Shivin Dass

https://shivindass.github.io
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RESEARCH INTERESTS

My research goal is to develop generalist robotics that can do everyday tasks in complex unstructured real-world environments. To this end, my current research focuses on scaling data collection and finding efficient ways of using this data to train generalist robots, especially via imitation learning. I believe that expanding both expert and autonomous datasets in real-world, supplemented by simulation, is crucial for creating robust generalist robots and kick-start the robot data 'flywheel'.

EDUCATION

University of Texas at Austin, Austin, TX — Aug 2023 - Current
Ph.D. in Computer Science (Advisor: Roberto Martín-Martín) — GPA: 3.67

University of Southern California, Los Angeles, CA — Aug 2021 - May 2023
Masters in Computer Science with Specialization in Intelligent Robotics (Distinction) — GPA: 4

Indraprastha Institute of Information Technology, Delhi, India — Aug 2016 - Aug 2020
Bachelor of Technology, Computer Science and Engineering (Distinction) — CGPA: 9.49/10

PUBLICATIONS

[6] **Shivin Dass**, Jiaheng Hu, Ben Abbatematteo, Peter Stone, and Roberto Martín-Martín. "Learning to Look: Seeking Information for Decision Making via Policy Factorization", *Conference on Robot Learning (CoRL)*, 2024

[5] **Shivin Dass**, Wensi Ai, Yuqian Jiang, Samik Singh, Jiaheng Hu, Ruohan Zhang, Peter Stone, Ben Abbatematteo, and Roberto Martín-Martín. "TeleMoMa: A Modular and Versatile Teleoperation System for Mobile Manipulation", *ICRA MoMa Workshop & RSS DGR Workshop*, 2024

[4] Alexander Khazatsky, Karl Pertsch, Suraj Nair, Ashwin Balakrishna, Sudeep Dasari, Siddharth Karamcheti, Soroush Nasiriany, Mohan Kumar Srirama, ..., and **Shivin Dass** et al.. "Droid: A large-scale in-the-wild robot manipulation dataset", *Robotics: Science and Systems (RSS)*, 2024

[3] Huihan Liu, **Shivin Dass**, Roberto Martín-Martín, and Yuke Zhu. "Model-based runtime monitoring with interactive imitation learning", *IEEE International Conference on Robotics and Automation (ICRA)*, 2024

[2] Open X-Embodiment Collaboration. "Open X-Embodiment: Robotic Learning Datasets and RT-X Models", *IEEE International Conference on Robotics and Automation (ICRA)*, 2024

[1] **Shivin Dass***, Karl Pertsch*, Hejia Zhang, Youngwoon Lee, Joseph J. Lim, and Stefanos Nikolaidis. "PATO: Policy Assisted TeleOperation for Scalable Robot Data Collection", *Robotics: Science and Systems (RSS)*, 2023

TEACHING

Teaching Assistant, UT Austin — Spring 2024
Freshman Research Initiative (Robotics)

Teaching Assistant, USC — Fall 2022
CSCI-570 Analysis of Algorithms

Teaching Assistant, USC — Summer 2022
CSCI-570 Analysis of Algorithms

Teaching Assistant, USC   Spring 2022
CSCI-561 Foundations of Artificial Intelligence

EXPERIENCE

Cognitive Learning for Vision and Robotics (CLVR) Lab, USC, CA   Aug 2021 - May 2023
Deep Learning Graduate Researcher with Joseph Lim
- Research in robot learning and deep learning

Astech Systems, Remote   May 2022 - Aug 2022
Computer Vision Intern
- Research in Computer Vision and deploying logo detection framework in live television video streams

TensorClass, New Delhi, India   Aug 2020 - Aug 2021
Startup Co-Founder
- A web-based e-learning platform with mentor matching to make education accessible during Covid19

Collaborative Robotics Lab, IIIT Delhi, India   Jan 2019 - Dec 2019
Researcher
- Research in multi-agent path planning in communication restricted settings

COMMUNITY SERVICES AND AWARDS

Awards
- *World Robotics Olympiad 2013*, National Rank 4
- *World Robotics Olympiad 2014*, National Rank 1, World Rank 18
- Dean's List of Academic Excellence, IIIT Delhi (2017 and 2018)

Reviewer
- Robotics Automation Letters (RA-L)
- CoRL Deployable Workshop, 2023
- CoRL X-Embodiment Workshop, 2024

Student Organizations
- President of the Sports Council, IIIT Delhi, 2018-2020
- Member of the Students' Council, IIIT Delhi, 2019-2020

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