# Lawrence Jiang

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#### Education

University of California, Berkeley

Spring 2019

- Bachelor of Arts in Computer Science and Statistics Double Major, Junior
- GPA: 3.67
- Relevant Coursework
  - CS 189 Introduction to Machine Learning
  - CS 170 Efficient Algorithms and Intractable Problems
  - CS 162 Operating Systems and Systems Programming
  - CS 161 Computer Security
  - CS 198 Deep Learning Decal
  - CS 61C Machine Structures

- CS 61BL Data Structures and Programming Methodology
- CS 61A The Structure and Interpretation of Computer Programs
- STAT 135 Concepts of Statistics
- STAT 134 Concepts of Probability
- CS 70 Discrete Math and Probability Theory
- EE 16A Designing Information Devices and Systems I

#### Skills

- Programming Languages: Python, Java, Ruby/Extended Ruby, HTML, CSS, Git
- Software: OS X, Windows, IntelliJ, Eclipse, Microsoft Office, Google Docs and Spreadsheets, Garageband, Sibelius

### <u>Experience</u>

CS 189 Introduction to Machine Learning Academic Intern

Fall 2017

- Created practice problems and worksheets, presented slides, and created lecture notes
- Administered over 100 students at homework parties and office hours, going over concepts from lecture

Xero Software Engineering Intern

Summer 2017

- Worked on DevOps team to improve the testing process for other engineers by building Docker containers that contained mock Xero services to allow quick in-depth testing without dependency issues
- Developed application to generate fake data for engineers to test on. Pushed to production at the end of internship for all Xero software engineers to test on. Coded in Ruby and Javascript

CS 70 Discrete Math Academic Intern

Fall 2016

 Volunteered at weekly homework parties and helped reinforce material with students, helped host monthly guerilla sections that reviewed topics that students struggled with

## **Projects**

Spork Summer 2017

 Used Yelp and Facebook API to develop a server that responded to messages through Facebook messenger with new restaurants in the area, hosted with Raspberry Pi, coded in Javascript

Neural Net Spring 2017

- Implemented a single hidden layer neural net using the tanh activation function and softmax output units. Derived the stochastic gradient descent equations for the weight matrices from tanh and softmax respectively.
- Achieved 90% accuracy on predicting letters

Tiramisu (CalHacks Project)

Fall 2016

• Used Amadeus API to create a website that shows the five cheapest flights out of any given airport in the United States. Web scraped for necessary data using JSON Parsing through BeautifulSoup. Coded in Python flask

Hamiltonian Path Finder Fall 2016

• Finished in the top 15% of a Hamiltonian Path Finding algorithm competition. Realized that graph was directed and acyclic, used topological ordering of DAG, ran 100,000 iterations, choosing the starting node at random each time

# Awards/Competitions/Extracurricular Activities

Upsilon Pi Epsilon Computer Science Honor Society Vice President

Fall 2017

• Invited for having a GPA within the top third of declared Computer Science majors in the College of Letters and Sciences. In charge planning events for the members and running the initiation process for new candidates

Citadel Datathon Spring 2017

Competed against UC Berkeley teams to draw conclusions on Bart case using machine learning on Bart ridership data.
 Used linear regression to predict gentrification trends based off of Bart ridership. Manipulated data using Pandas

Dean's Honor List Spring 2016

- GPA within the top 4% of undergraduates in the College of Letters and Science, recognized for academic achievement
   Google Games

  Spring 2016 & 2017
- Competed against UC Berkeley and Stanford teams to solve Google logic riddles, coding problems, and miscellaneous IQ related puzzles, worked with a team of four others to solve time constrained challenges