Mohit Shridhar

mohitshridhar.com mshr@cs.washington.edu
github.com/MohitShridhar

RESEARCH INTERESTS Language Grounding, Action-Centric Perception, Human-Robot Interaction, Generative Models, Foundation Models, 3D Perception and Graphics

EDUCATION

University of Washington 2018 - 2023
PhD in Computer Science
Advised by: Dieter Fox
Committee: Leslie Kaelbling, Luke Zettlemoyer, Blake Hannaford

University of Washington 2018 - 2020
Masters in Computer Science

National University of Singapore 2012 - 2016
B.Eng in Computer Engineering, Minor in Techno-Entrepreneurship
Honors with Distinction
Advised by: David Hsu

Stanford 2015 - 2015
NUS Overseas College - one year program

PUBLICATIONS **Representative papers**. See Google Scholar and Semantic Scholar for all papers.

Conferences

(C10) **Generative Image as Action Models**
Conference on Robot Learning (CoRL) 2024
Mohit Shridhar*, Yat Long Lo*, Stephen James

(C9) **Gensim: Generating Robotic Simulation Tasks via Large Language Models**
International Conference on Learning Representations (ICLR) 2024
Lirui Wang, Yiyang Ling, Zhecheng Yuan, Mohit Shridhar, Chen Bao, Yuzhe Qin, Bailin Wang, Huazhe Xu, Xiaolong Wang

(C8) **AR2-D2: Training a Robot without a Robot**
Conference on Robot Learning (CoRL) 2023
Jiafei Duan, Yi Ru Wang, Mohit Shridhar, Dieter Fox, Ranjay Krishna

(C7) **Perceiver-Actor: A Multi-Task Transformer for Robotic Manipulation**
Conference on Robot Learning (CoRL) 2022
Mohit Shridhar, Lucas Manuelli, Dieter Fox

(C6) **CLIPort: What and Where Pathways for Robotic Manipulation**
Conference on Robot Learning (CoRL) 2021
Mohit Shridhar, Lucas Manuelli, Dieter Fox

(C5) **Language Grounding with 3D Objects**
Conference on Robot Learning (CoRL) 2021
Jesse Thomason*, Mohit Shridhar*, Yonatan Bisk, Chris Paxton, Luke Zettlemoyer

(C4) **ALFWorld: Aligning Text and Embodied Environments for Interactive Learning**
International Conference on Learning Representations (ICLR) 2021
Mohit Shridhar, Xingdi Yuan, Marc-Alexandre Côté,
Yonatan Bisk, Adam Trischler, Matthew Hausknecht

(C3) **ALFRED: A Benchmark for Interpreting Grounded Instructions for Everyday Tasks.**
Computer Vision and Pattern Recognition (CVPR) 2020
Mohit Shridhar, Jesse Thomason, Daniel Gordon, Yonatan Bisk
Winson Han, Roozbeh Mottaghi, Luke Zettlemoyer, Dieter Fox

(C2) **Interactive Visual Grounding of Referring Expressions for Human-Robot Interaction.**
Robotics: Science and Systems (RSS) 2018
Mohit Shridhar, David Hsu

(C1) **XPose: Reinventing user interaction with flying cameras.**
Robotics: Science and Systems (RSS) 2017
Ziquan Lan, Mohit Shridhar, David Hsu, Shengdong Zhao
Best Systems Paper Award

Journals

(J1) **INGRESS: Interactive Visual Grounding of Referring Expressions.**
International Journal of Robotics Research (IJRR) 2020
Mohit Shridhar, Dixant Mittal, David Hsu

Preprints

(P2) **PerAct^2: A Perceiver Actor Framework for Bimanual Manipulation Tasks**
ArXiv 2024
Markus Grotz, Mohit Shridhar, Tamim Asfour, Dieter Fox

(P1) **Retrospectives on the Embodied AI Workshop.**
ArXiv 2022
Matt Deitke et al.

Workshops

(W1) **Grounding Spatio-Semantic Referring Expressions for Human-Robot Interaction.**
RSS Workshop on Spatial-Semantic Representations in Robotics 2017
Mohit Shridhar, David Hsu

EXPERIENCE

Google Deepmind, London — Nov 2024 - Present
Research Scientist

Dyson, London — Jul 2023 - Oct 2024
Research Scientist

NVIDIA, Seattle — Jun 2022 - Sep 2022
Research Intern

Microsoft, Redmond — Jun 2020 - Sep 2020
Research Intern

NVIDIA, Seattle — Jan 2020 - May 2020
Research Intern

M^{2}AP Lab, Singapore — Jan 2016 - Aug 2018
Research Assistant

Meta Co, Redwood City — Jan 2015 - Dec 2015
Computer Vision and Graphics Intern

Hope Technik, Singapore — May 2014 - Aug 2014
Robotics Intern

SERVICES

Reviewer for CoRL, ICRA, IROS, RSS, T-HRI, RA-L, ACL, SIGGRAPH, ICCV, CVPR, TMLR, IJRR, IJCAI.

Area Chair for CoRL 2024.

TECHNICAL SKILLS

Languages: Python (most familiar), C++
Frameworks: PyTorch, OpenCV, ROS, Unity3D, MTurk

ORGANIZER

Co-Organizer: A Future Roadmap for Sensorimotor Learning at ICRA-24

Co-Organizer: EAI Workshop at CVPR-23

Co-Organizer: Language and Robot Learning (LangRob) Workshop at CoRL-22

Co-Organizer: ALFRED and TEACh Challenge @ EAI Workshop at CVPR-22

Co-Organizer: ALFRED Challenge @ EAI Workshop at CVPR-21

Co-Organizer: Embodied Vision, Actions & Language Workshop (EVAL) at ECCV-20

AWARDS & HONORS

NVIDIA Graduate Fellowship (2022)

Paul G. Allen Fellowship (2018), University of Washington

Best Systems Paper Award in Memory of Seth Teller (2017), RSS

NUS 30th Annual Faculty Innovation and Research Award (2016), Undegrad Thesis

NUS Overseas College Scholarship (2015), Exchange Program at Stanford

ASEANpreneurs Autodesk Design Challenge (2014), First Place

INVITED TALKS

Mila Robot Learning Seminar (May 2023)

Stanford Vision and Learning Lab (May 2023)

Boston Dynamics AI Institute (Feb 2023)

RAIL Lab – Postdoc Job Talk @ Berkeley (Feb 2023)

AIR Seminar @ UofT (Oct 2022)

Machines in Motion Lab @ NYU (Oct 2022)

AI & Analytics – Talk Series @ A*STAR (Aug 2022)

iGibson Team @ Stanford (Mar 2022)

CAIR Lab @ Columbia (Jan 2022)

Language & Intelligence Group @ MIT (Dec 2021)

Robotics Group @ Brown (Oct 2021)

RAIVN Lab @ UW (Sept 2021)

AdaComp Lab @ NUS (Oct 2021)

GUEST LECTURES

University of Minnesota
Course: Deep Learning for Robot Perception (2023)