

Education

University of California, Berkeley

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

Aug 2016 - May 2020

Courses: Algorithms (170) Artificial Intelligence (188) Computer Architecture (61C - C)
Data Structures (61B - Java) Database Systems (186 - SQL)
Discrete Math & Probability (70) Intro Data Science (C8) Computer Programs (61A - Python)

Skills

Programming Languages: Python, Java, JavaScript, C, SQL, HTML, CSS

Front-End: React (ES6), Redux, JQuery, Jekyll, Angular, EJS, Bootstrap, SASS/CSS, Tailwind.css

Back-End: Node, Express.js, Oracle SQL / MySQL, Java Spring, AWS EC2

Data/ ML: NumPy, matplotlib, Apache Spark, Ray/RLlib

Other: Git, JUnit, Mocha, Travis CI, Linux/Unix, Windows, Ant, Docker, Electron, socket.io, Cron

Experience

Learning Traffic Lab Undergraduate Researcher (Sept 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
- ▶ Developed the front-end and database API of a web app using JavaScript, Node, Express.js, HTML, and EJS, integrating with UI to display a leaderboard of solutions for each benchmark on different routes

Faraday Technology Software Development Intern (June - July 2018)

- ▶ Developed IntelliJ plugins using Java and built a Swing UI for showing fields and methods of internal libraries for generating code, 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 an Angular 4 web application to Angular 5 and Angular 6, fixing dependency conflicts and bugs

Pioneers in Engineering Web Project Manager (2017 - 2018), Web Developer/ Maintainer (2016 - Present)

- ▶ Trained team and maintained Github repo, issues, PR's, and deployment for <http://pioneers.berkeley.edu>
- ▶ Spearheaded site-wide redesign and development in team of 7 and led project to completion, implementing responsive and human-centered design using HTML, SCSS, JavaScript, Jekyll, and Git
- ▶ Implemented AngularJS app features to pull and display live match data using Google Sheets API

Pioneers in Engineering Software Developer (2016 - 2017)

- ▶ Developed UI and features for educational desktop app using React, ES6, Redux, and Electron for 300+ high school students per season to learn to program & control robots
- ▶ Added asynchronous file I/O operations with Redux Sagas and unit tests, and persistent settings

UC Berkeley EECS Department CS 61A Academic Intern (Spring 2017)

- ▶ Taught Python and CS fundamentals through helping students in labs and office hours (Spring 2017)

Projects

Cron Scheduler UI | Faraday Technology (July 2018)

- ▶ Designed and built a UI using JavaScript and JQuery to generate Linux cron expressions for automating jobs
- ▶ Integrated UI with a Spring web application to edit schedules from a pop-up from a grid of schedules

Kingdom Conquer | Algorithms Project (April 2018)

- ▶ Designed and developed Python solver to an NP-hard graph problem and optimized solutions for 700+ input cases, combining Dijkstra's and TSP algorithms using Docker, Git and BitBucket, working in a team of 3

Database Client | Data Structures Project (March 2017)

- ▶ Designed and built from scratch a SQL-like relational database client with Java OOP using Git in a team of 2
- ▶ Developed table read, save, select, natural join, and where operations, and wrote JUnit tests