# Shehan Suresh

## **3A Software Engineering**

shehan.suresh@uwaterloo.ca http://github.com/shehan29

shehansuresh.me

in linkedin.com/in/shehansuresh

**Q** (416) 471-8024

## **EDUCATION**

## University of Waterloo

Bachelor of Software Engineering Sept 2016 – Present GPA: 3.96/4

Cumulative Average: 91.4%

# SKILLS

## Languages

Java, Python, C/C++, SQL, Bash, Scala

#### **Frameworks**

TensorFlow, Keras, Scikit-Learn, Spring, Node.js, React, Ionic, Selenium

#### **Tools**

Kafka, Amazon Web Services, Unix, IBM Cloud Object Storage, Docker, Git

## AWARDS

Hack the Valley MLH 3rd Place out of 76 teams	2018
Capital One Outstanding Employee Recognition	2018
Electric City Hacks Top 5 + Wolfram Alpha Award	2017
Dean's Honours List (Top 10%) 1A, 1B, 2A, 2B	2017
President's Scholarship of Distinction and Nortel Scholarship	2016

## SKILLS

#### IBM · Watson Data and Al Co-op · Fall 2018

Java, Bash, Jenkins, Cloudant, Cloud Object Storage

- Spearheaded the development of the Asset Management Service for the launch of Watson Studio Desktop
- Responsible for architecting file system utility APIs that made up 60% of the backend
- Wrote and maintained backup scripts in order to ensure that customer data in cloud object storage can be recovered

## Capital One • Software Engineer • Spring 2018

Python, Java, JavaScript, TensorFlow, Kafka, AWS, Docker

- Engineered alerts application to reduce account takeover fraud loss by \$2.5 million and accelerated the alert delivery time by configuring multi-threading
- Increased fraud loss coverage by 18% by implementing 20 new asynchronous aggregate features using Java Streams for the transaction fraud detection model
- Strengthened fraud model monitoring by leveraging selftaught JavaScript visualization frameworks (D3, DC and crossfilter) to build a configurable interactive dashboard
- Built and trained deep learning model using TensorFlow and Keras frameworks in order to identify new features for the fraud detection model

## National Instruments • Software Developer • Summer 2017

JavaScript, Node.js, Python, Django, Selenium, Jasmine

- Independently established a WebRTC signaling server that manages WebSocket communication allowing devices to stream data to the web in real time
- Co-developed a WebRTC library that allows users to easily view and retrieve data from external devices
- Created a Node.js server that implements the OpenScope API protocol using REST APIs in order to better examine the data streaming capabilities of the product

# SELECT PROJECTS

#### ZoomAl

Python, Pygame

- Designed a flexible Reinforcement Q-Learning model that can be trained on various inputs
- Trained the Artificial Intelligence model over several epochs to self-drive in a racing game made with Pygame

#### FINDR - Hack the Valley II

Python, OpenCV, Raspberry Pi, Firebase

- Autonomous robot equipped with a webcam and ultrasonic sensors that locates people in distress
- Utilized OpenCV to detect people and plot their GPS co-ordinates on a map in real time using Firebase