

Calvin Tse

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Summary Of Skills

Languages: Java, C#, C++, SQL, Javascript, HTML/CSS

Databases: Oracle Database, MySQL

Tools/Frameworks: JUnit, Git, SVN, AWS (EC2, RDS), Azure (Functions, Stream Analytics), Node.js, Android SDK, Ionic

Experience

HubHead Corp. (NRX AssetHub)

Toronto, Ontario

JAVA BACKEND DEVELOPER

Sept. 2017 - Dec. 2017

- Designed and built an ETL data pipeline using **Java**, **Groovy**, and **SQL** for a major electric utility, to allow for the monitoring of **100,000+ assets**
- Developed an interactive map tool for a desktop application using **JSP**, and **Tomcat**, to alter client data and improve usability
- Wrote a script using Groovy to display the results of a data analysis through static web pages, allowing clients to have more unified asset data
- Optimized Groovy scripts used to analyze data from a backend database, by reducing the number of API calls by **50%**

Multi Health Systems

Toronto, Ontario

SOFTWARE DEVELOPER

Jan. 2017 - Apr. 2017

- Developed RESTful APIs with C# using **.Net framework** to handle survey responses
- Created a prototype PDF viewer and editor mobile application using **Ionic 2** and **AngularJS**, to provide an online platform for user manuals
- Built and deployed an **Azure Function** that purges all unneeded data in **SQL Server**, improving the overall performance of the SQL Server System
- Worked alongside data scientists to write and optimize mathematical algorithms in **R**

Projects

NBA Facebook Chatbot

JAVASCRIPT, NODE.JS, EXPRESS.JS, MYSQL, AWS EC2

- Developed a chatbot using Facebook's Messenger Platform, allowing users to ask for live scores and stats from the NBA
- Deployed Node.js webhook endpoint onto AWS EC2 instance to handle messages
- Retrieved scores and stats from multiple endpoints at data.nba.net
- Utilized MySQL to store and retrieve user's favourite teams through subscription

Automated Plant Watering System

C#, ARDUINO, WINDOWS IOT CORE, MS AZURE

- Created a plant watering system with Arduino, and Raspberry Pi that waters a plant based on moisture level
- Displays real-time data in PowerBI using Connectthedots.io to send data to Azure Stream Analytics
- Modified open-source code to include support for Connectthedots.io v2

Android Puzzle Game

JAVA, ANDROID SDK

- Developed a 2048 like puzzle game, applying OOP methodologies to create and control game objects
- Controlled game actions using embedded sensors, and touch events
- Created blocks, and gameboard graphics in Photoshop

Education

University Of Waterloo

Waterloo, Ontario

CANDIDATE FOR BACHELORS OF APPLIED SCIENCE, COMPUTER ENGINEERING

Sept. 2016 - PRESENT

- Relevant courses: Data Structures and Algorithms, Digital Computers, Electronic Circuits, Introduction to Programming, Linear Circuits, Embedded Systems Design, Digital Circuits