Henry Bendekgey

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Education	**Pomona College**, Claremont, CA Expected Spring 2019

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   Summer 2018
Kenneth Cooke Research Fellowship   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
CS 151: Artificial Intelligence   Pomona College
MATH 154: Computational Statistics
Gave guest lectures to upper-division undergraduate elective courses on:
Artificial Intelligence: Monte Carlo Tree Search and the Multi-Armed Bandit Problem.
Computational Statistics: Markov Chain Monte Carlo for Metropolis-Hastings.

Teaching Assistant
Computer Science Department   Pomona College
∘ 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
∘ Linear Algebra   Fall 2018
∘ Statistical Theory   Fall 2018
∘ Combinatorial Mathematics   Spring 2017-Spring 2018

Technical 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

Clustering Player Strategies from Variable-Length Game Logs in *Dominion*. Henry Bendekgey, AAAI Workshop on Knowledge Extraction from Games (KEG), 2019.

In preparation: Consistency and Reproducibility in U.S. House of Representatives Forecasts. Henry Bendekgey.

In preparation: Bad Data: A Survey. Henry Bendekgey.

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%20Automaton
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 — 2010-2015
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.