

Education

Stanford University

September 2021 - Present

PhD in Computer Science, AI

GPA: 4.3/4.0

- *Funding Awards:* I am graciously supported by a DoD NDSEG Fellowship, roughly 5% selection rate.
- *Research:* Advised by Dorsa Sadigh. My research focuses on learning for decision-making and robotics.

University of California, Berkeley

August 2017 – May 2021

B.S. in Electrical Engineering and Computer Science

GPA: 4.0/4.0

- *Academic Awards:* Highest Honors, top 3% of graduates; Regents and Chancellors Scholar, top <2% incoming
- *Research:* Advised by Pieter Abbeel and Lerrel Pinto. CRA Undergrad Research Award Honorable mention

Publications

Scaffolding Dexterous Manipulation with Vision-Language Models

Arxiv Preprint

Vincent DeBakker, [Joey Hejna](#), Tyler Lum, Onur Celik, Aleksandar Taranovic, Denis Blessing, Gerhard Neumann, Jeannette Bohg, Dorsa Sadigh. <https://sites.google.com/view/dexterous-vlm-scaffolding>

Robot Data Curation with Mutual Information Estimators

RSS 2025

[Joey Hejna](#), S Mirchandani, A Balakrishna, A Xie, A Wahid, J Thompson, P Sanketi, D Shah, C Devin, D Sadigh <https://jhejna.github.io/demonstration-info>

Efficiently Generating Expressive Quadruped Behaviors via Language-Guided Preferences

ICRA 2025

Jaden Clark, [Joey Hejna](#), Dorsa Sadigh, <https://lgpl-gaits.github.io/>

Vision-Language Models are In-Context Value Learners

ICLR 2025

J Ma, [Joey Hejna](#), ... Google DeepMind Robotics ..., D Sadigh, F Xia <https://generative-value-learning.github.io/>

Show, Don't Tell: Aligning Language Models with Demonstrated Feedback

ICLR 2025

O Shaikh*, M Lam*, [Joey Hejna*](#), S Yao, M Bernstein, D Yang <https://arxiv.org/abs/2406.00888>

ReMix: Optimizing Dataset Mixtures for Large Scale Imitation Learning

CoRL 2024 (Best Paper Nominee)

[Joey Hejna](#), Chet Bhateja, Yichen Jiang, Karl Pertsch, Dorsa Sadigh <https://arxiv.org/abs/2408.14037>

So You Think You Can Scale Autonomous Imitation Learning?

CoRL 2024

Suvir Mirchandani, Suneel Belkhale, [Joey Hejna](#), Evelyn Choi, Md Sazzad Islam, Dorsa Sadigh

MotIF: Motion Instruction Finetuning

IEEE RA-L

Minyoung Hwang, [Joey Hejna](#), Dorsa Sadigh, Yonatan Bisk <https://arxiv.org/abs/2409.10683>

Scaling Laws for Reward Model Overoptimization in Direct Alignment Algorithms

NeurIPS 2024

R Rafailov*, Y Chittepudi*, R Park*, H Sikchi*, [J Hejna](#), WB Knox, C Finn, S Niekum <https://arxiv.org/abs/2406.02900>

From r to Q*: Your Language Model is Secretly a Q-Function

CoLM 2024

Rafael Rafailov*, [Joey Hejna*](#), Ryan Park, Chelsea Finn

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

RSS 2024

Aleksander Khazatsky, Karl Pertsch, ... [Joey Hejna](#), et al. <https://droid-dataset.github.io/>

Octo: An Open Source Generalist Robot Policy

RSS 2024

Octo team, ... [Joey Hejna](#), et al. <https://octo-models.github.io/>

Contrastive Preference Learning: Learning from Human Feedback without RL

ICLR 2024

[Joey Hejna](#), R Rafailov, H Sikchi, C Finn, S Niekum, WB Knox, D Sadigh <https://arxiv.org/abs/2310.13639>

Inverse Preference Learning: Preference-based RL Without a Reward Function

NeurIPS 2023

[Joey Hejna](#), Dorsa Sadigh. <https://arxiv.org/abs/2305.15363>

Distance Weighted Supervised Learning

ICML 2023

Joey Hejna, Jensen Gao, Dorsa Sadigh. <https://arxiv.org/abs/2304.13774>

Extreme Q-Learning: MaxEnt RL without Entropy

ICLR 2023 (Oral)

Div Garg*, Joey Hejna*, Mattheiu Gesit, Stefano Ermon. <https://openreview.net/pdf?id=SJ0Lde3tRL>

