



# Seth Whalen

Electrical Engineer

Whalen\_designco@outlook.com

+1 (250) 421 2562

Vancouver, BC, Canada

linkedin.com/in/seth-whelen-46b165158/

github.com/Sethwhelen94

Final year Electrical Engineering student at the University of British Columbia with 12 months of industry experience.

## EDUCATION

### BASc. Electrical Engineering

University of British Columbia

09/2017 – 05/2021

Vancouver, BC

#### Courses

- ♦ Basic Algorithms and Data Structures
- ♦ Intro to Software Engineering
- ♦ Systems and Control
- ♦ Microcomputer System Design
- ♦ Modern Web Applications

## WORK EXPERIENCE

### Firmware Validation Specialist

Avigilon by Motorola Solutions

01/2019 – 09/2019 and 05/2020 – 09/2020

Vancouver, BC

- ♦ Monitored and tested camera performance to identify potential bugs, developed solutions, and collaborate with a team of 15 firmware developers on solution implementation
- ♦ Constructed and maintained accurate and efficient automated test scripts in Python to manage testing of certain camera products and features
- ♦ Debugged Python code and located root causes of problems by reviewing configuration files and device logs
- ♦ Assessed firmware bugs and compiled findings along with resolution techniques in documentation to disseminate to firmware team
- ♦ Utilized a Linux environment to test cameras' IPV4/IPV6 functionality and process cameras' core dump logs

### Junior Technician

UBC Department of Computer Science

05/2018 – 09/2018

Vancouver, BC

- ♦ Installed well-functioning LAN/WAN and managed components, including servers and IPs
- ♦ Assisted staff and faculty members by troubleshooting computer-related issues such as virus removal, password resets, email setup and software installs
- ♦ Completed projects by applying engineering, technical and maintenance procedures
- ♦ Performed several computer software installations and deletions to extend use of a variety of computer hardware

## SKILLS

### Systems/Version Control

Linux

Git/GitHub

Jira

Windows

Confluence

### Software Development

C++

C#

Python

UML

C

### Web Development

JavaScript

TypeScript

ionic

Angular

HTML/CSS

MongoDB

Node.js

### Protocols

SPI

I2C

CANBUS

RS232

UART

SIP

RTP

### Other Skills

Data Structures

Algorithms

Networking

Protocols

Verilog

Wireshark

Embedded Design

## PROJECTS

### Cross Platform Web Application

05/2020 – Present

- ♦ Alternated between frontend and backend development duties, fulfilling Full Stack development commitments on the entire project.
- ♦ Implemented the use of custom data structures and algorithms to help organize and store data efficiently
- ♦ Boosted efficiencies in HTML using Ionic SDK to deliver better overall user experience
- ♦ Documented all software development methodologies to be used in future projects.
- ♦ Utilized: TypeScript, Angular, Firebase, HTML, CSS/SASS, Ionic, GIT

### Python Amazon Price Checker

09/2020 – Present

- ♦ Researched new technologies, Python packages and libraries for use in project optimization.
- ♦ Employed coding practices based on commonly accepted standards to establish clean, readable code
- ♦ Implemented intelligent error catching using try catch blocks to stop unexpected program termination
- ♦ Created separate text files to expand the number of email clients and products that can be price checked
- ♦ Accurately parsed HTML DOM to find the specified title and price of products

## INTERESTS

Jiu-Jitsu

Baseball

Hiking

Camping