

Simar Kareer

CONTACT INFORMATION

PhD Student @ Georgia Tech Advised by Judy Hoffman and Danfei Xu
LinkedIn | Website
E-mail: skareer@gatech.edu

RESEARCH INTERESTS

My research focuses on deep learning and robotics. I aim to develop skillful robots that can act in the real world by leveraging vast data sources. I develop both deep learning algorithms and systems to achieve this.

EDUCATION

Georgia Institute of Technology Aug 2022 – Nov 2026
PhD, Computer Science GPA: 4.0
Advised by Judy Hoffman and Danfei Xu
Teaching robots to manipulate objects via egocentric human videos.

Georgia Institute of Technology Aug 2021 – May 2022
Master of Science, Computer Science GPA: 4.0
Worked with Dhruv Batra and Sehoon Ha
Enabled a quadruped robot to navigate cluttered indoor environments using deep reinforcement learning and computer vision.

Georgia Institute of Technology Aug 2018 – May 2021
Bachelor of Science, Computer Science GPA: 3.97
Advised by Jacob Abernethy
Collaborated with Jacob Abernethy, Satyen Kale and Pranjal Awasthi on adversarial robustness. Published undergraduate thesis.

RESEARCH EXPERIENCE

NVIDIA 2026 – Present
Research Intern, GEAR, Human2Robot org led by Danfei Xu
Researching the science of pretraining robot policies on human data.

Physical Intelligence (π) San Francisco, CA Feb 2025 – Dec 2025
Research Intern
Led research on human-to-robot transfer in vision-language-action models (RSS 2026).

PRIOR WORK EXPERIENCE

Georgia Tech Angel Network Atlanta, GA Jun 2023 - Present
Associate
Network of angel investors which fund startups founded by GT alumni. Find companies and perform diligence before sending to angel investors. Raised over \$7M in total funding!

Goldman Sachs New York, NY Summer 2021
Quantitative Analyst Intern
Used machine learning to understand which features most impact the price of mortgage-backed securities. Estimated losses under simulated scenarios.

Lyft San Francisco, CA Summer 2020
Data Science Intern
Worked to improve Lyft's proprietary map generated from open source data. I used machine learning to assess the quality of a given edit before integrating that change into the app.

CONFERENCE PUBLICATIONS

[1] Mengqi Zhang, Sahil Khose, **Simar Kareer**, Yuchen Song, Unnat Jain, Judy Hoffman. "DeVA: Decoupled Video-Action Model with Physical Guidance for Robot Policy Learning", *arXiv*, 2026.

	[2] Ryan Punamiya*, Simar Kareer *, et al. “EgoVerse: An Egocentric Human Dataset for Robot Learning from Around the World”, <i>Robotics: Science and Systems (RSS)</i> , 2026.	
	[3] Simar Kareer , Karl Pertsch, James Darpinian, Judy Hoffman, Danfei Xu, Sergey Levine, Chelsea Finn, Suraj Nair. “Emergence of Human to Robot Transfer in Vision-Language-Action Models”, <i>Robotics: Science and Systems (RSS)</i> , 2026.	
	[4] Lawrence Y. Zhu, Pranav Kuppili, Ryan Punamiya, Patcharapong Aphiwetsa, Dhruv Patel, Simar Kareer , Sehoon Ha, Danfei Xu. “EMMA: Scaling Mobile Manipulation via Egocentric Human Data”, <i>IEEE Robotics and Automation Letters (RA-L)</i> , 2026.	
	[5] Ryan Punamiya, Dhruv Patel, Patcharapong Aphiwetsa, Pranav Kuppili, Lawrence Y. Zhu, Simar Kareer , Judy Hoffman, Danfei Xu. “EgoBridge: Domain Adaptation for Generalizable Imitation from Egocentric Human Data”, <i>Neural Information Processing Systems (NeurIPS)</i> , 2025.	
	[6] Simar Kareer , Dhruv Patel*, Ryan Punamiya*, Pranay Mathur*, Shuo Cheng, Chen Wang, Judy Hoffman [†] , Danfei Xu [†] . “EgoMimic: Scaling Imitation Learning via Egocentric Video”, <i>International Conference on Robotics and Automation (ICRA)</i> , 2025.	
	[7] Simar Kareer , Vivek Vijaykumar, Harsh Maheshwari, Prithvijit Chattopadhyay, Viraj Prabhu, Judy Hoffman. “We’re Not Using Videos Effectively: An Updated Domain Adaptive Video Segmentation Baseline”, <i>Transactions on Machine Learning Research (TMLR)</i> , 2024.	
	[8] Simar Kareer , Naoki Yokoyama, Dhruv Batra, Sehoon Ha, Joanne Truong. “ViNL: Visual Navigation and Locomotion Over Obstacles”, <i>International Conference on Robotics and Automation (ICRA)</i> , 2023.	
THESES	[9] Simar Kareer . “Effect of Boosting on Adversarial Robustness”, <i>Georgia Institute of Technology</i> , 2021.	
WORKSHOP PUBLICATIONS	[10] Simar Kareer , Dhruv Patel*, Ryan Punamiya*, Pranay Mathur*, Shuo Cheng, Chen Wang, Judy Hoffman [†] , Danfei Xu [†] . “EgoMimic: Scaling Imitation Learning via Egocentric Video”, <i>X-Embodiment Workshop at CoRL</i> , 2024.	
	[11] Simar Kareer , Naoki Yokoyama, Dhruv Batra, Sehoon Ha, Joanne Truong. “ViNL: Visual Navigation and Locomotion Over Obstacles”, <i>CoRL Agile Robotics Workshop</i> , 2022. Best Paper Award	
AWARDS	Best Paper Finalist at H2R Workshop at CoRL 2025 (EgoBridge)	2025
	Best Paper at Learning for Agile Robotics Workshop at CoRL 2022	2022
	Georgia Tech Szlam Fellowship	2022
	President’s Undergraduate Research Award	2020
	Overall Event Winner HackGT6 (1 of 218)	2019
	Lyft Data Challenge Winner (3 of 250)	2019
INVITED TALKS & PRESS	Invited Speaker, Data-Centric Robotics Workshop at RSS	2026
	Featured in The Washington Post , “Robots are learning to do housework from videos of humans doing chores”	2026
	Invited Talk, EgoAct Workshop at RSS	2025
	Invited Talk, Google DeepMind Reading Group	2024
	EgoMimic featured on the Meta AI Blog and Georgia Tech News	2024

TEACHING

Georgia Institute of Technology Atlanta, GA
Head Teaching Assistant for CS6476: Graduate Computer Vision
Georgia Institute of Technology Atlanta, GA
Teaching Assistant for CS3510: Algorithms

Spring 2024

Fall 2021, Spring 2022

PROFESSIONAL
ACTIVITIES

Reviewing

Conference on Robot Learning (CoRL)
IEEE Robotics and Automation Letters (RA-L)
IEEE International Conference on Robotics and Automation (ICRA)
Transactions on Machine Learning Research (TMLR)

Advising

Ryan Punamiya (BS Georgia Tech → Research Scientist at NVIDIA | PhD @ Stanford)
Pranav Kuppli (BS/MS Georgia Tech → Mecka AI)
Vivek Vijaykumar (BS/MS Georgia Tech → Databricks)