

EDUCATION

The University of Texas at Austin

Ph.D., Computer Science 2020 – present
Adviser: Prof. Yuke Zhu
GPA: 4.0/4.0

University of California, Berkeley

M.S., Electrical Engineering and Computer Science 2019 – 2020
Adviser: Prof. Sergey Levine
GPA: 4.0/4.0
B.A., Computer Science 2015 – 2019
GPA: 3.97/4.0

Selected coursework: Deep RL, Deep Unsupervised Learning, Robot Learning, Human-Robot Interaction, Convex Optimization, Linear System Theory, Visual Perception, Sensory-Motor Systems, Grounded NLP

RESEARCH EXPERIENCE

Robot Perception and Learning Lab (RPL), UT Austin

2020 – present

Advised by Professor Yuke Zhu

Research Focus: Robot Learning, Robot Manipulation, Imitation Learning

Robotic AI & Learning Lab (RAIL), UC Berkeley

2016 – 2020

Advised by Professor Sergey Levine

Research Focus: Deep Reinforcement Learning, Planning, Representation Learning

Molecular Cell Biomechanics Lab, UC Berkeley

2015 – 2016

Advised by Professor Mohammad Mofrad

Research Focus: NLP, Machine Learning for Health

INDUSTRY EXPERIENCE

Research Intern, NVIDIA

Sept 2024 - present

Generalist Embodied Agent Research group

Research Intern, Google DeepMind

Oct 2023 - July 2024

Foundation models for robotics

Research Intern, NVIDIA

June 2022 - Jan 2023

Scaling imitation learning with automatically generated robot demonstrations

Software Engineering Intern, Facebook

May 2017 - Aug 2017

Managing distributed systems at scale with Apache ZooKeeper

PUBLICATIONS AND MANUSCRIPTS

RT-Affordance: Affordances are Versatile Intermediate Representations for Robot Manipulation

Soroush Nasiriany, Sean Kirmani, Tianli Ding, Laura Smith, Yuke Zhu, Danny Driess, Dorsa Sadigh, Ted Xiao
IEEE International Conference on Robotics and Automation (ICRA), 2025

RoboCasa: Large-Scale Simulation of Everyday Tasks for Generalist Robots

Soroush Nasiriany, Abhiram Maddukuri*, Lance Zhang*, Adeet Parikh, Aaron Lo, Abhishek Joshi, Ajay Mandlekar, Yuke Zhu
Robotics: Science and Systems (RSS), 2024

DROID: A Large-Scale In-The-Wild Robot Manipulation Dataset

Alexander Khazatsky, Karl Pertsch, Suraj Nair, Ashwin Balakrishna, Sudeep Dasari, Siddharth Karamcheti, **Soroush Nasiriany**, ..., Yuke Zhu, Thomas Kollar, Sergey Levine, Chelsea Finn
Robotics: Science and Systems (RSS), 2024

PIVOT: Iterative Visual Prompting Elicits Actionable Knowledge for VLMs

Soroush Nasiriany*, Fei Xia*, Wenhao Yu*, Ted Xiao*, Jacky Liang, Ishita Dasgupta, Annie Xie, Danny Driess, Ayzaan Wahid, Zhuo Xu, Quan Vuong, Tingnan Zhang, Tsang-Wei Edward Lee, Kuang-Huei Lee, Peng Xu, Sean Kirmani, Yuke Zhu, Andy Zeng, Karol Hausman, Nicolas Heess, Chelsea Finn, Sergey Levine, Brian Ichter*
International Conference on Machine Learning (ICML), 2024

PRIME: Scaffolding Manipulation Tasks with Behavior Primitives for Data-Efficient Imitation Learning

Tian Gao, **Soroush Nasiriany**, Huihan Liu, Quantao Yang, Yuke Zhu
IEEE Robotics and Automation Letters (RA-L), 2024

MimicGen: A Data Generation System for Scalable Robot Learning using Human Demonstrations

