

StevenHall

Software Engineering

Contact

steven@stmhall.ca

GitHub: hallzy

LinkedIn: steventmhall

Languages

Assembly (68k and 8052)

Bash Script

C/ C++

HTML/ CSS/ JavaScript

MySQL/ mongoDB

Python

Computers and Programs

Computer Repair

Git

Linux (CLI proficient)

Microsoft Windows

Vim

Electronics

Microcontrollers

Soldering

Technical Work Experience

UBC Big Data Research Assistant

May 2016–Aug 2016

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

Ericsson Software Developer Co-op

Jan 2015–Aug 2015

- Tested and developed quality of service and policy-based routing software solutions on a variety of Ericsson's enterprise scale 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.

ByteCom Computer Services Computer Repair Technician

Summer 2014

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

Technical Projects

Web Application Online Store

Nov 2017

- Built a web application that mimics an online store using AJAX requests and MongoDB.

Capstone IoT Based Livestock Bio-Signal Monitoring and Management System

April 2017

- Construct cattle eartags that comply with Canadian Cattle Identification Agency (CCIA) standards which track vital information such as heart rate, body temperature, and rumination patterns.
- 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 early to keep medical costs low and prevent more livestock from getting sick.

Electromagnetically Tethered Robot

April 2014

- Constructed a robot using one solid 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.

Volunteer Experience

North Delta Baseball Association and Surrey Canadian Baseball Association Assistant Coach

2010–2013

- Coached range of age groups over a three season period.
- Duties include teaching proper throwing and hitting mechanics, resulting in increased performance by every player.

Education

University of British Columbia Vancouver, BC

2013–Dec 2017

Bachelor of Applied Science in Computer Engineering (Software Option)

Kwantlen Polytechnic University Surrey, BC

2012–2013

Engineering Certificate

Interests and Activities

- Programming and computers
- Contributing to open source projects such as:
 - Gravity programming language
 - Git Radar
 - Various Vim plugins
- Encryption
- Cryptocurrencies and blockchain
- Computer and information security
- Network security including router configuration and VPNs.
- Configuring my Vim text editor so that it now has over 175,000 lines of additional configuration code and plugins which increases my productivity when coding and editing text.
- I perform all of my own car repairs and maintenance including:
 - Repairing the starter motor
 - Replacing a leaking radiator
 - Performing brake changes
 - Diagnosing and repairing emissions controls systems (IAC and EVAP emission control)
 - Replacing a door
 - fluid changes
- Created a script to solve a problem a relative had when inputting date block requests to their corporate computer program. My program worked so well that all the other employees in that department asked to use my program to streamline their date block requests as well.
- Skiing, Snowboarding
- Baseball, Hockey, Lacrosse