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| Joey Hejna | jhejna @ cs.stanford.edu  [joeyhejna.com](http://joeyhejna.com) [github.com/jhejna](https://github.com/jhejna) |

# Education

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| **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.

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| **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

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| **Data Retrieval with Importance Weights for Few-Shot Imitation Learning** | *CoRL 2025* |

Amber Xie, Rahul S Chand, Dorsa Sadigh, Joey Hejna

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| **Scaffolding Dexterous Manipulation with Vision-Language Models** | *NeurIPS 2025* |

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>

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| **Robot Data Curation with Mutual Information Estimators** | *RSS 2025* |

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

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| **Efficiently Generating Expressive Quadruped Behaviors via Language-Guided Preferences** | *ICRA 2025* |

Jaden Clark, Joey Hejna, Dorsa Sadigh, <https://lgpl-gaits.github.io/>

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| **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/>

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| **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>

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| **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>

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| **So You Think You Can Scale Autonomous Imitation Learning?** | *CoRL 2024* |

Suvir Mirchandani, Suneel Belkhale, Joey Hejna, Evelyn Choi, Md Sazzad Islam, Dorsa Sadigh

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| **MotIF: Motion Instruction Finetuning** | *IEEE RA-L* |

Minyoung Hwang, Joey Hejna, Dorsa Sadigh, Yonatan Bisk <https://arxiv.org/abs/2409.10683>

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| **Scaling Laws for Reward Model Overoptimization in Direct Alignment Algorithms** | *NeurIPS 2024* |

R Rafailov\*, Y Chittepu\*, R Park\*, H Sikchi\*, J Hejna, WB Knox, C Finn, S Niekum <https://arxiv.org/abs/2406.02900>

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| **From r to Q\*: Your Language Model is Secretly a Q-Function** | *CoLM 2024* |

Rafael Rafailov\*, Joey Hejna\*, Ryan Park, Chelsea Finn

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| **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/>

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| **Octo: An Open Source Generalist Robot Policy** | *RSS 2024* |

Octo team, … Joey Hejna, et al. <https://octo-models.github.io/>

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| **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>

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| **Inverse Preference Learning: Preference-based RL Without a Reward Function** | *NeurIPS 2023* |

Joey Hejna, Dorsa Sadigh. <https://arxiv.org/abs/2305.15363>

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| **Distance Weighted Supervised Learning** | *ICML 2023* |

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

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| **Extreme Q-Learning: MaxEnt RL without Entropy** | *ICLR 2023 (****Oral****)* |

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

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| **Few-Shot Preference Learning for Human-in-the-Loop RL** | *CoRL 2022* |

Joey Hejna, Dorsa Sadigh. <https://openreview.net/pdf?id=IKC5TfXLuW0>

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| **Improving Long-Horizon Imitation Through Instruction Prediction** | *AAAI 2023* |

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

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| **Task-Agnostic Morphology Evolution** | *ICLR 2021* |

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

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| **Hierarchically Decoupled Imitation for Morphological Transfer** | *ICML 2020* |

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

# Work Experience

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| **Physical Intelligence, Research Intern** | *June 2025 – Sept 2025* |

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

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| **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.

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| **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.

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| **Intel AI Products Group, Intern** | *May 2018 –August 2018* |

Created demos for Intel OpenVino Model Optimizer. Computer vision project [featured on intel’s blog](https://www.intel.com/content/www/us/en/artificial-intelligence/posts/unlocking-aws-deeplens-with-the-openvino-toolkit.html) and developed workflows for AWS model training.

# Open Source

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| **Research Lightning** | [*https://github.com/jhejna/research-lightning*](https://github.com/jhejna/research-lightning) |

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

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| **OpenX** | [*https://github.com/jhejna/openx*](https://github.com/jhejna/openx) |

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

# Teaching

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| **CS 221: Artificial Intelligence, Head Course Assistant** | *Autumn 2023* |

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

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| **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

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| **EECS 127: Optimization Models, Teaching Assistant** | *Fall 2020* |

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

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| **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.

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| **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

**Informs 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