Mark Smith

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Education

University of Utah Salt Lake City, UT

M.S. Software Engineering, Entertainment Arts and Engineering

Expected May 2018

B.S. Business, Marketing May 2005

Skills and Qualifications

Programming:

-C++ -C# -Java -Python - PHP -x86 Assembly -MIPS Assembly

Projects:

PlayWrite Studios Ongoing

Gameplay and Tools Programmer

- Imperium, a narrative based game about a post-apocalyptic dystopia built in Unreal 4.
- Coding an enemy selection and target lock-on system in Unreal C++.
- Building Unreal Blueprints and transferring Blueprint functions to C++ code.
- Utilizing Perforce version control.
- Contributing to stories about the end of the world and the people who might have survived.

SpawnCreepWave Ongoing

Lead Programmer

- Personal project for experimenting with Unreal C++.
- Replicating functionality of Uncharted 4's Hard Point AI system per Matthew Gallant's 2017 GDC Talk.
- Merging code functionality with editor supported UI and game objects.

BigHeap Completed 7/27/17

Lead Programmer

- Custom memory manager built from scratch using only stdio.h and assert.h.
- Allocate a large block of memory at startup and then replicate malloc functionality to suballocate from the block.
- Implement coding best practices such as const correctness, function inlining, and pass/return by reference/value.

Twiddle the Maze Completed 11/10/16

Gameplay and Deployment Programmer

- Mobile puzzle game built in the Unreal 4.
- Linked mobile device sensor data to player movement.
- Worked with a small team to produce a proof of concept in about two weeks.

Online Multi-User Spreadsheet

Completed 11/3/2014

Programmer

- Ported previously developed spreadsheet and string socket C# projects to C++.
- Handled multiple simultaneous client connections to a single sheet while maintaining the integrity of the data.
- Practiced SCRUM development, pair programming and Git/SVN version control systems.

Taught an introduction to Java programming class for students age twelve to sixteen.

Employment History

Data Entry and Cashier

University of Utah, AOCE Registration and Cashiering

Salt Lake City, UT

Aug 2012-Aug 2017

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Pentara Corporation Salt Lake City, UT

Software Development and QA Intern

June 2015-Aug 2015

- Developed functioning code modules to facilitate passing data between the client, server, and database.
- Tested new features in an agile environment as they were coded.