

# Shehan Suresh

University of Waterloo • 2A Software Engineering

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## Technical Skills

<b>Languages</b>	Java, Python, C/C++, SQL, Bash, Scala, JavaScript
<b>Frameworks</b>	OpenCV, Node.js, D3, DC, Crossfilter, React, React Native, Ionic, Selenium
<b>Tools</b>	Kafka, Maven, Amazon Web Services, Unix, Git

## Experience

**Capital One** • Software Engineering Intern Jan 2018 – Apr 2018

*Java, Kafka, Python, Amazon Web Services, JavaScript*

- Configured **multi-threading** in an alerts application to **increase processing speed** of messages by **10**
- Implemented features that compute **complex aggregations** of **Java Streams** containing authorization history in order to pass values to the model which predicts whether the current transaction is fraudulent
- Co-developed a **configurable** model monitoring web page that utilizes **D3, DC** and **Crossfilter** to provide data scientists a **visualization** of the performance of each of their features in their model

**National Instruments** • Application Software Developer May 2017 – Aug 2017

*Javascript, Node.js, Python, Django, Selenium, Jasmine*

- Completed **55** tasks, fixed **44** defects, wrote **41** unit tests and **7** Selenium tests within an **Agile** team
- Independently established a **WebRTC signaling server** that manages **WebSocket** communication, which opened up new possibilities for streaming data between a web and device peer
- 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
- Corrected **Django migration scripts** to restore broken databases within the infrastructure

## Projects

**FINDR – Hack the Valley II** Feb 2018

*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**

**Aloud** Jan 2018

*Ionic, Google Cloud Vision API, Watson Assistant*

- Produced an application supported on **Android** and **iOS** that helps children read and learn new words
- Takes advantage of **Google Cloud Vision** in order to read text seen through the phone's camera
- Watson Assistant** is used to allow children to have **realistic conversations** with their reading helper

## Education

**University of Waterloo**, Bachelor of Software Engineering (Cumulative GPA: 3.96) 2016 – 2021

## Awards

**Hack the Valley – MLH 3rd Place** (out of 76 teams) 2018

**Electric City Hacks – Top 5 + Wolfram Alpha Award** 2017

**Dean's Honours List** (Top 20%) 2016 – 2017