

# Maxfield Friedman

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## WORK EXPERIENCE

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### Force Multiplier Studios

Remote, United States

Gameplay Software Engineer (Freelance, Contract)

06/2024 - Present

- Debugged and delivered new gameplay mechanics by overhauling the reconstructible material system—enabling shooting through the mesh, mantling, and faster performance—and built features like drones and score streaks, resulting in higher player engagement and smoother gameplay.
- Build and deploy major updates to Fortnite, write clear patch notes for each release, and run weekly playtests, which speed up issue resolution and raise player satisfaction.
- Reworking an existing level into a standalone third experience using UEFN and Verse, delivering a new playable mode that expands content variety.
- Delivered live-service holiday updates across two core experiences, driving up to 10% click-through on release days and increasing daily impressions from ~100 to 10,000+.

### Launchvox, Inc

San Francisco, CA

XR Software Engineer

09/2023 - 06/2025

- Engineered a graded scoring system for a VR cataract surgery training simulator by aggregating step-level user data and storing results in AWS DynamoDB, enabling measurable progress over time.
- Led multiplayer integration for a VR surgical room, replicating up to 6 users and their interactions, and adding voice chat using Photon (Unity).
- Developed an Android plugin (Android Studio) to pass intents/extras between VR experiences, preserving multiplayer connection state, standardizing audio volume, and handling return-to-room flows.
- Built a drag-and-drop room configuration system in Unreal Engine (Blueprints & C++), enabling users to place/remove objects in 3D for space reconstruction and layout planning.

### Elara Systems, Inc

Sacramento, CA

XR Software Engineer

01/2022 - 03/2023

- Led development of an ambient NPC state system for six VR drills in Unity using C#, incorporating A\* pathfinding, finite state machine logic, and IK-driven animations, which improved NPC responsiveness and reduced navigation bugs.
- Profile and optimize character spawning, background actions, and object loading to reduce hitching and lag for Quest headset.
- Designed and integrated a to-do-style interactive video player for an on-rails Unreal Engine VR experience, gating playback on user actions, which increased user engagement and ensured tutorial completion.
- Implemented four dynamic events (fire, flood, windstorm, disease) for a top-down educational web game to increase variety and support learning outcomes.

## EDUCATION

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### University of California: Santa Cruz

Santa Cruz, CA

Bachelor of Science

Received 06/2021

Major in Computer Science; Concentration in Game Design

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

## ADDITIONAL

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**Programming:** C#, C++, Python, Verse, UE Blueprinting

**Technical Tools:** Unity, Unreal Engine, AWS, DynamoDB, OpenXR, Android Studio, Git, PlasticSCM

**General Skills:** Real-time systems, multiplayer, networking, profiling/performance optimization, interaction systems, UI/UX

**Interests:** Running, triathlon/endurance sports, baking & cooking, skiing, basketball