

Objective

To obtain a full-time position as a gameplay programmer after I graduate in May 2020.

Skills

Programming

- C#, C/C++, Java, Lua, HLSL, Node.js, HTML 5, CSS3, JavaScript, JSON.

Software

- Visual Studio, Vim, Eclipse, VS Code, Microsoft Office, Photoshop, Illustrator, After Effects, Microsoft Windows, macOS.

Engines/Tools

- Unity3D, DirectX, OpenGL, Unreal Engine 4, Monogame, Git, WPF, Windows Forms.

Experience

Software Engineering Intern, *Charles River Analytics* | Cambridge, MA | Summer 2019

- Continued work from previous summer, bringing a project to near completion.
- Programmed gameplay features and user interactions for a medical training simulation using Unity3D.
- Polished and refactored old features to be deployment-ready.
- Refactored a Lua scripting environment in a backend engine for variety of projects to make it multi-platform.

Software Engineering Intern, *Charles River Analytics* | Cambridge, MA | Summer 2018

- Recipient of the Great Promise Award for showing exceptional talent and dedication.
- Designed and developed a UI based medical simulation from scratch using Unity3D.
- Developed and tested a backend simulation library that is currently implemented in a variety of projects.
- Created Unity3D editor tools to assist and streamline the development process.

Counselor, *GreenApple Campus, Olin College* | Needham, MA | Summer 2017

- Instructed children grades 3-9 the Swift programming language through Swift Playgrounds, how to create Augmented Reality and Virtual Reality mobile apps using Unity3D, and how to create Mods for Minecraft using Java.
- Reported and presented students' work to managers and parents.

Projects

Snake on the Water — Gameplay Programming, Engine Development

- Programmed boat movement, swimmer following behavior, buoyancy logic, camera system, and many other gameplay elements
- Created a custom engine for this project using DirectX and HLSL in C++.
- Created a prototype in Unity3D before developing engine and gameplay features that fit the project.

Knight Move 3D — Gameplay Programming

- Used a professor's proprietary engine to create an enhanced recreation *Knight Move* using C++ and OpenGL.
- Programmed the underlying board structure of the game, allowing for easily accessible entity movement and pickup placement.
- Created gameplay systems, scoring, and effects for player actions on the board.

VRn't (Ludum Dare 41 GameJam) — Gameplay Programming, Team Lead, Audio

- Ranked #17 in Humor out of 2000+ entries.
- Programmed player controls, enemy AI, obstacles, state system, and other gameplay elements.
- Composed all audio in the game.

Education

Rochester Institute of Technology | Fall 2016—Spring 2020

- Bachelor of Science in Game Design and Development.
- Minor in Computer Science.
- GPA 3.90/4.0, Dean's List Fall 2016 - Present
- RIT Presidential Scholarship