Aatef Baransy

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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 **AWS Transcribe and the Web Audio API's Audio Worklet** interface to efficiently process audio inside of the AudioWorkletGlobalScope. The service is currently used by 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 r**esizing 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*

Awards

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