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, High Tech Venture Creation.

EXPERIENCE

Software Engineer Intern

May 2023 – Present

Walmart Global Tech

Bentonville, AR

- Updating various applications to accommodate additional data for all prescription pharmacy items, in compliance with the Supply Chain Safety Act that comes into effect November 2023
- Working with large-scale systems, processing 189 million prescription units annually.
- Developing event listeners and data mapping methods in Spring Boot.
- Utilizing Offset Explorer to efficiently manage Kafka clusters and KafkaSender to send mock messages for testing and validation.
- Enabling data indexing from Cassandra to Elasticsearch, ensuring seamless long-term data storage and retrieval capabilities.

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.
- Made possible by 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.

Covid-19 Data Analysis Script | Bash, Sed, Awk

- Takes as input a large set of data containing all Canadian Covid-19 information and has various options to output data and relevant statistics for a specific province or date interval.
- Uses both awk and sed to manipulate the data.
- Includes an optional switch to compare data between specific provinces or time intervals.

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, MySQL, FireStore, BigQuery