

Noah Fischer

Gameplay Engineer

Portfolio | noisfischer@gmail.com | GitHub | LinkedIn

Summary

Gameplay Engineer specializing in Unreal Engine 5 and C++, with experience building large-scale AI systems, UI frameworks, and performance-critical gameplay features.

Work Experience

Gameplay & UI Engineer (Unreal Engine)

07/2024 – Present

Refactor Games

- Designing and implementing a state-machine-driven goalkeeper AI directed by over 100 behavior instructions.
- Designing and maintaining large-scale animation chooser table supporting over 200 contextually driven animations. Creating inverse kinematics system to support goalkeeper animations.
- Building a scalable UMG-based UI framework supporting over 300 screens for both keyboard and gamepad navigation. Creating menus with local and online multiplayer support and replicated visuals.
- Optimizing Chaos Cloth simulation and creating a central cloth manager for up to 25 on-screen characters. Achieved a 45% increase in framerate from the initial cloth implementation.
- Mentoring 2 engineering interns, resulting in them joining the team as full-time employees.

Gameplay Engineer (Roblox Studio)

10/2025 - Present

Freelance

- Lead Luau engineer developing a multiplayer base protection experience in Roblox Studio.
- Designing scalable base constructor module scripts that can be reused for future base building features.
- Developing AI spawn manager and behavior system.

Unreal Engine Gameplay Instructor

09/2023 – 07/2024

Vertex School

- Introduced over 50 students to programming fundamentals beginning in Blueprints and proceeding to C++. Guided students through creating game mechanics of their own design, culminating in them developing their own unique finished projects.

Multimedia Specialist

09/2022 – 07/2024

Launch Family Entertainment

- Designed, developed and maintained a live website that displayed park specific information in 30 locations nationwide.

Skills

Core Technologies: Unreal Engine 5, C++, Blueprints, Roblox Studio, Luau

Gameplay & Systems Programming: Gameplay Architecture, State Machines, Character Controllers, Animation Systems, Animation Chooser Tables, Inverse Kinematics (IK)

AI & Decision Logic: Behavior-Driven Systems, Data-Driven Design, AI State Machines, Gameplay Debugging

UI: UMG, Focus Management, Input Routing, Multiplayer UI (Local & Online)

Multiplayer & Networking: Replication, Client–Server Architecture, Multiplayer-Ready Gameplay Systems

Performance & Optimization: Profiling, Chaos Cloth Optimization, Performance-Conscious Development

Version Control & Pipelines: Perforce, Unreal Game Sync, GitHub

Education

Unreal Engine Game Development Program — Vertex School

04/2023 – 11/2023

B.S. Graphic Communication, Cum Laude

2016 – 2020

California Polytechnic State University – San Luis Obispo
Concentration in Web & Digital Media