

SKILLS

Languages: Python, C++, JavaScript, Ruby, CSS, HTML

Frameworks: React, Ruby on Rails

Databases: SQL(PostgreSQL), NoSQL(MongoDB, DynamoDB), Object Storage(S3)

Web Audio: Web Audio API

Cloud Computing: AWS(API Gateway, Lambda, EC2, ECS, S3, DynamoDB, SQS, Transcribe, Chime), Heroku

Back-end runtime environments: NodeJS

Testing: RSpec, Jest

Version Control: Git

Practices: Agile

Other: **fluency in fundamental computer science concepts such as data structures and algorithms**, clear, precise, and simple verbal and written communication, multi-tasking, intense curiosity, team-player, ability to navigate a complex and highly quantitative environment

EXPERIENCE

Full Time Software Engineer | **promoted after one month**

Prevail Legal | December 2020 - current

- Successfully designed and implemented from scratch a modular client-send transcription service utilizing **Websockets, AWS Transcribe, and the Web Audio API's Audio Worklet**, efficiently processing audio inside of the AudioWorkletGlobalScope. The service is currently used by hundreds of users on a daily basis.
- Removed redundant instantiations of memory intensive objects, reducing the company's **audio stream** handling service's **memory allocation by more than 2000%**, added JavaScript to **handle audio buffer overflow**, and wired in a **bandpass filter (my idea)** to reduce noise, effectively eliminating unwanted transcriptions of random background noises.
- Reduced the amount of data loaded into the user's browser by implementing a JavaScript controller that **dynamically and automatically fetches and loads new information** as needed, and simultaneously trims stale data from the **DOM**. This reduced the amount of built up **HTML** from about **3500 elements over 4 hours to only 150 at any given moment**.
- Re-engineered and **simplified** the underlying structure of two views using a **CSS grid** and added **JavaScript** to allow for **seamless drag and drop** as well as **resizing functionality** for various panels.

Full Time Junior Software Engineer

Prevail Legal | November 2020 - December 2020

- Designed and implemented a highly interactive and user-friendly price calculator that generates a detailed side-by-side breakdown of the cost of the company's remote depositions and the cost of in-person alternatives.
- Added **JavaScript** and **Ruby** code to accurately store, persist, and display users' **local time zones** throughout all of the application's views, and in email invitations regularly sent out to **clients in different regions**.

PROJECTS

Balls and Boxes | (*JavaScript, CSS, HTML*) [Live](#) | [GitHub](#)

- Coded a **custom level generator** that dynamically generates a potentially **infinite** quantity of **unique** new puzzles and adds difficulty with each successive win.
- Implemented a **swapping algorithm** that uses **CSS transform, setTimeout**, and the geometry of a circle to elegantly animate the motion of the balls.

In-Memory File System | (*C++*) [GitHub](#)

- Implemented a **trie** based file system efficiently where look-up and creation for both directory and file runs in **linear time**.
- Designed the system such that one method, `createNode`, can handle creating both a directory and a file.

EDUCATION

University of California, Davis - Bachelor's, 2017, GPA: 3.6

San Francisco Conservatory of Music, Master's, 2017, GPA: 4.0

App Academy (3% acceptance rate) - Full-Time Immersive Certificate, 2020, Finished 3rd in my class.

Awards

Undergraduate Citation for Outstanding Performance - University of California, Davis 2017