

ETHAN STERLING

Senior Gameplay Programmer & Systems Engineer

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TECHNICAL SKILLS

Engines & APIs

Unreal Engine 4/5, Unity
DirectX 12, Vulkan, PhysX

Programming Languages

C++, C#, HLSL/GLSL, Python,
Lua, SQL, x86 Assembly

Tools & Workflows

Perforce, Git, Visual Studio,
RenderDoc, Unreal Insights,
CMake, Jenkins CI/CD

SHIPPED PROJECTS

Nexa: Infinite

Lead Systems Programmer

Unreal Engine 5 (C++)

PC, PS5, Xbox Series X | Shipped 2025

- Designed and optimized high-performance C++ multiplayer replication systems, decreasing network bandwidth consumption by 32%.
- Implemented customized character controller logic using Unreal's physics engine for complex wall-running and dashing mechanics.
- Architected multi-threaded gameplay systems and asset loading pipelines, completely eliminating loading-screen stuttering.

Synapse: Breach

Gameplay Engineer

Unity (C#)

PC, Nintendo Switch | Shipped 2023

- Created highly responsive combat systems, inventory management, and weapon modding framework used across the title.
- Built state-of-the-art AI behavior trees and custom navigation meshes for stealth-focused combat encounters.
- Optimized GPU render state and memory allocation, reducing overall load times by 40% and target memory footprint by 150MB.

Meridian: Odyssey

Gameplay Programming Intern

Custom C++ Engine

PC | Shipped 2021

- Maintained cross-platform rendering wrappers and game logic layers using C++ and DirectX 11.
- Programmed procedural audio system for dynamic environment soundscape generation based on player position.

PROFESSIONAL EXPERIENCE

Vertex Interactive

Senior Gameplay Developer

Jan 2024 – Present

Fictional City, State

- Lead technical design and implementation of gameplay systems for an unannounced AAA open-world action-RPG.
- Standardized gameplay profiling guidelines using RenderDoc and Unreal Insights, saving developers average of 5 hours/week.
- Mentor 4 junior programmers, establishing robust code review pipelines and unit testing patterns in C++.

Apex Game Lab

Gameplay Programmer

Jun 2021 – Dec 2023

Fictional City, State

- Programmed complex player mechanics, interactive objects, and dynamic UI panels in close collaboration with game design team.
- Engineered custom editor scripts and diagnostic tools, reducing level designers' assembly time by 20%.

ENGINE EXPERTISE

Unreal Engine 5

- Gameplay Ability System
- C++ Source Modding
- Multiplayer Replication
- Blueprint Integration

Unity

- DOTS / ECS Framework
- Shader Graph & URP
- Addressable Assets
- Custom Editor Tools

EDUCATION

B.S. in Game Development

Meridian Inst. of Tech.

2017 – 2021

- Focus: Graphics Programming & Engine Architecture
- GPA: 3.9/4.0

SHIPPED TOOLS

Vertex RenderDoc Importer

Custom plugin for importing and parsing RenderDoc frame captures directly into game editor viewports.

Apex ECS Physics

Lightweight C++ entity-component-system library optimized for multi-threaded physics calculations.