

Work Experience

Studio Wildcard: Gameplay Programmer

Released Scorched Earth Expansion into Early Access

Started July 2016

Education

The Guildhall at Southern Methodist University

Graduated in Game Development: Specialization in Programming

Spring 2016 GPA: 3.863

Southern Methodist University

Computer Science Engineering

December 2014 GPA: 3.841

Team Game Projects

Scrapped - Team size 15 | 5 Months | 2 Programmers (UE4, Blueprints, Perforce) | Finished Fall 2015

- Responsible for the game's core "magnetism" gameplay mechanic
- Implemented a spline following NPC utilizing an event queue with trigger-driven behaviors

Chibieval Wars - Team size 8 | 2 Months | Sole Programmer (UE4, Blueprints, Perforce) | Finished Spring 2015

- Lead Programmer in a multiplayer FPS made with UE4
- HUD and networking

Styx - Team size 5 | 2 Months | Sole Programmer (Unity, C#, Perforce) | Finished Fall 2014

- Mentored level designers in programming tasks
- Integrated animations using Unity's animation tree
- Developed the game's 3 core mechanics (player controlled platforms, spawning jump pads, shout)

Individual Projects

Machine Learning - 2 Months | Finished Summer 2015 | C++ and OpenGL

- Utilized a neural network using a genetic algorithm for learning to train an AI
- Application trained AI ships in a 2D environment to avoid asteroids using sensors as inputs

Roguelike - Into The Mists - 2 Months | Finished Spring 2015 | C++ and OpenGL

- Created data driven Als, random map generator, and data driven items
- Utilized a factory pattern for generating NPCs

Simple Miner – 2 Months | Finished Fall 2014 | C++ and OpenGL

- Incorporated and optimized voxel terrain generation using Perlin noise
- Incorporated run length encoded saving

Skills

Languages

• C++, C#, C, JavaScript, Java

Ue4 Blueprints, Python

Systems and Tools

- OpenGL
- Unreal Engine 4

Concepts

- A* Pathing
- Agile Development
- Voxel Ray casting

- Unity
- NodeJS
- Linear Algebra
- Multithreading

- Visual Studio 2010/2013
- Perforce, Git, TortoiseSVN
- Shading, Lighting
- UDP Networking