Software Engineering

Technical Skillset

- o Proficient in Java, C#, C++, and C for Android, game and application development
- o Experienced with JavaScript, AngularJS, jQuery, HTML, SQL
- o Worked with Python, Lua, PHP, ASP, Silverlight, MVC design pattern

Employment History

Application Developer - Imagine Communications Inc.

2018

May 2014 - Aug. 2014

- Developed an internal progress dashboard to record and monitor employee efficiency using AngularJS, Bootstrap
- Designed a RESTful route handler API in C# for the progress dashboard backend with exception/error propagation
- o Maintained existing software systems, bug fixes in Silverlight and C# backend

Web Developer - IvyGlobal Education

Jul. 2013 - Aug. 2013

- Developed a news feed using Google Feed API.
- Wrote a PHP script to find trending topics; also retrieves new news articles and inserts them into the SQL database
- Created, updated, and maintained functionality and content of web pages using JQuery,
 Javascript, and HTML

Projects

BubblEscape - an original Android game

Aug. 2013

- Led, architected, and managed the project over entire development cycle
- o Assigned tasks to other developers and organized project meetings and deadlines
- o Implemented object collisions, animations, character AI, game logic, and unique swipe controls
- 300+ installs on google play store

Myoenu - 2014 Hack the North project

Sept. 2014

- o A desktop navigation menu for Windows using arm and hand gestures with Myo
- Developed gesture recognition scripts in Lua for scrolling and bringing menu overlay in/out of focus

(Below are projects using my own custom Java framework, PCPC)

PC Pwns Console (PCPC) - A custom Java framework

- A Java console designed to be used as a framework engine for efficient development of applications
- o Provides methods for accessible file I/O, text I/O, audio, graphics, and socket connections
- Used to develop games, messengers, and GUI applications

Steganographer - An Image and text steganography tool

o Encodes and decodes images and text within other images by bit manipulating RBG values

Pathery - A 'find the longest path' game, based on Pathery.com

- Developed a custom JSON parser from scratch to read map info from Pathery.com
- o Implemented a function to determine the shortest path using Breadth First Search

PC3D with **PCAA**

- Built a 3D space view of coordinates with a free moving camera
- o Developed a custom anti-aliasing filter to smooth jagged lines

KICKS - A clone of the classic arcade game QIX

Developed a recursive flood-fill algorithm to calculate the area of polygons given vertices