

Ethan Kim

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EDUCATION

Harvard University

A.B Candidate in Statistics (Data Science Track), Secondary in Computer Science GPA: 3.75 /4.00.

Cambridge, MA

Expected Dec '21

Coursework: Advanced Topics in Data Science, Algorithms and Data Structures, Data Science, Time Series, Linear Models, Probability, Inference, Introduction to Computer Science, Multivariable Calculus, Linear Algebra,

Boston Latin School

GPA: 4.52, SAT 2370/2400 (V800, M800, W770)

Boston, MA

May '17

Activities/Awards: Varsity Soccer League All Star, National Merit Scholar Finalist, National Honor Society

SKILLS

Technical Skills: Python, Scikitlearn, TensorFlow, Matplotlib, Seaborn, SQL, R, AngularJS, D3.JS, git

RELEVANT EXPERIENCE

BrainSpec

Boston, MA

Intern

May 20 - Present

- Brainspec seeks to use Magnetic Resonance Spectroscopy to make the virtual biopsy a reality
- Developed visualizations to present MRS data for clinical use
- Created Python data processing pipeline for analysis of spectroscopic data

Harvard College Data Analytics Group

Cambridge, MA

Data Science Consulting Team Leader

Jan '20 - Present

- Led team of six on Data Science research project for a Sports Analytics company
- Explored low latency predictive models for sports matches
- Facilitated launch of new club focusing on helping companies and non-profits derive value from Data
- Interviewed potential members and developed technical standards for the team

Coronavirus Response Team

- Created visualizations for a high impact COVID paper (JAMA Internal Medicine)
- Performed initial data processing and consulted on effective visualization techniques

Harvard Open Data Project

Cambridge, MA

- Completed curriculum on data scraping, statistical analysis and data presentation.
- Implemented tools to visualize trends in menu data scraped from the Harvard Dining Service website

Feb '19 - Present

PROJECTS

Impact of Weather on Social Distancing

- Scraped county level weather data to evaluate relationship with social distancing indices
- Explored effect of weather on Coronavirus reproductive rates

Predicting Types of Crime in Boston

- Using spatiotemporal data to predict category of crimes from location
- Achieved significant increase in accuracy using census and location data and Random Forest models

Solving a Scrabble Like Word Game

- Designed data structures to efficiently predict playable words for a scrabble like word game
- Created training tool to help improve at game

Detection of Cell Cycle Genes and Regulators in *S. Cerevisiae*

- Time series analysis on mRNA expression data in yeast to detect cyclic genes
- Correctly identified key cell cycle proteins and regulators

Training an AI to play Incan Gold

- Implemented playable version of the board game, Incan Gold, using Python, Flask and JavaScript
- AI trained on winning moves from thousands of games achieved 150% increase in win percentage

Predicting Airbnb Prices in Boston

- Using relevant demographic and location predictors to better predict price of Airbnb accommodation
- Identified key differences in preferences between long term property buyers and short-term renters

LEADERSHIP AND ACTIVITIES

Harvard Academic Resource Center

Cambridge, MA

Peer Tutor

Sept '18 - Present

- Tutored Students in Math 21A Multivariable Calculus and Stat 111, Introduction to Statistical Inference
- Completed peer tutoring professional development workshop program on best practices in education

Languages: Conversational in Spanish, Classes at the Academia Latino America in Quito, Ecuador

Favorite Books: *Unbroken*, *The Power of Habit*, *Moneyball*, *Soccernomics*

Interests: Sports Analytics, Reading, Football, Basketball, Harvard Club Soccer

