# **Ryan Harrs**

University of Waterloo | Computer Science

## **Relevant Experience**

Amazon - SDE Intern | May – July 2019, Vancouver | May 2020 – present, Toronto

- Created APIs to congregate seller address information to a single set of endpoints, and improved the address information infrastructure to align with the domain gateway pattern being used
- Implemented client-side metrics to track user's usage behaviours and website performance
- Created a secure internal web portal to interact with the Mobile Campaigns database, simplifying and streamlining the editing and approval process for campaigns

ICF Next - Software Developer, Backend Team | Sep – Dec 2018, Toronto

- Designed and implemented an automated performance tracking system that measures customer connection speeds to ensure proper website response times using Java and Jenkins
- Researched and developed a Jira project migration tool capable of migrating large scale projects across host servers without any loss of data using Python
- Developed a multi-threaded tool to query APIs, validate responses, and report on response accuracy using Java

Ministry of Finance – Database Programmer | Jan - Apr 2018, Toronto

- Designed and developed an automated system to gather millions of international trade data points in real-time for integration into financial reports and for presentation on public portal
- Created an automated program to track thousands of data sets and update financial reports on the housing markets

Tulkita Technologies – Software Developer | Apr - Aug 2017, Toronto

- Developed a database migration script in SQL to move information from locally hosted servers to cloud hosted servers in order to increase usability and query response times
- Co-developed a project planning and legal contract management website that used Gantt charts, custom work flows, work products, etc.

### **Projects**

Dynamic Location Service Modification | Aug – Nov 2019, NUSingapore

 Android app to enable and detect location spoofing through GPS data and WIFI MAC addresses using an SDR, Raspberry PI and a NodeMCU

WeePlanner | Aug – Nov 2019, National University of Singapore

• Created a web-app for collaborative itinerary planning; developed with a focus on interaction design (i.e. user studies, personas, storyboards, etc.)

+1 416 476-3061 ryanharrs@gmail.com

# Skills

#### Programming Languages

C++11/14 Java C JavaScript/TypeScript Python Bash

#### Databases

SQL FAME

#### **Tools & Libraries**

AWS HTML/CSS Git Jenkins Maven Appium/Selenium Jira

#### Leadership & Team Skills

UW Varsity Squash Team-Up motivational speaker

## **Education**

#### **University of Waterloo '21**

Bachelor of Computer Science President's Scholarship Faculty of Math Scholarship Academic All-Canadian Fairfax Financial Athletic Leadership Scholarship NUSingapore Exchange

#### **Relevant Course Work**

Algorithms, Operating Systems, Databases, Numerical Computation, Computer Security, Interaction Design, Data Structures, Sequential Programming, Object Orientated Programming, Graph Theory