraries: PyTorch, TensorFlow, Keras, OpenCV, ROS, MuJoCo, Bullet, Blender
- Physical Robots: Experience with Sawyer, Franka Panda, and Fetch.

Professional Service

Reviewer for CoRL (2023, 2024), ICRA (2024), IROS (2024)