# 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 (out of 4.0)

### Relevant Coursework

• Introduction to Programming, ESC180 (96%) • Data Structures & Algorithms, ESC190 (93%) • Engineering Mathematics & Computation, ESC103 (95%)

# Experience

**Loblaw Digital** 

May 2021 - Present

Software Development Co-op

Toronto, ON

- Set up latency log tracking in various functions in the **Spring Boot Java** backend and created **GCP** metrics and dashboards to extract and display the data, with 200k+ data points collected per hour
- Led research into content targeting engine and presented to the 40+ member PC Optimum team to enable personalization of marketing tiles for consumers
- $\bullet$  Created various internal self-serve and admin endpoints to reduce development, testing, and debugging time by over 60% for various parts of the PC Optimum product

# Content Turbine (Freelance)

Dec. 2020 – Present

Software Development Freelancer (Part Time)

Mississauga, ON

- Built NoSQL 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
- Contributing to the **JHipster** open-source project (over 18,000 stars) by implementing a major upgrade for a **Spring Data** SDK integration, including **Full Text Search (FTS)**
- Wrote ASCIIDOC documentation, created demo apps and wrote technical blog posts

# FoodTrain (formerly OrangeTopi)

May 2020 – Dec. 2020

 $Lead\ Software\ Engineer\ Intern$ 

Sunnyvale, CA

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  $\mathbf{CI}/\mathbf{CD}$  pipeline for automatic deployment
- Developed multiple backend functions in Node.js and Express.js, including all payment and email handling

# **Delovery**Software Engineer Intern

Mar. 2020 – Jun. 2020

- 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

# **Open Source Contributions**

JHipster Database Integration | Pull Request | Java, Spring Boot, Spring Data, NoSQL

May 2021 - Jul. 2021

• Adding support for a popular NoSQL database service to the JHipster project with over 156,000 monthly downloads

### Couchmove Full Text Search (FTS) | Pull Request | Java, Couchbase

Jun. 2021

• Resolved Github issues and implemented major bug fixes for the FTS functionality in the Couchmove project

# **Projects**

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

Jul. 2020

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

### Technical Skills

Languages: Python, Java, JavaScript, C, C++, HTML/CSS, YAML, PostgreSQL, MATLAB

Technologies/Frameworks: Spring Boot, React.js, React Native, Node.js, Express.js, Flask, Git, Couchbase, Linux, GCP, Firebase, Play Framework, Vert.x, JHipster

### Awards

UofTHacks 2020

Best Healthcare Chatbot Hack,  $1^{st}$  out of 70 teams

ECOO-CS Programming Contest 2018

 $1^{st}$  out of 40 teams