Shehan Suresh

3B Software Engineering

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EDUCATION

University of Waterloo
Software Engineering
Artificial Intelligence Option
Sept 2016 – Present
GPA: 3.97/4
Cumulative Average: 91.8%

SKILLS

Languages
Python, Go, SQL, Java, C/C++, Scala

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

Tools
Redis, Kafka, Amazon Web Services, Unix, Docker, Git

AWARDS

Dean's Honours List 2019
1A, 1B, 2A, 2B, 3A

Outstanding Intern Award 2018
IBM, Capital One

Hack the Valley 2018
MLH 3rd Place out of 76 teams

Electric City Hacks 2017
Top 5 + Wolfram Alpha Award

President's Scholarship of Distinction and Nortel Scholarship 2016

WORK EXPERIENCE

Wish • Data and Relevancy Engineer • Summer 2019
Go, Python, Redis, Bash

- Implemented centralized Redis feature store which reduced memory usage on 52 EC2 instances by 75%
- Reduced request latency by 90% by caching model weights and multithreading feature computation
- Added new features to the product ranking model to increase GMV (gross merchandise value) by 3%

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

- Spearheaded the development of the Asset Management Service for the launch of Watson Studio Desktop
- Architected file system utility APIs that made up 60% of the backend for the critical service
- Developed a custom document indexer in order to perform complex search queries using Apache Lucene
- Wrote and maintained backup scripts that ensured the resiliency of user data in Watson Knowledge Catalog

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
- 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 developed a WebRTC library that allows users to stream data from external devices in real time
- 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

- Designed a flexible Reinforcement Q-Learning model to train an AI to drive in a racing game made with Pygame

FINDR – Hack the Valley II

- Built an autonomous robot that detects people in distress using OpenCV and plot GPS location using Firebase