GEORGE SAAD

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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)

Experience

Meta Software Engineer Intern May 2022 - Jul. 2022

Menlo Park, CA

• Designed Thrift service to add tracking to over 260 million external Instagram story and profile links per day

- Implemented client-side app detection feature and ran controlled experiment on 4% of users to determine impact, which resulted in a 120% increase in ad impressions for Instagram users without linked Facebook accounts
- Performed major backend code improvement in Hack (PHP) and Python Django for the Instagram Ads endpoints

aUToronto Sep. 2021 – Apr. 2022

Mapping Software Team Member

Toronto, ON

• 1st Place Winner of 2022 SAE Autodrive Challenge II

 $\bullet \ \ \text{Maintained testing track map in OpenStreetMap using } \textbf{JOSM} \ \ \text{and implemented Python methods with } \textbf{PyOSM} \ \ \text{library}$

University of Toronto

Sep. 2021 - Apr. 2022

Teaching Assistant

Toronto, ON

• Teaching Assistant for: Introduction to Programming (ESC180) in Python, Algorithms & Data Structures (ESC190) in C

Content Turbine

Dec. 2020 - Sep. 2021

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
- Contributed 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

Loblaw Digital

May 2021 - Aug. 2021

 $Software\ Development\ Co-op$

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

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 CI/CD pipeline for automatic deployment
- Developed multiple backend functions in **Node.** is and **Express.** is, including all payment and email handling

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++, PHP/Hack, HTML/CSS, YAML, PostgreSQL, MATLAB Technologies/Frameworks: Spring Boot, React.js, React Native, Node.js, Express.js, Flask, Django, Thrift, Git, Couchbase, Linux, GCP, Firebase, Play Framework, Vert.x, JHipster, Airbyte