

Lisa Kirby

EDUCATION

Sept. 2015
- May 2020

University of British Columbia (UBC), Vancouver
Bachelor of Applied Science in Computer Engineering, 94% average (2018-19)
Dean's Honor List
Trek Excellence Scholarship (awarded to top 5% of undergraduate year, faculty, & school)

TECHNICAL KNOWLEDGE

Programming Languages: Javascript (ES6/7, Node.js, React, React Native), C/C++, C#, Java, Python
Markup/Query Languages: HTML, CSS, ColdFusion, SQL, Twig (Drupal)
Tools, Frameworks, & Libraries: Git, JQuery, ASP.NET w/ Entity Framework, Bootstrap, AJAX, Firebase/Firestore

TECHNICAL EXPERIENCE

May 2019
- Current

Undergraduate Researcher (NSERC Research Award, IBM CAS)
IBM & The Reliable, Secure, and Sustainable Software Lab, Vancouver, BC

- Performed a comparative analysis of static and dynamic analysis-aided techniques that automate the process splitting monolithic software applications into microservices
- Exhibited work at IBM CASCON x EVOKE 2019

Oct 2018
- Current

Lead Software Engineer
Vancouver General Hospital & the Medical Applications and Software Team, Vancouver, BC

- Worked with a team of 7 to design and implement a cross-platform application to bridge 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
- Sep. 2018

Web Applications Developer
Public Services and Procurement Canada (PSPC), Vancouver, BC

- Built and deployed the Pacific Pilotage Authority website (<http://www.ppa.gc.ca>)
- Built and deployed a survey retrieval API (now used in production: http://www2.pac.dfo-mpo.gc.ca/avdpth_srch-eng.html?page=sdb)

May 2017
- Sept. 2017

Web Applications Developer & IT Special Projects
Public Services and Procurement Canada (PSPC), Vancouver, BC

- Built a web interface that enables users to update relevant SQL database tables using AJAX and ColdFusion – site is now used in production
- 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 using the ASP.NET with Entity Framework in the Model-View-Controller (MVC) architectural pattern

TECHNICAL PROJECTS

Sep. 2018
- Dec 2018

UBSafe - A Cross Platform Mobile Application
Node.js, React Native, Google Cloud Firestore, Jest, Travis CI

- Implemented a client-server REST system that allows users to monitor each other's locations in real-time 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

Jan. 2018
- April 2018

Hardware Note Detection of Impure Tones
C, SystemVerilog, Verilog, VHDL

- Built a system that performs accurate frequency detection of impure tones using a hardware (FPGA) Fast Fourier Transform (FFT) run on a De1-SoC