

# George Saad

g.saad@mail.utoronto.ca | www.linkedin.com/in/gkysaad | www.github.com/gkysaad | 647-544-5877

## Education

University of Toronto | Engineering Science - Bachelor of Applied Science (BASc) | GPA: 3.8/4.0 2019-2023

- **Relevant Courses:** Introduction to Programming (4.0), Algorithms & Data Structures (4.0)

## Work Experience

### Freelance

December 2020 – Present

#### Software Engineer

Mississauga, Ontario

- Built a **Couchbase** datastore and caching module for the Akka **Play! Framework** in **Java** using the **Singleton** and **Dependency Injection (DI)** design patterns, with **Guice** and **JUnit** unit testing
- Wrote **ASCIIDOC** documentation, and created a demo app and an introductory blog post

### OrangeTopi

May 2020 – December 2020

#### Lead Software Engineer Intern

Sunnyvale, California

- Led a team of **8 – 10 developers** by providing guidance on **React Native**, reviewing code, approving PR's, and leading product demos
- Developed **50%+** of the **React Native** mobile app for **Android** and **iOS** in a fast-paced environment, including **Expo**, app notifications, and authentication with the **React Context API**
- Developed multiple backend functions in **Node.js** and **Express.js**, including all payment and email handling
- Reduced deployment time by over **90%** by implementing a **CI/CD** pipeline for automatic deployment

### Delovary

March 2020 – June 2020

#### Software Engineer Intern

Sunnyvale, California

- Built a **Python** web scraper using **Beautiful Soup** to scrape **915 data points** and graphed it using **Matplotlib**
- Designed and developed the cart user flow and other major frontend components with **React.js**
- Created an API using **Node.js** and **Express.js** to handle all payment processing with Braintree Payments

## Projects / Accomplishments

### crowd.data, Hack the North 2020++ ([Project](#))

January 2021

- Developed **Node.js** and **Express.js** backend and **React.js** frontend components with **Chakra UI**
- Created 4 data models with **CockroachDB** (PostgreSQL compatible) using the **Sequelize ORM**, and **Dropbase API** integrations

### GPT-3 for Finance ([Demo](#))

July 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**
- Featured on [InfoQ](#) and received **100,000 views**
- Used **Git** for coordination of work by creating branches, PRs, and reviewing code

### HyperBot, UofTHacks VII 2020 ([Code](#))

January 2020

- Won **1<sup>st</sup>** out of **70** teams by building the best healthcare chatbot (**Hypercare API** prize)
- Used **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
- Used **Hypercare API** to receive and send messages, schedule appointments, and find other doctors
- Used a Python **ELMo** module to preform **NLP** on user input and map it to a symptom to produce a diagnosis

### Data Science/ML Learning Project

January 2020 – March 2020

- Developed **KNN (k-Nearest Neighbors)** algorithm in **Python 3** with **90%+ accuracy** using the Iris dataset
- Fitted the Iris dataset to a **Decision Tree Classifier** using **scikit-learn** and achieved **92% accuracy**

## Skills

- **Languages:** Python, Java, C, C++, HTML, CSS, JavaScript, ES6, JSX, MATLAB
- **Technologies:** React.js, React Native, Node.js, Express.js, Python Flask, CockroachDB, PostgreSQL, Verilog, Google Cloud, Google Firebase, Git, Android Studio, Expo, Couchbase, Play Framework