Few-Shot Preference Learning for Human-in-the-Loop RL

CoRL 2022

Joey Hejna, Dorsa Sadigh. <https://openreview.net/pdf?id=IKC5TfXLUW0>

Improving Long-Horizon Imitation Through Instruction Prediction

AAAI 2023

Donald Joseph Hejna III, Pieter Abbeel, Lerrel Pinto. <https://openreview.net/pdf?id=1Z3h4rCLvo->

Task-Agnostic Morphology Evolution

ICLR 2021

Donald Joseph Hejna III, Pieter Abbeel, Lerrel Pinto. <https://openreview.net/pdf?id=CGQ6ENUMX6>

Hierarchically Decoupled Imitation for Morphological Transfer

ICML 2020

Donald Joseph Hejna III, Pieter Abbeel, Lerrel Pinto. <https://arxiv.org/abs/2003.01709>

Work Experience

Physical Intelligence, Research Intern

June 2025 – Present

Visiting researcher at Physical Intelligence based in San Francisco, working on robot foundation model pre-training.

Google DeepMind, Student Researcher

June 2024 – Nov 2024

Student researcher on the Google DeepMind robotics team in Mountain View, working on data quality and curation.

Citadel Global Quantitative Strategies, Intern

June 2019 – August 2019

Developed C++ proxy and API for job monitoring, worked on APIs for trade messages, explored reducing peak memory usage of decision tree training libraries.

Intel AI Products Group, Intern

May 2018 – August 2018

Created demos for Intel OpenVino Model Optimizer. Computer vision project [featured on intel's blog](#) and developed workflows for AWS model training.

Open Source

Research Lightning

<https://github.com/jhejna/research-lightning>

A framework for quickly implementing deep learning algorithms in PyTorch. Reproduces SAC, TD3, PPO, etc.

OpenX

<https://github.com/jhejna/openx>

A framework for training large behavior models using the OpenX Embodiment datasets in JAX, FLAX, and, TFDS

Teaching

CS 221: Artificial Intelligence, Head Course Assistant

Autumn 2023

Head course assistant for Stanford CS 221. Lead development of new course assignments, exams, etc.

CS 189: Machine Learning, Teaching Assistant

Spring 2020, Spring 2021

Wrote Neural nets HW. Overall rating of 4.61/5.00 in comparison to department average of 4.41

EECS 127: Optimization Models, Teaching Assistant

Fall 2020

Taught sections on linear alg, duality, convex models. Managed website and internal course logistics.

CS 70: Discrete Math and Probability Theory, Teaching Assistant

Fall 2019

Taught weekly discussions. Earned overall 4.68/5.00 rating in comparison to department average of 4.33.

Hack:Now – CalHacks, ML Workshop Instructor and Developer

April 2020

Machine learning tutorial for Cal Hacks, the largest collegiate hackathon. <https://github.com/jhejna/mlworkshop>

Mentorship

Jaden Clark. Stanford CS undergraduate, applying for CS PhDs

Chethan Bhateja. Stanford CS masters Student, applying for CS PhDs

Hristo Todorov. Stanford CS undergraduate

Fellowships and Awards

DoD NDSEG Fellowship 2021, roughly a 5% selection rate.

Finalist, Qualcomm Innovation Fellowship 2024, joint with Suvir Mirchandani

NeurIPS 2023 Distinguished Reviewer

ICML 2023 Outstanding Reviewer

Eta Kappa Nu (EECS Honors Society). Top students in EECS.

Highest Honors, UC Berkeley Engineering 2021, top 3% of graduating class.

CRA Undergraduate Research Award Honorable Mention. Awarded to top undergrad CS researchers in the US.

Regents and Chancellors Scholar. Awarded to <2% of top entering undergraduate students at UC Berkeley

EECS Honors Program. Program for high achieving students in academics and research.

Dean's List. Awarded for maintaining academic position in top <10% of engineering students at UC Berkeley.

Rambus Innovator of the Future 2017. Scholarship awarded for exceptional academics and research.

Kraft Award for Freshmen. Awarded to ~4% of freshmen UC Berkeley students for academic standing.

Eta Kappa Nu (EECS Honors Society). Top students in EECS.

Invited Talks

Waymo Reading Group May 2025: Simplifications for Learning from Human Feedback

Inform 2024, Integrating GenAI and Sequential Decision-Making Workshop: Training and Adapting Large-scale Robot Foundation Models

CoRL 2024, Oral Presentation: Optimizing Data Mixtures for Large Scale Imitation Learning

ICLR 2023, Oral Presentation: Extreme Q-Learning