Elliot Quan

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Education

University of California, Berkeley **Aug 2016 - May 2020**
B.A. Statistics, emphasis in Computer Science | GPA: **3.78/4.0**
Highlighted Coursework:

- Linear Models/Regression, Machine Learning, Causal Inference, Stochastic Processes, Probability, Algorithms, Data Structures, Data Science, Linear Algebra, Real Analysis

Experience

Math/Statistics Tutor, UC Berkeley Student Learning Center **Aug 2018 - Present**

- Provide drop-in and group tutoring services for probability and statistics students
- Held weekly exam review sessions and office hours for Stat 198 course (70 students)

Research Assistant, UC Berkeley School of Public Health **Feb 2019 - Dec 2019**

- Merged and cleaned disease/agriculture data in master database with Python/R
- Collected >50k WNV tweets via Twitter API for regression/spatial analysis with Python

Supply Planner Intern, Marvell Semiconductor **Jun 2019 - Aug 2019**

- Analyzed supply chain data to dispose of expired inventory, saving >$ 10k in monthly storage fees
- Developed VBA scripts to improve daily reporting efficiency, reducing weekly time spent by 3 hours
- Created Tableau dashboards to analyze and forecast product cycle times

Projects

- **London Marathon Analysis:** Scraped 6 years of marathon data (>230k results) into an SQLite database using Python (BeautifulSoup). Used regression models, ANOVA, and post-hoc t-tests to find the optimal race strategy and created visualizations of results.
- **Twitch.tv Markov Chain Chatbot:** Created an IRC chatbot using Python that trains on users' messages, generates messages using a markov chain algorithm. Logs 10k messages per min and can be trained on other texts (books, tweets).
- **Cave Quest:** Developed a 2d exploration game using Java. Created UI elements, combat mechanics, and a save/load system. Game elements are randomly generated, and save progress is erased upon death.

Skills

- **Programming/Visualization:** R (dplyr, ggplot2), Python (numpy, pandas, sklearn, matplotlib), Java, SQL, Tableau, Excel/VBA, Linux/Bash
- **Statistics/Machine Learning:** Linear/Logistic regression, Decision Trees/Random Forests, Support Vector Machines, Neural Networks, Linear Discriminant Analysis, Expectation-Maximization, K-means Clustering, K-Nearest Neighbors, Principal Component Analysis, ANOVA, A/B Testing