# RYAN MARTIN

## 2A Software Engineering Student

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#### SUMMARY OF QUALIFICATIONS

- Self-directed individual comfortable developing on both Windows and Linux operating systems
- Proficient in numerous programming languages and libraries, notably C, C#, C++, the STL, Qt, SDL2 and familiar with Java, Javascript, SQL and OpenGL
- Experienced with Object Oriented Programming
- Strong teamwork and communication skills, demonstrated through past experience working as a snowboard instructor
- o Competent with both Git and Bazaar version control

#### WORK EXPERIENCE -

## Software Engineer, Jamesway Incubator Company, Cambridge ON

May 2016 - Aug 2016

- O Developed software to efficiently control and manage incubators and HVAC systems in hatcheries using C++ and Qt
- O Appropriately designed an intricate graphical user interface for Hatchcom 4 using various graphical design software such as Inkscape, Photoshop, and paint.net
- Utilized SQL to communicate with a database in order to store and load information pertaining to the incubators

## Snowboard Instructor, Chicopee Ski Resort, Kitchener ON

Jan 2014 - Mar 2016

- o Communicated with a team of instructors to collectively share knowledge of snowboarding to students
- o Maintained and organized large groups of snowboarders in order to progress their skill level from beginner to advanced

### **RELEVANT PROJECTS** -

## **A\*** Pathfinding Implementation

 Studied the A\* Pathfinding algorithm using online resources and designed a 3D implementation of the algorithm using OpenGL/Freeglut and C++

#### **Billiards Locator**

O Developed an Android application using Java and Android Studio which uses crowdsourcing to store locations of pool tables in an online database in order to show the best tables nearby

## Open World Role-Playing Game

• Created and programmed assets using 3D modelling and animation tools alongside Unity 3D Game Engine to produce a large scale medieval themed video game using C#, including a complex graphical user interface

#### **Super Snowboarding**

O Designed and implemented a modular and endless-scrolling snowboarding game written in C++ with the SDL2 library

#### **EDUCATION** -

#### University of Waterloo, Waterloo, ON

Sept 2015 - Present

Candidate for Bachelor of Software Engineering

## **Relevant Courses:**

- O Data Abstraction and Implementation Implemented data structures using C++ and gained experience with STL
- Methods of Software Engineering Discussed software development techniques and covered various topics including how to succeed in a professional workplace environment.

#### EXTRA CURRICULARS -

Hackathons and Competitions - Placed top 10% in 2015 Canadian Computing Competition and attended Hack the North 2016
University of Waterloo Intramurals - Participated in Hockey, Ultimate Frisbee, and Dodgeball intramural teams
Conrad Grebel University College - Orientation week leader and a member of the student leadership team