Harry Bendekgey

www.hbendekgey.me github.com/hbendekgey linkedin.com/in/hbendekgey

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

CS 177: Applications of Probability in CS University of California, Irvine In addition to standard TA duties (holding office hours and discussion sections, grading assignments) I designed both exams for this class section.

Teaching Assistant

Computer Science Department

Output

Discrete Math and Functional Programming (Head TA)

Computer Systems

Fundamentals of Computer Science (Head TA)

Introduction to Computer Science

Spring 2017, Spring 2018

Spring 2016-Fall 2016

Mentor and Grader

Mathematics Department
Output
Combinatorial Mathematics
Linear Algebra
Statistical Theory

Pomona College
Spring 2017, Spring 2018, Spring 2019
Fall 2018

Industry Experience

Intern

Summer 2019

Chan Zuckerberg Biohub

San Francisco

Work with the theory group on two projects touching biology, physics, and statistics: \circ Investigating the ability of $(MC)^3$ to explore the space of phylogenetic trees, and

o Discovering a new power law for modeling diffusion in crowded dynamic spaces

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

Undergraduate data science education: Who has the microphone and what are they saying?

M Dogucu, S Demirci, H Bendekgey, FZ Ricci, CM Medina. In submission.

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 Dominion.

H Bendekgey, AAAI Workshop on Knowledge Extraction from Games (KEG), 2019.

UC Irvine Awards Hasso Plattner Institute Fellowship

2021-2023

Provides 3 years of full Ph.D funding for work on adaptive, safe and human-centered

artificial intelligence.

Enhanced Computer Science Department Excellence Fellowship 2019-2020

Allows first-year Ph.D students to engage sooner and more deeply with research by dispensing with teaching assistant requirement.

Dean's Award 2019

Extra first-year grant for outstanding research potential.

Pomona College Awards Paul B. Yale Computer Science Prize

2019

Awarded annually to an outstanding senior majoring in Computer Science.

Phi Beta Kappa Award

2019

Awarded to a senior for high quality of scholarship and promise of future distinction.

Kenneth Cooke Summer Research Fellowship

2018

Grant for summer research in an area of applied mathematics or statistics.

Bruce Jay Levy Prize in Mathematics

2018

Awarded annually to a student for excellence in the field of mathematics.

Llewellyn Bixby Mathematics Prize

2017

Awarded annually to a sophomore for excellence in the second year of mathematics.

National Awards Phi Beta Kappa Member

Elected Junior year, 2018

The oldest honor society in the country; at eligible schools, 2% of Juniors are elected.

National Merit Scholar

2015

College scholarship based on performance on the Practice SAT.

Caroline D. Bradley Scholar

2011-2015

Merit-based, four-year high school scholarship granted to 11 students nationally.