

SKILLS

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

Frameworks: React, Ruby on Rails

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

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: Systems design (distributed systems), 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 complex and **distributed full-stack audio-processing and transcription** system using **NodeJS (designed a multi-threaded backend to deliver sub 50ms processing per 150ms of 16khz audio), AWS API Gateway, Lambda, ECS, and SQS, Ruby on Rails, and React**. This system is currently serving hundreds of users on a daily basis.
- 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**.
- Dramatically reduced 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.
- 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 - *BA, 2017*

San Francisco Conservatory - *Master's, 2020*

Awards

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