GEORGE SAAD

Education

University of Toronto

Sep. 2019 - May 2023

Bachelor of Applied Science in Engineering Science

Major in Machine Intelligence, Minor in Engineering Business (Anticipated)

GPA: 3.8

Experience

Loblaw Digital

May 2021 - Present

Software Development Co-op

Toronto, ON

• Working on the Java backend on the PC Optimum Middleware team

Software Freelance

Dec. 2020 - Present

Software Development Freelancer (Part Time)

Mississauga, ON

- Built Couchbase datastore and caching modules for the Akka Play! and Vert.x frameworks in Java using Singleton and Dependency Injection (DI) design patterns, and reactive programming, with Guice and JUnit unit testing
- Upgraded JHipster Couchbase integration, including Full Text Search (FTS) and Spring Boot, to the latest release
- Wrote ASCIIDOC documentation, created demo apps and wrote technical blog posts

FoodTrain (formerly OrangeTopi)

May 2020 - Dec. 2020

Lead Software Engineer Intern

Sunnyvale, CA

- Led a team of 8 10 developers in developing a **React Native** mobile app MVP in under 6 months by providing guidance and developing components, including app notifications and authentication with the React Context API
- Reduced deployment time by over 90% by implementing a ${\bf CI/CD}$ pipeline for automatic deployment
- Developed multiple backend functions in Node.js and Express.js, including all payment and email handling

Delovery Mar. 2020 – Jun. 2020

Software Engineer Intern

Sunnyvale, CA

- Reduced market research time by over 80% by building a **Python** web scraper using Beautiful Soup to scrape and graph 900+ data points using **Matplotlib**
- Designed and developed the cart user flow and other major frontend components in **React.js** with Material-UI
- Created an API using Node.js and Express.js to handle all payment processing with PayPal Braintree Payments

Projects

crowd.data | Node.js, Express.js, React.js, CockroachDB, PostgreSQL

Jan. 2021

- Top 4 out of 30 projects submitted for the Dropbase API prize
- Developed Node.js and Express.js RESTful backend and React.js frontend components with Chakra UI
- Created 4 data models with CockroachDB (PostgreSQL) using the Sequelize ORM, and Dropbase API integrations

GPT-3 for Finance | *GPT-3*, *Python*, *Flask*

Jul. 2020

- Built a RESTful Python Flask server to create and fill a balance sheet based on natural statements, using the OpenAI GPT-3 NLP API and the Google Sheets API
- Received 100,000 views, featured on InfoQ and on Y Combinator Hacker News front page

HyperBot | GCP, Python, Flask, Firebase, ELMo

Jan. 2020

- Won 1st out of 70 teams by building the best healthcare chatbot (Hypercare API prize)
- Employed Google Cloud App Engine to host a RESTful Python Flask backend to receive POST requests from webhooks and Google Firebase to store and update a Firestore database using JSON files
- Implemented object-oriented programming practices such as inheritance to create different account types and databases.
- Used a Python **ELMo** module to preform **NLP** on user input and map it to a symptom to produce a diagnosis

Technical Skills

Languages: Python, Java, JavaScript, C, C++, HTML/CSS, YAML, PostgreSQL, MATLAB Technologies/Frameworks: React.js, React Native, Node.js, Express.js, Flask, Git, Couchbase, Linux, GCP, Firebase, Play Framework, Vert.x, JHipster

Awards

UofTHacks 2020 ECOO-CS Programming Contest 2018 Best Healthcare Chatbot Hack, 1^{st} out of 70 teams 1^{st} out of 40 teams