

# 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

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

2016 – 2020