

EDUCATION

Sept. 2015
- Current

University of British Columbia (UBC), Vancouver
B.Eng. - Computer Engineering

TECHNICAL WORK EXPERIENCE

May 2017
- Sept. 2017

Web Applications Developer & IT Special Projects for the Canadian Federal Government
[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 Model-View-Controller (MVC) architectural pattern
- Served all web maintenance and service requests for existing Pacific Region government web applications within a 24-hour timeframe

PROJECTS

Jan. 2017
- Current

ljkirby.com – A Personal Website
[HTML/CSS, JavaScript](#)

- Built an animated, responsive website that highlights my resume and accomplishments

March 2017
- April 2017

Cereal Monitor – A Smart Pantry Scale
[HTML/CSS, JavaScript, Python/Raspberry Pi, C/Arduino](#)

- Implemented a 'smart' application that measures the weight of pantry items and dynamically updates a shopping list to display items that fall under 35% of their initial weight
- Headed the design and implementation of the web application, which utilized JavaScript to retrieve and display python-parsed scale data

Feb. 2017
- March 2017

Autonomous Robot Car
[C/Arduino](#)

- Built an autonomous Arduino-driven robot that can intelligently navigate around objects and draw the Mona Lisa pixel-by-pixel

Dec. 2016

Virtual Ecosystem – A Simulation of Predator vs. Prey
[Java](#)

- Using the delegation pattern, implemented a virtual world filled with items, food, and intelligent rabbits and foxes that interact with and adapt to their surroundings

Oct. 2016

Twitter Analyst
[Java](#)

- Implemented a graph-based interface that identifies common influencers between users and the minimum number of times a tweet must be retweeted for it to appear on a specific user's feed
- Utilized Breadth First Search and Depth First Search algorithms for efficient graph traversal

TECHNICAL KNOWLEDGE

Programming Languages: Java, JavaScript, C/C++, C#
Markup/Query Languages: HTML, CSS, ColdFusion, SQL
Tools, Frameworks, & Libraries: Git, JQuery, ASP.NET (MVC), Bootstrap, p5.js, AJAX