# University of California Berkeley

Fall 2015 to Fall 2019 Intended bachelors of computer science RELEVANT COURSEWORK

[CS61C] Computer Architecture [Math 54] Linear Algebra [CS70] Discrete Math and Probability Theory [CS61B] Data Structures [CS61A] Structure and Interpretation of Computer

Programs [CS98] Ruby on Rails

# SKILLS

<b>I I</b> java	■ ■ python	<b>■■ □ c ■■ ■</b> ht	tml 📕 🛮 css 📗	☐js ■ ☐ git
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#### EXPERIENCE

### UI/UX Developer and Full Stack Developer for ASUC Chief Technology Office [Sept 2016 - Present]

Communicated with different offices within ASUC (Student Union) to provide technological solutions to student problems. Led development of Project Hermione, a computer vision service, as a full stack developer using the MEAN stack. Designed front end design of Berkeley Mobile app that features real-time Bear Transit times, dining hall menus and facility schedules.

### Lead Graphic Designer Chair for AAA [Sept 2016 - Present]

Created flyers and designs for Asian American Association to advertise club fundraisers and events. Hosted workshops open to everyone to teach advance techniques using pen tool and popular UI/UX practices. Taught committee members and general members new design principals using photoshop and illustrator. Communicated with other committees to ensure designs standards are met for their flyers and events.

### Tech Consultant for CodeBase [Aug 2016 - Present]

Created web apps using react.js and ruby on rails for startups.

Used API's such as Algolia.js to create fast, scalable production level products.

Thoroughly documented code to allow for readability, worked extensively with Git for code review using pull requests.

# Lab Assistant for CS61A and CS61B [Jan 2016 - Jan 2017]

Strengthened student knowledge of data structures, sorting algorithms, environment diagrams and test driven development. Communicated with lab assistants and teacher assistants at the largest CS program in the number one public university. Taught students to be familiar and effective with languages such as Java, Python, and SQL.

Provided office hours to further explain topics and debug projects such as Scheme interpreters and Text Editors.

### Front End Developer for Cyrcle [Aug 2016 - Sept 2016]

Drafted wireframes to create clean and minimalist designs and built the website from scratch using HTML/CSS/JS. Communicated with graphic designer and Founder to create a smooth user experience across mobile app and web app. Communicated with back-end engineers to integrate front and back end.

Developed new search features to improve search accuracy and provide a cleaner search experience.

# Front End Developer for Big Data Genomics [Jan 2016 - Aug 2016]

Visualized human genome by highlighting allele differences on a web app using Javascript library d3.js. Processed millions of data points and developed algorithms to maintain a quick, fluid viewing experience. Designed front end of website to cleanly display genome data and allow easy comparison between genomes.

### PROJECTS

### Hermione [coming soon]

Hermione is a web portal that allows professors to upload their lectures using our computer vision service to create clear lectures (with automated transcriptions) and allows students to search past lectures for topics to enhance their learning process. I developed the front and back end of Project Hermione while working in ASUC Office of CTO. Using the MEAN stack I was able to authenticate users with passport, store class objects using mongoose and handle routing with express.

# Bearmaps [https://github.com/Justinzh1/Bearmaps]

Created a google maps inspired project that parses xml data from open street maps to construct a graph connecting local restaurants and attractions in the Berkeley area. Created a quadtree to stitch together images to support high resolution zooming. Implemented the A\* routing algorithm to calculate the shortest distance between two points and render a path on the web app. Implemented a trie to support auto completion for known attractions within the city.

# SimplyBecky [http://www.simplybecky.cloudapp.net]

Created a blogging site for a client using ruby on rails to store posts and comments. Created a database using rails active record database using PostgreSQL to keep track of users and posts. Managed user permissions to allow client to manage site. Implemented markdown rendering to allow client to improve readability and organization. Provided client with ability to edit and delete posts. Hosted and maintained website on Microsoft's Azure Cloud service.