

FRED LEE

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EDUCATION

University of California, Berkeley

Aug. 2013 – May 2017

- Bachelor of Arts: Computer Science and Applied Mathematics (GPA: 3.7/4.0)

Relevant Coursework

- Introduction to Artificial Intelligence
- Discrete Mathematics and Probability Theory
- Efficient Algorithms and Intractable Problems
- Structure and Interpretation of Systems and Signals
- Introduction to Database Systems
- Data Structures and Machine Structures
- Multivariable Calculus
- Linear Algebra and Differential Equations

EXPERIENCE

Software Development Engineer Intern, Amazon

May. 2016 – Aug. 2016

- Amazon Fulfillment Technologies. Under NDA.

Undergraduate Research Assistant, Berkeley Institute for Data Science

Feb. 2016 – Present

- Creating a software that scrapes public data on clean energy firms to create a comprehensive data set to help understand why certain firms succeed or fail. Coded in Python.

CS 61BL and CS 61B Lab Assistant, UC Berkeley

June. 2015 – Dec. 2015

- Helped students debug projects and labs. Assisted students with understanding the core concepts behind data structures and programming methodology, with an emphasis towards test driven development.
- Improved the UI of the course website, <http://cs61bl.github.io/>, using CSS.

Event Management, Cal Recreational Sports

Aug. 2014 – May 2015

- Increased customer satisfaction, implements safety measures, and enforces Cal Rec. Sport's facility policies.
- Provided IT assistance and enforced policies to Pepsi, IKEA, Wells Fargo, and more at Caltopia and Career Fair.

Campus Intern, GameOn Technology

Oct. 2014 – Dec. 2014

- Worked with the CMO to help promote the product to college students.
- Enhanced the User Interface of the GameOn mobile application.

Operations Intern, BabShuttle Company

Sept. 2013 – Dec. 2013

- Improved Facebook page viewership by 30% through flier design and distribution, and on-campus marketing.
- Enhanced the User Interface of the company's website www.babshuttle.com, using HTML, CSS, and jQuery.

PROJECT

Pacman AI

Feb. 2016

- Created an Artificial Intelligence for Pacman, allowing it to search through a given maze to achieve a high score using various search algorithms and implementing heuristics. Coded in Python.

Glories of Featured Games

Aug. 2015

- An entry for Riot's API Challenge; used Riot Game's REST APIs to gather and analyze League of Legends. Data analysis is then visualized on a website. Coded in Python, HTML, CSS, and JavaScript.

32-bit Two-cycle Processor

Aug. 2015

- Created a simple 32-bit two-cycle pipelined (Instruction Fetch and Execution) processor by using Logism and MIPS with a colleague.

Search Engine

May. 2015

- Implemented a Trie and Ternary Search Tree to process a given dataset to provide a search engine graphic user interface that mimics the Google Search functionality. The user interface also predicts possible words or phrases, and sorts based on their weights. Coded in Java.

Git Version Control System

April. 2015

- Created my own version control system that mimics features of the popular version control system git. Coded in Java. Another version coded in C.

TECHNICAL EXPERTISE

Language

- Expert: Java, Python
- Intermediate: C, Ruby on Rails, R, SQL, Swift, HTML, CSS, PHP, MATLAB
- Familiar: JavaScript, C++, jQuery

Applications

- Parse SDK, R Studio, iOS, Eclipse, MARS, Logism, Amazon EC2, XCode, Vim, and Git

NATIONAL HONOR

11th place at Canadian Open Math Challenge

Nov. 2011

- COMC is a mathematics competition leading to the selection of the Canadian team to compete in the International

Mathematical Olympiad. I was also invited to participate in Canadian Mathematical Olympiad.