

# GEORGE SAAD

☎ 647-544-5877 ✉ [g.saad@mail.utoronto.ca](mailto:g.saad@mail.utoronto.ca) [in linkedin.com/in/gkysaad](https://www.linkedin.com/in/gkysaad) [github.com/gkysaad](https://github.com/gkysaad)

## Education

### University of Toronto

Sep. 2019 – May 2023

*Bachelor of Applied Science in Engineering Science*

GPA: 3.8

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

## 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 **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 BeautifulSoup 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 1<sup>st</sup> 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, C, C++, HTML/CSS, JavaScript, PostgreSQL, YAML, MATLAB

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

## Awards

UofTHacks 2020

Best Healthcare Chatbot Hack, 1<sup>st</sup> out of 70 teams

ECOO-CS Programming Contest 2018

1<sup>st</sup> out of 40 teams