

Experience

The 9th Circle - Project Lead, Engineer Lead, Lead Software developer

09/2023-Present

Irvine, CA

- Led and managed a team of 18 individuals, overseeing weekly task assignments for sprints.
- Integrated original art models and animations for a cohesive visual experience with low render times on the threads, improving GPU render times from 27ms to 8ms per frame.
- Engineered software infrastructure using a blend of blueprints and C++ code in Unreal Engine 5 in order to optimize the performance of gameplay from 78ms processing time per frame to an average of 28ms.
- Spearheaded the development of core mechanics.
- Programmed the procedural generator for dynamic and unpredictable gameplay allowing players to play over 200 different permutations of the core game loop.
- Established comprehensive project documentation for clarity and reference.
- Maintained an organized and efficient working tree in the GitHub repository using open-source methodology; switched to Git Flow working tree methodology after 4 months of development to avoid the use of semaphore locks.

Quantum Leap - Gameplay Engineer, Software Engineer, Plugin Developer

03/2023-06/2023

Irvine, CA

- Designed and developed software infrastructure for a rhythm-based parkour game.
- Used public APIs to generate beat maps based on player selected sound track and connected API with a self-built script to generate a level of platforms and walls.
- Created an online Plug-in for Network play in Unreal Engine 5.

Code Ninjas - STEM and Game Development Instructor

08/2023-Present

Costa Mesa, CA

- Provided instruction on a diverse set of game development platforms and engines for teenagers.
- Refined Unity Level Curriculum for higher level students to teach industry standards as well as familiarity with engine tools and assets.

Imbed LLC - Embedded Software Engineer

05/2021-09/2021

Burbank, CA

- Designed embedded software and interfaces applicable to the Digital Cinema industry.
- Implemented in C++ XML and MXF parsers to facilitate playback of Digital Cinema Movies.

Education

University of California, Irvine - B.S. in Computer Game Science

Graduation: March 2024

- Data Structures Analysis and Implementation, Operating Systems, Project in Artificial Intelligence, Computer Networks, Game Engine Lab, Multiplayer Game Project, Game Capstone I & II
- **Programming Languages:** C++/C#/C, Python, Java, SQL, RISC Assembly
- **Software:** Unreal Engine 5, Unity, Godot, Git, MIPS