

Education

University of California, Berkeley

B.S. in Electrical Engineering and Computer Science (GPA: 3.712)

Aug 2016 - May 2020

Coursework: Algorithms and Intractable Problems (170), Artificial Intelligence (188), Data Structures and Algorithms (61B), Computer Architecture (61C), Database Systems (186, *in progress*), Discrete Math & Probability (70), Foundations in Data Science (C8)

Experience

Learning Traffic Lab Undergraduate Researcher

2018 - Present

- ▶ Maintaining Flow, an open source Python framework for facilitating control and deep reinforcement learning in autonomous vehicles by leveraging an open source traffic simulator, SUMO with deep RL libraries
- ▶ Developing website for submissions of benchmarks and solutions for Flow, using Express.js

Faraday Technology Software Development Intern

June - July 2018

- ▶ Developed IntelliJ plugins using Java Swing, featuring a UI for code generation for usage of internal Java libraries to do SQL operations and a template generator for Java Spring web applications
- ▶ Built with JQuery and Bootstrap a scheduling UI and JS parser class for making and editing cron expressions
- ▶ Upgraded a Angular 4 web application to Angular 5 and Angular 6, fixing dependency conflicts and bugs

Pioneers in Engineering Website - Project Manager (1 yr) / Maintainer (2+ years)

2016 - Present

- ▶ Oversaw team and maintained Github repo, pull requests, and deployment for <http://pioneers.berkeley.edu>
- ▶ Trained and managed team of 7 to redesign and implement 10+ pages of content using HTML, SCSS, Jekyll, JQuery, Bootstrap, and Github to provide responsive and interactive content
- ▶ Worked on AngularJS app to pull and display live match data using Google Sheets API

Pioneers in Engineering Software Developer

2016 - 2017

- ▶ Developed a desktop app using React, ES6, Redux, and Electron for students to program + control robots
- ▶ Added asynchronous file I/O operations with Redux Sagas and unit tests, and built components

Additional Projects

Flipped Classroom | Side Project

June 2018

- ▶ Added live teacher/student quiz interaction using Socket.io to an Express.js web application.

RDBMS | Data Structures Project

March 2017

- ▶ Designed and built a SQL-like relational database CLI with Java OOP using Git in a team of 2.
- ▶ Developed table read, select, join, and conditionals operations, and wrote JUnit unit tests.

BearMaps | Data Structures Project

April 2017

- ▶ Built the Java back-end REST API of a Java Spark web app that handles image delivery for map queries.
- ▶ Implemented A* search for shortest directions from any start to any destination, and autocomplete with tries.

Other Work / Volunteer Experience

UC Berkeley EECS Department / DSEP

EECS Tutor/ ASE (Paid): Taught circuit analysis, linear algebra, and iPython in labs and OH

Fall '17

EECS Academic Intern: Taught in offices hours and labs for Data Structures.

Spring '18

DSEP Associate: Developed auto-graded iPython notebooks and taught statistics and NumPy.

Spring '18

Skills

Programming Languages: Python, Java, JavaScript, C, SQL, HTML, CSS, RISC-V

Web Development: React.js (ES6), JQuery, Jekyll, SCSS, Angular, Bootstrap, Express.js, Java Spring

Data Science: NumPy, matplotlib, Apache Spark, Data Inference, Data Visualization

Software: Git, Node, IntelliJ, Redux, ES6, Electron, JUnit, Mocha, Travis CI, OpenMP, SIMD, Unix, Windows

Other: IntelliJ SDK, Java Swing, LaTeX, Gulp, Ant, Docker, Socket.io