StevenHall

Computer Engineering

Contact

steven@stmhall.ca
stmhall.ca
GitHub
LinkedIn

Languages

Assembly (68k and 8052)
Bash Script
C/ C++
HTML/ CSS/ JavaScript
Java
mySQL
Python

Computers and Progams

Computer Repair
Git
Linux (Ubuntu)
Mac OS X
Microsoft Windows
Microsoft/ Libre Office

Electronics

Breadboard
Microcontrollers
Multimeters
Oscilloscopes
Signal Generators
Soldering

Academic Status

Academic Program
Anticipated date of graduation: May, 2018

Technical Work Experience

May 2016–
August 2016 **UBC** Big Data Research   Vancouver, BC

- Goal: To share memory (RDDs) across Apache Spark instances through a unified memory manager.

January 2015–
August 2015 **Ericsson** Software Developer Co-op   Burnaby, BC

- Tested and developed quality of service and policy based routing software solutions on a variety of Ericsson's routing platforms using a combination of manual router configurations and scripts for testing.
- Presented demos showing the functionality and progress of policy based routing during the testing and development phases.

Technical Projects

September 2016–
Present   **Capstone** IoT Based Livestock Bio-Signal Monitoring and Management System

- Construct cattle eartags that comply with Canadian Cattle Identification Agency (CCIA) standards that track vital information such as heart rate, body temperature, and respiration rate.
- The information is stored on the tag until the time comes for the data to be transferred wirelessly through a mesh network of cattle to a gateway for further processing. The data is then displayed in a web application for the end users.
- This is designed to identify sick animals before the disease spreads across the farm

April 2014   **Electromagnetically Tethered Robot**

- Constructed a robot using one sold piece of aluminum resulting in usable parts that we used for the remote and robot.
- Designed, built, and programmed an autonomous robot that follows an electromagnetic signal produced by a solenoid on a remote that our group also built, resulting in a high grade. The remote sends binary data through the magnetic field that tell the robot to spin 180 degrees, move back, move forward, and parallel park.

January 2014   **Alarm Clock**

- Programmed a simulation of an 8052 chip using an Altera DE2 Logic Board with Assembly to work as a 12-hour, am/pm clock, which resulted in an alarm clock that had the option to set the current time, set an alarm time, and have the alarm sound a buzzer at 2kHz once the alarm time is reached.

Other Work Experience

July 2014–
August 2014   **ByteCom Computer Services** Computer Repair Technician   Surrey, BC

- Fixed broken, slow, and non-responsive computers in a computer repair shop by replicating the customer's problem, identifying the cause of the problem, and fixing the problem with the tools we had, resulting in satisfied customers.
- Techniques used to fix the computers include antivirus programs, file and registry manipulations, and taking the computers apart to diagnose hardware problems, resulting in faster, and better working computers.

July 2013–
August 2013   **Self Employed** Landscaping/ Labour   Surrey, BC

- Broke stucco off the rear exterior wall of a house, fixed rotten parts of a leaking wall, and reapplied tar paper, as well as paved a pathway, resulting in a fixed wall, which could now be covered again with another material.
- Learned to use new power tools quickly in order to complete the job, including angle grinders and table saws, resulting in faster labour, and more experience with various tools.

June 2013   **Self Employed** High School Science Tutor   Langley, BC

- Tutored a student in grade 10 science for their final exam by providing clear instructions and examples that they were able to understand, and apply in the exam, allowing the student to pass their test.
- Provided small tests with several questions on each to test understanding of the material, resulting in better preparation for the real final exam.

Volunteer Experience

April 2014–
Sept. 2014   **Delview Secondary** Online Classroom Development   North Delta, BC

- Helped a high school science teacher develop an online classroom environment. Duties include writing Google Scripts to grade assignments, and take attendance, resulting in less marking time for the teacher so that he can dedicate more time to teaching his students, and instant feedback, as the assignments email the student their results.

April 2010–
June 2013 **North Delta Baseball Association and Surrey Canadian Baseball Association**
Assistant Coach   North Delta, BC and Surrey, BC

- Worked with a group of coaches to coach a range of age groups over the three season period.
- Duties include teaching how to play baseball by teaching proper throwing, catching, fielding, and hitting mechanics, resulting in increased performance by every player.
- Learned to explain our expectations of our players clearly, and learned to explain new concepts to the players by giving easy to understand examples, resulting in constant improvement.

Education

2013–Present **University of British Columbia**   Vancouver, BC
Bachelors of Applied Science in Computer Engineering (Software Option)

2012–2013 **Kwantlen Polytechnic University**   Surrey, BC
Engineering Certificate

Awards

2012   **Coaching Staff of the Year (Highest voted coaching staff in the league)**
Surrey Canadian Baseball Association

Professional Affiliations

APEGBC Member Advantage Program for Students (MAPs)

Interests

Skiing/ Snowboarding
Baseball – I played in the British Columbia Premier Baseball League for 2 years
Hockey
Guitar
Fixing Computers
Fixing/ Replacing Car part