# MACKENZIE HIGA

+1 (604) 250-5081 | github.com/kinziemac | mhiga@sfu.ca | mackenziehiga.com

**EDUCATION** 

Vancouver, BC Simon Fraser University Graduation: Dec 2019

• Major: Computer Science, BSC.

#### **SKILLS**

Programming Languages: C/C++, Python, Go, JavaScript, HTML & CSS (SASS), Swift, Java

Frameworks: React JS, JavaFX, Valgrind, Jest, Git

Academic Work: Data Structures & Algorithms, Operating Systems, Databases, Distributed Systems, Data Mining

OS: Linux/Unix, Mac, Windows, iOS

## WORK EXPERIENCE

# Web Developer - MuseFind Inc.

Oct 2016 - May 2018

- Built frontend web applications using React JS to create/maintain relationship management platform
- Created automated testing suite for MuseFind using Jest and Enzyme to eliminate manual functionality testing
- Developed interface with Instagram and Facebook APIs using OAuth to manage and store profile data
- Trained and mentored junior developers

## QA Test Analyst II - BestBuy Canada Ltd.

May - Nov 2015

- Ran regression and happy-path tests on new system builds to ensure platform remained stable
- Created automated tests in C++ to eliminate redundant manual testing

## **SOFTWARE PROJECTS**

# Mock BlockChain Miner (Comparative Programming Languages Course)

Dec 2018

• Developed mock blockchain miner using **Go** with an emphasis on **go-routines** and parallelism

#### A\* Search w/ GUI (Personal)

Nov 2018

- Built Python application that implements A\* search with a GUI to give a visual representation of the algorithm
- Application uses **Tkinter** for the UI, and involves **multithreading** to allow A\* search and the GUI to run concurrently

#### **Consumer/Producer Buffer** (Operating Systems Course)

Oct 2018

- Created in C bounded buffer that produces and consumes objects in parallel
- Program involved multithreading, deadlock prevention, semaphores, and memory-management

#### FlixFinder (Personal)

Nov 2017

- Created Chrome Extension in React JS to search for movie/tv reviews though theMovieDB API
- Wrote **Technical Article** about creating **Chrome Extensions in React** with **20,000+ views** and **1.4K+ likes** (https://engineering.musefind.com/how-to-build-a-chrome-extension-with-react-js-e2bae31747fc)

# ClarityHierarchy (Intro to Software Engineering)

Apr 2017

- Acted as Team Lead to develop anxiety management iOS application for software engineering course
- Developed in Swift using internal memory storage, and storyboards

#### INTERNATIONAL VOLUNTEERING

### **CISV International**

May 2008 - Present

- A global NGO that conducts international youth programmes across the world
- Member of National Leadership Training Committee (NLTC) for CISV Canada
- Responsibilities include facilitating training weekends across Canada for adults to attend International CISV programs

#### **AWARDS + INTERESTS**

- Dean's List Spring 2018
- Memorial Fund Winter Recipient 2018
- Interests: Instruments, Fitness, Travelling, Latin America, Books, Film, Rugby, Football, and Ping Pong