Eli Ben-Michael

1038 Sierra St, Berkeley, CA 94707

(908)-472-6870 | ebenmichael@berkeley.edu | github.com/ebenmichael

EDUCATION

University of California, Berkeley, Berkeley, CA   Expected May 2020
PhD in Statistics

Columbia University, Columbia College, New York, NY   May 2016
Bachelor of Arts, *Summa Cum Laude*, Computer Science and Statistics
Honors: Phi Beta Kappa, Computer Science Department Award (top Computer Science Major), Dean's List (Fall 2012-Spring 2016)

EXPERIENCE

Knewton, New York, NY   Summer 2016
Data Science Intern

- Generalized Bayesian models to incorporate hierarchical structure
- Scaled learning algorithms with a 10x speedup using Spark
- Analyzed performance, strengths, and weaknesses of models on student data
- Presented and documented models, code, and results

Columbia University Department of Economics, New York, NY   Fall 2014 - Spring 2016
Research Assistant

- Built a natural language processing text analysis application in Python for use by economists
- Extracted text features from corpora using Python, NLTK, and gensim
- Performed econometric and statistical analysis on text data with associated meta data

Center for Discrete Mathematics and Theoretical Computer Science, Piscataway, NJ
Research Intern   Summer 2014

- Implemented a spectral machine learning algorithm in Python to learn a Hidden Markov Model
- Improved algorithm runtime 100x through utilization of Python's NumPy and SciPy libraries
- Presented results to colleagues and faculty to gain feedback

Columbia University Departments of Mathematics and Statistics, New York, NY
Undergraduate Teaching Assistant   Spring 2014 - Spring 2016

- Held regular office hours for calculus, linear algebra, and statistics students
- Evaluated assignments and provided feedback to students

EXTRACURRICULAR ACTIVITIES

Columbia Data Science Society, Vice President of Education   Fall 2015 - Spring 2016

- Designed and taught workshops on data science tools such as Python and R
- Ran a committee of six people which organized educational events in data science

Personal Projects (On Github)

- Qlearning: Implementation of deep reinforcement learning algorithms
- brownian: Simulation of Brownian motion and general stochastic differential equations
- memm_tagging: Implementation of a Maximum Entropy Markov Model

SKILLS

Machine Learning, Natural Language Processing, Python, R, Scala, Spark, MATLAB, Java