

Harry Bendekgey

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Education	Ph.D. Candidate, University of California, Irvine Fall 2019-present Advised by Erik Sudderth. Advanced to Candidacy Spring 2022. GPA: 4.0
	B.A., Pomona College Graduated Spring 2019 Computer Science and Mathematics (Double Major) GPA: 3.97 Thesis: Clustering Player Strategies from Variable-Length Game Logs in Dominion
Teaching Experience	Instructor of Record Summer 2023 ICS 6N: Computational Linear Algebra University of California, Irvine For the 10-week summer session: developed all course materials, lectured, and graded
	Teaching Assistant Fall 2020, Winter 2024, Fall 2024 CS 177: Applications of Probability in CS University of California, Irvine Designed exam content in addition to standard TA duties: Holding office hours and discussion sections; grading assignments.
	Teaching Assistant Computer Science Department Pomona College ◦ Discrete Math and Functional Programming (Head TA) Spring 2019 ◦ Computer Systems Fall 2018 ◦ Fundamentals of Computer Science (Head TA) Spring 2017, Spring 2018 ◦ Introduction to Computer Science Spring 2016-Fall 2016
	Mentor and Grader Mathematics Department Pomona College ◦ Combinatorial Mathematics Spring 2017, Spring 2018, Spring 2019 ◦ Linear Algebra Fall 2018 ◦ Statistical Theory Fall 2018
	Intern Summer 2019 Chan Zuckerberg Biohub San Francisco Work with the theory group on two projects touching biology, physics, and statistics: ◦ Investigating the ability of $(MC)^3$ to explore the space of phylogenetic trees, and ◦ Discovering a new power law for modeling diffusion in crowded dynamic spaces
Industry Experience	Engineering Intern Summer 2017 QuanticMind Created an API for employees to access databases without requiring access credentials; Led meetings with colleagues to generate common use cases to be addressed by API.
	Publications Unbiased learning of deep generative models with structured discrete representations. H Bendekgey, G Hope, E Sudderth. NeurIPS 2023
	Scaling Study of Diffusion in Dynamic Crowded Spaces. H Bendekgey, G Huber, D Yllanes, L Yan. APS March Meeting 2022
	Scalable & Stable Surrogates for Flexible Classifiers with Fairness Constraints. H Bendekgey, E Sudderth. NeurIPS 2021
	Clustering Player Strategies from Variable-Length Game Logs in <i>Dominion</i> . H Bendekgey, AAAI Workshop on Knowledge Extraction from Games (KEG), 2019.

Publications In Submission	Fast inference in sparse time series. H Bendekgey, D Sujono, M Motamed, E Sudderth.	
	Undergraduate data science education: Who has the microphone and what are they saying? M Dogucu, S Demirci, H Bendekgey, FZ Ricci, CM Medina.	
Talks	Why We Use Reverse-Mode Autodiff (And the Time I Didn't) UC Irvine DataLab Seminar	Feb 2024
	Unbiased Learning of Deep Generative Models with Discrete Representations Pomona College Computer Science Colloquium Series.	Nov 2023
Department Service	AI Faculty Search Committee, Student Member I was part of a group of 4-6 PhD students who interviewed faculty candidates with a focus on their research, their advising styles, and their interactions with PhD students.	2022-2024
	HPI@UCI Reading Group Organizer Organized a cross-lab reading group of 15 student fellows across machine learning specializations for the 2021-2022 academic year.	2021-2022
	HPI@UCI Workshop Organizer Coordinated talks and activities for 30 workshop attendees from UC Irvine and the Hasso-Plattner Institute in Germany.	2021-2022
UC Irvine Awards	Hasso Plattner Institute Fellowship Provides 3 years of full Ph.D funding for work on adaptive, safe and human-centered artificial intelligence.	2021-2023
	Enhanced Computer Science Department Excellence Fellowship Allows first-year Ph.D students to engage sooner and more deeply with research by dispensing with teaching assistant requirement.	2019-2020
	Dean's Award Extra first-year grant for outstanding research potential.	2019