Jack Denton

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EDUCATION

McGill University

Montreal, Quebec

Bachelor of Arts in Computer Science, Minor in Economics

September 2020 - April 2024

GPA:3.42

Relevant Coursework: Algorithms and Data Structures, Software Design Patterns, Computer Systems, Functional Programming, Concurrent Systems, Information Management, Applied Machine Learning, Software Privacy.

EXPERIENCE

Software Engineer Intern

May 2023 - August 2023

Walmart Global Tech

Bentonville, AR

- Worked with the Pharmacy team on various compliance initiatives in response to the Drug Supply Chain Security Act set to take effect in November 2023.
- Built a SpringBoot application to process and save a new industry standard structure of shared data to Cassandra and Elasticsearch, allowing visibility for research or audit.
- Utilized Kafka for data streaming as well as Offset Explorer to manage Kafka clusters and KafkaSender to send mock messages for testing and validation.
- Made enhancements to the Inventory UI (React) to include compliance-related data. Integrated new fields into existing features such as filtering, sorting, and exporting results. Used feature flags to limit my changes to the Pharmacy market.

Software Engineer Intern

June 2022 – August 2022

Tech For Good

Remote

- Designed and implemented a web application using Next.js, AWS, and Flask to display real-time data for Tech For Good's deployed networks.
- Integrated the MapBox GL JS API to create a visually compelling representation of the data.

Projects

Golf Social Media App | Expo (Front-end), Firestore (Back-end)

- Developed a Golf social media app that supports image sharing, messaging, and public or private game creation. The cross-platform application aims to strengthen connections with existing contacts and discover new golf partners.
- Integrated Google Maps API to enable location-based features such as finding nearby golf courses and games.
- Utilized Jest to write and maintain unit tests, achieving 85% code coverage and significantly improving the overall code quality and maintainability of the application.

Productivity Enhancing Chrome Extension | HTML, CSS, JavaScript

- Created to help users quickly find answers to highlighted questions as well as definitions of highlighted words.
- The tool is built with the user experience in mind, as it displays the result in a pop-up bubble next to the user's cursor so there is no need to open a new tab or press any keys.
- Built with the OpenAI API, DBPedia, and DictionaryAPI.dev.
- Won best use of modern technology at the McGill 2022 CodeJam();

CPU Implementation | Logism

- Created a functioning CPU using Logism, a digital circuit design and simulation tool. The CPU includes an Arithmetic Logic Unit, RAM, and other key components necessary to execute basic instructions.
- Instructions included reading/writing to/from RAM and performing addition/subtraction.

TECHNICAL PROFICIENCIES

Languages: Python, Java, OCaml, C, HTML, CSS, JavaScript

Frameworks: Next.js, Expo, SpringBoot, Flask, TailwindCSS, JUnit, Jest

Developer Tools: GitHub, Jira, Kubernetes, Docker

Data: Kafka, Cassandra, Elasticsearch, MySQL, FireStore, BigQuery