

# MACKENZIE HIGA

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## EDUCATION

Vancouver, BC

Simon Fraser University

Graduation: Dec 2019

- **Major:** Computer Science, BSC.

## SKILLS

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

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

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

**OS:** Linux/Unix, Mac, Windows, iOS

## WORK EXPERIENCE

**Web Developer** - MuseFind Inc.

Oct 2016 - May 2018

- Developed frontend application using **JavaScript (React JS)**, **HTML & CSS (SASS)** to create/maintain relationship management platform
- Created **automated testing suite** for platform 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

**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 System - CMPT 300)

Oct 2018

- Created bounded buffer in **C** where a producer thread creates objects, and a consumer thread removes 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
- Connects to **theMovieDB API** for reviews and links back to respective review webpage
- 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 - CMPT 276)

Apr 2017

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

## INTERNATIONAL ENGAGEMENT

**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
- David And Brenton Nichols Award - 2014
- Interests: Instruments, Fitness, Travelling, Latin America, Books, Film, Rugby, Football, and Ping Pong