Soroush Nasiriany

{firstname} at cs.utexas.edu
snasiriany.me

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 - present
Scalable imitation learning via retrieval from large prior robotic datasets

Software Engineering Intern, Facebook — May 2017 - Aug 2017
Managing distributed systems at scale with Apache ZooKeeper

Publications

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

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

Organizer of UT Robot Learning Reading Group

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