Henry Bendekgey

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Education Pomona College, Claremont, CA

Expected Spring 2019

Bachelor of Arts in Computer Science and Mathematics (Double Major)

GPA: 3.99

Relevant Coursework: Computational Statistics, Statistical Linear Models, Bayesian Statistics, Combinatorial Optimization, Computational Biology.

Anticipated 2019: Natural Language Processing, Topology, Advanced Linear Algebra.

Aquincum Institute of Technology, Budapest, Hungary

Fall 2017

Study Abroad

Research Experience Research Fellow

Fall 2018

Computer Science Department Pomona College Designed a novel approach for understanding the landscape of personas across games; Scraped and cleaned data from online *Dominion* logs to visualize player strategies.

Research Fellow

Kenneth Cooke Research Fellowship

Summer 2018 Pomona College

Researched the mathematical models underlying state-of-the-art election forecasting; Implemented adjustable forecasts for the 2018 midterm election based on these models.

Teaching Experience

Guest Lecturer

Fall 2018

CS151: Artificial Intelligence

Pomona College

Gave a guest lecture on Monte Carlo Tree Search and the Multi-Armed Bandit Problem to an upper-division computer science elective course.

Teaching Assistant

Computer Science Department • Computer Systems Pomona College

• Fundamentals of Computer Science (Head TA)

Fall 2018

o Introduction to Computer Science

Spring 2017-Spring 2018

Spring 2016-Fall 2016

Mentor and Grader

Mathematics Department

Pomona College

o Linear Algebra

Fall 2018

Statistical Theory Combinatorial Mathematics

 $\begin{array}{c} \text{Fall 2018} \\ \text{Spring 2017-Spring 2018} \end{array}$

Technical Experience **Engineering Intern**

Summer 2017

ce 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

In submission: **H. Bendekgey**, "Clustering Player Strategies from Variable-Length Game Logs in *Dominion*", for *The AAAI Workshop on Knowledge Extraction from*

Games, 2019

In preparation: H. Bendekgey, "Consistency and Reproducibility in U.S. House of

Representatives Forecasts"

Programming Languages

Proficient with R, Python, Java, LATEX;

Familiar with: SQL, C, C++, Scala, JavaScript.

Projects

Midterms Forecasting Website

midterms.shinyapps.io/2018

A fully interactive website to understand the differences in popular election forecasting methods, and to see how changing assumptions or parameters affects the final forecast.

Spotify Data Science Workshop

github.com/hbendekgey/Spotify-Workshop

Detailed step-by-step instructions for how to use Spotify's API to get audio features of one's own music library, and then practice common machine learning techniques in Python on that data.

Cellular Automata

varsncrafts.com/#/crafts/react/Cellular%20 Automaton

Implementation of a generic cellular automaton with modifiable rule space, to understand how emergent properties can manifest in seemingly simple systems.

National Awards

Phi Beta Kappa Member

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.

Julian C. Stanley Study of Exceptional Talent, Mathematics

National award for students who score 700 or higher on the Math SAT before age 13.

Pomona College Awards

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.

Pomona College Scholar

2015-2018

Dean's list, awarded each semester to top 25% of each class based on GPA.

Extracurricular Activities

Model United Nations

2015-2017

Served as organization's Secretary-General for 2016-2017 academic year; Received best delegate award at TrojanMUN 2016 and WUMUNC 2017.

Mock Trial 2016-2018

Served as a witness on Pomona College's primary competition team;

Received best witness award at Mocktopia 2017.