# Soroush Nasiriany

#### 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

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

MimicGen: A Data Generation System for Scalable Robot Learning using Human Demonstrations Ajay Mandlekar, Soroush Nasiriany, Bowen Wen, Iretiayo Akinola, Yashraj Narang, Yuke Zhu, Dieter Fox In Submission, 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

# TEACHING AND SERVICE

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