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#### **SELECTED PROJECTS**

# Overnight - Unreal, C++

Single player horror game. Team of 8 (2 Engineers).

Developed interactions mechanisms for interacting with items in the environment including quest items, built darkness areas in the environment that affect vision and cause noises to trigger. Expected release May 2018.

## Cube.io - C#

Networked multiplayer game. Team of 2. Agar.io clone.

Developed a dedicated server and game clients using JSON as the communication protocol, leaderboards website, game mechanics such as viruses that hurt players and PvP damage. Built from scratch using SFML. Released Nov. 2015.

# Chef It - Unity, C#

2D roguelike. Team of 4 - 1 Engineer.

Developed random distribution system and loot table editors and tools for Unity, unit AI, turn managers, inventory systems, stats, and procedural generation. Released Dec 2017.

# Sprite Editor - C++, QT

Sprite editor program similar to paint. Team of 1.

Developed a Model, View, Controller for creating sprites, sprite sheets, and gifs. Built tools for quick design iterations. Exporting and saving file support. Released Apr. 2016

## Glitch Ball - Unity, C#

Local 4 player competitive party game. Team of 15 - 6 Engineers. Developed player movement mechanics. Designed levels and environmental mechanics. Developed UI. Built tools for quick design iterations on players and levels. Expected release May 2018.

## Tank Game - Unreal, C++

Single player tank battle game. Team of 1.

Developed character controllers for tank and AI. Extensive use of blueprints and C++. Developed menus and game managers. Tanks use Unreal's navmesh pathfinding. Released February 2018.

#### **WORK EXPERIENCE**

## **University of Utah -** C.S. Teacher's Assistant

(Jan. 2017 - Current)

Taught weekly labs on programming concepts such as testing, source control, threading, code debugging, object-oriented programming, etc. Heavily involved in judging code quality and performing quality assurance and code testing. Mentored other students one on one.

## **EDUCATION**

## University of Utah - B.S. Computer Science E.A.E

Spring 2015 - Expected graduation date Fall 2018

# **PROGRAMMING LANGUAGES**

C# Java

Python HTML / CSS

C / C++ SQL

#### **TOOLS**

**GDB** Linux

Unix Terminal Git / Github

Visual Studio Trello

QT Hack n' Plan **Eclipse** Slack Chat Maya Unity 3D Hansoft Unreal 4

#### **OTHER SKILLS**

**Excellent Written and Verbal** Communication

Client / Server. Peer to Peer Architectures

Strong Attention to Detail

Problem-solving

Agile / Scrum Development

Highly Motivated and Proactive

**Debugging and Diagnostics** 

Quality Coding Practices and

**Testing Methods** 

Cooperative Team Player

Understands concurrency, memory, and performance

#### **RELEVANT COURSES TAKEN**

Software Design 1 & 2, Databases, Operating Systems, Computer Systems, Data Structures, Algorithms, Artificial Intelligence, Linear Algebra, Calculus, Physics for Engineers, Computer Networking

#### LANGUAGES SPOKEN/WRITTEN

English, Tagalog