

Software engineer focused on VR and game development. Experienced with real-time systems, multiplayer gameplay, and XR interaction design. Particularly interested in roles working on NPCs/AI and systems that support immersive player experiences, with an eye toward eventually growing into product or project leadership.

Experience

Launchvox Inc. *Sacramento, CA*

XR Software Engineer

Sept. 2023 - Jun. 2025

- Collaborated on an analytics system using DynamoDB to capture and visualize player usage data for XR experiences.
- Implemented core multiplayer features in Unity (C#) using Photon Networking.
- Developed a cross-engine plugin (Unity & Unreal) under CTO guidance to persist network connections and room settings across sessions.
- Co-designed a modular drag-and-drop interaction system (translation, rotation) and implemented it in Unreal Engine Blueprints.
- Optimized interaction performance in a cataract surgery VR simulator using engine profiling tools to reduce hitching and latency.
- Integrated reusable VR UI components for a media viewer targeting multiple headsets.

Elara Systems Inc. *Sacramento, CA*

XR Software Engineer

Jan. 2022 - Mar. 2023

- Led an 8-month expansion of a drill-based VR training simulator, adding new drills, mechanics, and content.
 - Integrated inverse kinematics, pathfinding, and an ambient state system across six VR drills to support more believable NPC behavior and reactions.
 - Built an interactive VR video player in Unreal Engine for an on-rails medical simulation.
 - Created dynamic environmental events in a top-down educational farming game, driving player feedback and engagement.
-

Projects

Karnivus: Rooftop Rumble and Tournament

forcemultiplierstudios.com

- Expanded gameplay systems by enhancing player interactions, spectating features, and overall game balance atop an existing core framework in UEFN and Verse.
-

Skills

Programming

- C#, C++
- Verse

Game Engines

- Unity
- Unreal

XR Tools

- OpenXR & SteamVR
- Mobile Development

General

- 3D Math
 - UI/UX
-

Education

B.S. in Computer Science: Game Design with Honors

University of California: Santa Cruz | Sep. 2017 - Jun. 2021

- Received the Technical Innovation and Social Impact awards for Senior Capstone Project.