

Justin Tin Jeng Suen

2540 Regent St., Apt. 5, Berkeley, CA 94704

jsuen27@gmail.com

+1 (510) 356-8297

Education

University of California, Berkeley - College of Letters and Science

Bachelor of Arts in Mathematics

Berkeley, CA

May 2016

Courses

UC Berkeley: Efficient Algorithms, Data Structures, Structure and Interpretation of Computer Programs, Numerical Analysis, Mathematical Optimization, Linear Algebra, Computing with Data, Probability, Calculus, Differential Equations

Independent Study: Corporate Finance, Marketing, Financial Accounting, Operations and Management, Financial Markets (via Coursera); Data Science and Analytics (via DataQuest.io)

Projects

Kidney Donation Exchange Solver (CS 170):

- Coded a Python program to find a set of donation chains with the most compatible cycles with five or less nodes given some various constraints
- Used dynamic programming techniques to determine the subset of cycles that remain after eliminating conflicting nodes
- Implemented a genetic algorithm that used a crossover function based on pre-defined fitness scores
- Developed a Python cycle finder that uses Dijkstra's algorithm and cuts recursion when the path is longer than five vertices

Sliding Block Puzzle (CS 61BL):

- Coded a Java solver to determine optimal winning moves for the Klotski sliding blocks game
- Implemented Dijkstra's algorithm to determine the shortest path from starting state to goal state
- Optimized efficiency of program with different data structures
- Completed design documentation with graphs on \LaTeX and recorded experimental results during debugging process

US Presidential Election Prediction (Stat 133):

- Coded in R a predictive model of the 2016 US Presidential Election based on past election and socioeconomic data
- Generated a decision tree that classifies the population based on dichotomous independent features using recursive partitioning
- Utilized k-Nearest Neighbors technique with multiple determining features to predict voting trends

Personal Website:

- Built a mobile responsive personal portfolio with HTML, CSS and jQuery

Relevant Experience

UC Berkeley Educational Technology Services

Scheduler and Computer Consultant

Berkeley, CA

August 2013 – Present

- Scheduled over 100 staff into campus facilities using advanced Excel spreadsheets every week
- Conducted statistical analyses on efficiency of schedules to optimize scheduling process
- Hosted six effective workshops on HTML, CSS and \LaTeX for over thirty coworkers and students
- Planning to implement a Python program and improve current system that uses MySQL backend in order to further automate the scheduling process

Emperor Capital Group

Summer Intern

Hong Kong S.A.R.

June 2015 – August 2015

- Analyzed the potential growth of Internet of Things in China and financial positions of IoT companies
- Presented about the impact of the Greek Debt Crisis on the global and Chinese economies
- Competed in a month long Hong Kong stock investment contest and ended with a 15% growth

Skills

Programming: Python, Java, C/C++, R, Unix, \LaTeX , MATLAB, SQL, HTML, CSS, VBA

Languages: Fluent in English, Cantonese, Mandarin; Conversant in Korean, Spanish