

Education

University of California, San Diego

B.S. in Computer Science, Minor in Literature. Class of 2022.

Skills

Technical

C#
C++
Unity3D
Unreal Engine 5
Godot
Embree
OpenGL

Development

Game Design
Gameplay Programming
Graphics Programming
Computer Animation
Prototyping
UI Design

Coursework

Advanced Data Structures
UX + Interaction Design
Advanced Rendering
Game Design and Implementation

Object-Oriented Design Computer Graphics Computer Animation Linear Algebra

Professional Experience

Unity Developer, FoundrySix, Los Angeles, CA Sep. 2021 - Present

- Implemented gameplay systems for ARealm, a fantasy AR MMORPG
- Translated high-level enemy behavior and attack designs into efficient and scalable AI code
- Sourced and integrated character animation assets using Unity's Mecanim system
- Contributed to multiplayer networking code in ARealm and other multiplayer AR experiences
- Researched and implemented Unity third-party APIs to improve gameplay experience in ARealm
- Completed several client projects, regularly communicating with clients and implementing client feedback

Personal Projects

Charioteer!

Mar. 2022 - Jun. 2022

Rust

Developed a office chair racing game in a custom Rust engine with a small team as a senior thesis project. Contributed to ECS implementation, art, UI, music, and helped host a live gameplay demo.

Once Upon A Time On Mars

Apr. 2022

Unity

Designed, animated, composed, and programmed a space western arcade game over the span of a week as a solo submission to the California Inter-collegiate Game Jam. Voted "Most Likely To Get Kickstarted".

3D Animation Engine

Jan. 2022 - Mar. 2022

C++, OpenGL

Programmed a 3D animation engine in C++ as part of UCSD's Computer Animation project course. Studied and implemented character animation (rigging, skinning, and keyframe animation), as well as realistic cloth simulation and inverse kinematics.

Monte Carlo Path Tracing Renderer

Jan. 2021 - Jun. 2021

C++ Embree

Programmed a real-time C++ path tracer with realistic lighting through UCSD's Computer Graphics and Advanced Rendering project courses. Studied and implemented acceleration structures, importance sampling, and industry level lighting models (GGX).