andrewleung104@gmail.com

(978) 221-8810

Andrew Leung

linkedin.com/in/andrewjleung-

github.com/andrewjleung

Education

Northeastern University   Sep 2017 – May 2022

B.S. Computer Science, GPA: 3.9/4.0   Boston, MA

Skills

Programming Languages: TypeScript, JavaScript, Python, Java, SQL
Tools & Frameworks: Git, React, Redux, Next.js, Express.js, Jest, HTML/CSS, PostgreSQL, Vim

Work Experience

Poloniex   Jan 2021 – Aug 2021

Software Engineer Co-op   Remote

- Led effort to migrate dynamic web marketing material to a content management system, successfully eliminating engineering time spent manually updating 14-18 instances of material per month
- Constructed Zendesk and Jira Service Desk API integrations and internal web tools in PHP, TypeScript, and React to streamline customer support engineer workflows that process 100s of customer tickets per day
- Improved developer experience for a Node.js permissions service by creating useful abstractions for rule composition, simplifying testing patterns in Jest, and contributing to underlying open source rules engine library

Sandbox at Northeastern University   Sep 2020 – May 2021

Software Developer   Remote

- Developed features for a university course planning web application using Ruby on Rails, TypeScript, and React
- Modeled course schedule data in TypeScript, wrote logic for validating course requirements, and implemented React components to display interactive course plans to users
- Wrote a Node.js script to automatically parse university course documentation into JSON for internal usage
- Provided technical mentoring to teammates on tasks through routine pair-programming

Teikametrics   Jan 2020 – Aug 2020

Software Engineer Co-op   Boston, MA

- Demonstrated technical growth starting with no Scala, TypeScript, or web development experience to becoming an active contributor to a Scala with Cats backend and a TypeScript with React/Redux frontend
- Built front-end user flows and interactions according to designer specifications with TypeScript, React, HTML, and CSS
- Surfaced API endpoints in Scala to persist millions of rows of user data in a PostgreSQL database
- Reduced manual effort for internal analysts and external users to modify advertising campaign targets by implementing a CSV bulk upload API and batch modification job in Scala, used 12 times per day on average

Projects

Random Audio Player *TypeScript, Node.js, Fastify, React, TailwindCSS, NGINX, Docker*   2022

github.com/andrewjleung/raudi

- Created a full-stack web application for demoing and downloading random sounds fetched from the Freesound API
- Deployed application frontend, backend, and NGINX reverse proxy to Railway using Docker

TheNeedleDrop Review Dataset *TypeScript, Node.js, Fastify, YouTube Data API, PubSubHubBub*   2022

github.com/andrewjleung/fantano-reviews

- Implemented a Node.js script to fetch and parse metadata from the YouTube Data API in order to generate a CSV dataset of a popular music critic's video music reviews for use in data analysis
- Automated real-time updates to a hosted dataset using a PubSubHubBub server deployed to DigitalOcean via GitHub

Compiler for Python-like Language *OCaml, C, x86 Assembly*   2022

Closed Source

- Wrote a compiler backend in OCaml and a C runtime for a Python-like expression-oriented language
- Supported dynamically-typed values including numbers, Booleans, tuples, strings, and first-class functions
- Managed program memory with mark-and-sweep garbage collection and register allocation
- Wrote over 600 unit tests and end-to-end tests to ensure correctness of compilation using OUnit