

Goose Steimann

Rendering Engineer | Unreal Engine | Real-Time Graphics | AR/XR Systems

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SUMMARY

Rendering Engineer with a track record of shaping rendering architecture at engine scale across Vulkan, DirectX 12, Metal, and OpenGL. At Epic Games / Psyonix, contributed to core rendering systems for UE6, UEFN, SceneGraph, and Verse — influencing pipeline direction across the engine while shipping Fortnite, Rocket League, and Rocket Racing. Previously a core contributor to the Niantic Lightship ARDK, defining ML-to-render pipeline architecture adopted across Pokémon GO, Pikmin Bloom, and Peridot. Operates effectively across the full stack: low-level GPU systems, cross-platform optimization, engine tooling, and technical mentorship of artists and engineers.

EXPERIENCE

Senior Rendering Engineer | Epic Games / Psyonix • 2022 – 2026 • Los Angeles, CA

- Shaped rendering pipeline architecture for UE5, UEFN, SceneGraph, and Verse — driving core render system design decisions that propagated across the engine and all shipping titles.
- Shipped rendering systems for Fortnite, Rocket League, and Rocket Racing across PC, console (PS5, Xbox Series X), and mobile, contributing at both game level and Unreal Engine core.
- Co-defined and built engine-level shader pipelines and technical artist tooling adopted studio-wide, reducing iteration time and raising the rendering capability floor across Epic's teams.
- Authored HLSL shaders, compute shaders, PBR materials, post-processing, and ray tracing systems (Lumen, DXR); profiled GPU performance with RenderDoc, PIX, and TSR Optimization to resolve bottlenecks in draw calls, LOD, and overdraw.

Augmented Reality Software Engineer (R&D) | Niantic, Inc. • 2020 – 2022 • London, UK

- Defined and built core ML-to-rendering pipeline architecture for the Niantic Lightship ARDK — identifying and correcting foundational design issues in prior implementations before public release.
- Shipped AR rendering systems powering Pokémon GO, Pikmin Bloom, Peridot, and Ingress — reality-blending graphics used by hundreds of millions of players across iOS and Android.
- Developed cross-platform graphics tooling using Unity, C++, C#, HLSL, Metal, and Vulkan; drove rapid R&D prototyping of novel XR rendering approaches for spatial computing targets.

Graphics & AR Freelance Developer | Independent • 2008 – 2020 • Selected projects

- Built a custom OpenGL game engine; developed AR games, interactive murals, and real-time graphics experiences using C++, C#, Unity, and HLSL.

Director of Mobile Engineering / Senior Software Engineer | Jiko Group • CLEAR • 2018 – 2020

- Jiko: Led mobile engineering team, architected iOS/Android apps, v1 API design, identity/device auth services on Kubernetes. CLEAR: Architected iOS, Android, and API layer including core biometric identity verification flow.

Software Development Engineer | Amazon • 2015 • Seattle, WA

HONORS & EDUCATION

Winner, MIT Reality Hack 2023 (Mixed Reality) • Mentor, MIT Reality Hack 2024 • Judge, NASA Space Apps Hackathon NYC

B.S. Web Design & Interactive Media, Art Institute International Minnesota • Coursework in Chemistry, University of Minnesota

TECHNICAL SKILLS

Graphics APIs: Vulkan, DirectX 12 (DX12), DXR, Metal, OpenGL, HLSL, GLSL, Compute Shaders

Engines & Frameworks: Unreal Engine, Unity, Niantic Lightship ARDK

Rendering: Real-Time Rendering, Rendering Pipeline, Ray Tracing, Lumen, PBR, Post-Processing, Shaders, LOD, Draw Call Optimization, Technical Art, 3D Graphics

Performance & Profiling: GPU Profiling, RenderDoc, Multi-Threading, Job Systems, Frame Time Optimization, Cross-Platform Performance

AR / XR: Augmented Reality, Virtual Reality, Spatial Computing, Reality Blending

Languages: C++, C#, HLSL, Python, JavaScript

Platforms: PS5, Xbox Series X, Nintendo Switch, PC, iOS, Android

Leadership: Technical Direction, Architecture Definition, Cross-Team Influence, Mentoring Engineers & Technical Artists, R&D Leadership