

## **EDUCATION**

Sept. 2015

## University of British Columbia (UBC), Vancouver

- May 2020

Bachelor of Applied Science in Computer Engineering, 94% average (2018-19)

Dean's Honor List

Trek Excellence Scholarship (awarded to top 5% in the Faculty of Applied Science)
General Motors of Canada Co. Scholarship in Electrical and Computer Engineering

#### TECHNICAL KNOWLEDGE

Programming Languages:
Tools, Frameworks, & Libraries:

Javascript (ES6/7, Node.js, React, React Native), C/C++, C#, Java, Python Git, JQuery, ASP.NET w/ Entity Framework, Bootstrap, AJAX, Firebase/Firestore

## TECHNICAL EXPERIENCE

# May 2019

- Current

# Undergraduate Researcher (NSERC Research Award, IBM Centre for Advanced Studies)

IBM & The Reliable, Secure, and Sustainable Software Lab UBC, Vancouver, BC Tools/Languages: Java, Python, LaTeX

- Performed a comparative analysis of static and dynamic analysis-aided techniques that automate the process of splitting monolithic applications into microservices
- Accepted exhibit at IBM CASCON x EVOKE International Conference, 2019

### Oct 2018

- Current

# **Software Project Lead**

Vancouver General Hospital & the Medical Applications and Software Team, Vancouver, BC Tools/Languages: JavaScript (React, React Native), C#, MATLAB

- Lead a team of 7 to design and implement a cross-platform mobile and web application that bridges the communication gap between emergency physicians and first responders
- Utilized C# and MATLAB to build an application that collects real-time data from two accelerometers and applies filtering and signal processing to isolate a patient's respiratory rate

#### May 2018

- Aug. 2018

## **Web Applications Developer**

Public Services and Procurement Canada (PSPC), Vancouver, BC Tools/Languages: Drupal (CMS), ASP.NET C# with Entity Framework

- Built a content-management system for the Pacific Pilotage Authority (<a href="http://www.ppa.gc.ca">http://www.ppa.gc.ca</a>)
- Built a survey retrieval API for Avadepth (<a href="https://www2.pac.dfo-mpo.gc.ca/avdpth-srch-eng.html?page=sdb">https://www2.pac.dfo-mpo.gc.ca/avdpth-srch-eng.html?page=sdb</a>)

### May 2017

- Aug 2017

### **IT Special Projects**

Public Services and Procurement Canada (PSPC), Vancouver, BC Tools/Languages: ASP.NET with Entity Framework, JavaScript (AJAX), ColdFusion

- Built a web interface that enables users to update SQL database tables
- Worked within a team to develop and optimize the "Timeline Tool" project a web application used to record, display, and schedule government initiatives on a graphical timeline

#### TECHNICAL PROJECTS

# Sep. 2019

- Current

# Trial Matcher: Optimization of VGH Clinical Trial Recruitment through a Mobile Application

Tools/Languages: JavaScript (Node, is, React, React Native), Google Firebase, Jest, Travis CI

• Implemented a cross-platform mobile application that generates a de-identified screening survey for clinical trials at the Vancouver General Hospital

## Sep. 2018

- Dec 2018

# UBSafe: Peer Location-Monitoring through a Mobile Application

Tools/Languages: JavaScript (Node.js, React Native), Google Cloud Firestore, Jest, Travis Cl

- Implemented a client-server REST system that allows users to monitor each other's locations in realtime up to a selected destination, and to send location-dependent safety alerts/notifications
- Application was ranked 1st place out of 28 competing apps in UBC's Software Engineering course