Ajay Mandlekar, **Soroush Nasiriany***, Bowen Wen*, Iretiayo Akinola, Yashraj Narang, Linxi Fan, Yuke Zhu, Dieter Fox
Conference on Robot Learning (CoRL), 2023

Robot Learning on the Job: Human-in-the-Loop Manipulation and Learning During Deployment

Huihan Liu, **Soroush Nasiriany**, Lance Zhang, Zhiyao Bao, Yuke Zhu
Robotics: Science and Systems (RSS), 2023
Best Paper Award Finalist

Learning and Retrieval from Prior Data for Skill-based Imitation Learning

Soroush Nasiriany, Tian Gao, Ajay Mandlekar, Yuke Zhu
Conference on Robot Learning (CoRL), 2022

Augmenting Reinforcement Learning with Behavior Primitives for Diverse Manipulation Tasks

Soroush Nasiriany, Huihan Liu, Yuke Zhu
IEEE International Conference on Robotics and Automation (ICRA), 2022
Outstanding Learning Paper

What Matters in Learning from Offline Human Demonstrations for Robot Manipulation

Ajay Mandlekar, Danfei Xu, Josiah Wong, **Soroush Nasiriany**, Chen Wang, Rohun Kulkarni, Li Fei-Fei, Silvio Savarese, Yuke Zhu, Roberto Martín-Martín
Conference on Robot Learning (CoRL), 2021
Oral Presentation

robosuite: A Modular Simulation Framework and Benchmark for Robot Learning

Yuke Zhu, Josiah Wong, Ajay Mandlekar, Roberto Martín-Martín, Abhishek Joshi, **Soroush Nasiriany**, Yifeng Zhu
Technical report, 2020

DisCo RL: Distribution-Conditioned Reinforcement Learning for General-Purpose Policies

Soroush Nasiriany*, Vitchyr H. Pong*, Ashvin Nair*, Alexander Khazatsky, Glen Berseth, Sergey Levine
IEEE International Conference on Robotics and Automation (ICRA), 2021

Planning with Goal-Conditioned Policies

Soroush Nasiriany*, Vitchyr H. Pong*, Steven Lin, Sergey Levine
Advances in Neural Information Processing Systems (NeurIPS), 2019

A Comprehensive Guide to Machine Learning

Soroush Nasiriany, Garrett Thomas, William Wei Wang, Alex Yang, Jennifer Listgarten, Anant Sahai
CS 189 Official Course Textbook, 2018
snasiriany.me/files/ml-book.pdf

Text Analysis and Automatic Triage of Posts in a Mental Health Forum

Ehsaneddin Asgari, **Soroush Nasiriany**, Mohammad R.K. Mofrad

NAACL-HLT Workshop on Computational Linguistics and Clinical Psychology, 2016

OPEN SOURCE PROJECTS

RoboCasa: Large-Scale Simulation of Everyday Tasks for Generalist Robots

github.com/robocasa/robocasa

Project lead.

RoboSuite: A Modular Simulation Framework and Benchmark for Robot Learning

github.com/ARISE-Initiative/robosuite

Core developer.

RoboMimic: A Framework for Robot Learning from Demonstration

github.com/ARISE-Initiative/robomimic

Core developer.

MimicGen: A Data Generation System for Scalable Robot Learning using Human Demonstrations

github.com/NVlabs/mimicgen

Contributor.

TEACHING AND SERVICE

CS 391R: Robot Learning, UT Austin

CS 343: Artificial Intelligence, UT Austin

CS 189: Machine Learning, UC Berkeley

Lead developer of official course guide: snasiriany.me/files/ml-book.pdf

CS 285: Deep Reinforcement Learning, UC Berkeley

Reviewer for CoRL, ICRA, NeurIPS, ICLR, ICML, IROS, IJRR

Organizer of [UT Robot Learning Reading Group](#)

Member of admissions committee, UT Austin Computer Science Master's program