Shehan Suresh

3A Software Engineering

shehan.suresh@uwaterloo.ca
http://github.com/shehan29
shehansuresh.me
linkedin.com/in/shehansuresh
(416) 471-8024

EDUCATION

University of Waterloo
Software Engineering
Artificial Intelligence Option
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 2018
MLH 3rd Place out of 76 teams

Capital One 2018
Outstanding Employee Recognition

Dean's Honours List (Top 10%) 2018
1A, 1B, 2A, 2B

Electric City Hacks 2017
Top 5 + Wolfram Alpha Award

President's Scholarship of Distinction and Nortel Scholarship 2016

WORK EXPERIENCE

IBM • Watson Data and AI Co-op • Fall 2018
Java, Bash, Apache Lucene, Jenkins, Cloudant

- 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
- Developed a custom document indexer in order to perform complex search queries utilizing Apache Lucene

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 self-taught JavaScript visualization frameworks (D3, DC and crossfilter) to build a configurable interactive dashboard
- Built and trained a 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

ZoomAI
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