Josh Colwell

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- Summary 3+ years of experience with C\C++
 - Experienced with C#, Unity3D and Visual Studio
 - Working knowledge of source control (Git/Team Foundation Server/TurtleSVN)
 - Familiar with Java, Golang, Clojure, Concurrency, and Qt
 - Basic understanding of Networking and MySQL

Experience Game Production Workshop

(August 2015 – Present)

- A series of courses designed to simulate industry production life cycle in a crossfunctional team environment.
- Developed a game for the Android platform using Unity in collaboration with a research group from SFU; who is studying the educational benefits of games on older adults.
- My team's game is Modern Mischief. A game where you navigate through a museum, avoiding security measures to correct mistakes in exhibit information
- As the project's *Lead Programmer* my responsibilities were
 - Architectural Planning and Feature Verification
 - o Timeline Management
 - o Feature Implementation

Artificial Intelligence Library

(October 2015 – December 2015)

- Library developed during the course of program course.
- Pathfinding library provides support for
 - defining a graph of nodes
 - provides a few pathfinding methods like A*, Dijkstra, DFS and BFS
- Steering based on Craig Reynolds' Steering behaviors
 - o Library provides a SteeringBehaviours component, allowing users to add and manage individual behaviors like Seek, Arrive and Wander
- Perception
 - Provides a perception component, allowing agent to maintain a collection of decaying records of nearby agents
 - Records are generated by filters
 - o Library defines a filter interface to allow for the create of user-defined filters
- Finite State Machine
 - Library provides a FSM component for agents to use and manage states
 - Provides a State class definition to handle Enter, Update and Exiting of a given state.

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2D Game Project (C++)

(July 2015 – September 2015)

- A Pair Project that started as a school project
 - o Goal is to make a 2D Roguelike using a light engine framework provided by an instructor
- Implemented Sprite Animation Back End
 - o Uses Polymorphic Inheritance to drive different animation states and functionality.
- Implemented Collision Detection and Handling
 - o Uses inheritance to identify collidable objects.
 - o Provide an interface to allow an object to define their own response behavior.

Work History

Store Clerk

SaveOnFoods

December 2007 - Present

12130 Nordel Crossing, Surrey, BC

Worked with coworkers in a team environment to divide and conquer daily tasks and meet end user needs.

Education

Visual and Game Programming Diploma

Art Institute of Vancouver

Vancouver, BC

Expected Graduation date is March 2016

October 2014 - March 2016

Courses of Interest

- Artificial Intelligence
- Concurrency
- Unity3D

Software Systems Degree Simon Fraser University Vancouver, BC

Left Institution in April 2014

September 2009 – April 2014

Courses of Interest

- Networking
- **Operating Systems**

References Available upon request

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