

Joshua Rutz

Principal UI Engineer & Engineering Manager

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Principal Engineer and Engineering Manager with 15+ years in game development. Specializing in UI architecture, systems design, and technical leadership across Unreal Engine, Unity, and proprietary engines.

SKILLS

- ✓ C++
- ✓ Unreal Engine (UE5)
- ✓ AI Workflows
- ✓ Engineering management
- ✓ Game development
- ✓ Real-time rendering
- ✓ Performance optimization
- ✓ Architecture & design
- ✓ Technical strategy
- ✓ People management

EXPERIENCE

Zipix - Founder & Technical Director | March 2026 - Present

- **Founder & Solo Build:** Designed and shipped a live mobile micro-game platform end to end in ten weeks: 20 games on one shared engine contract, in production across web and native (TypeScript, Phaser 3, Capacitor, Cloudflare, Supabase), built on a studio operating system a multidisciplinary team plugs into, with one CLI control plane for every privileged operation, a shared design-token system, 437 automated tests, and 9 CI/CD pipelines.
- **AI-Driven Operations:** Codified each discipline's workflow into 19 reusable agent playbooks plus a checkpoint-gated game-creation pipeline, so one operator delivers the output of a full team, and owns release engineering and reliability: a release manifest, kill switches, incident and cost runbooks, and a production monitor that gives every shipped change a tested path back.

Epic Games - Senior UI Engineer | January 2025 - March 2026

- **Technical Leadership:** Informally led the Fortnite UI team with no assigned lead, 12 UI engineers across 3 teams reporting up to me through a hierarchical structure, and was separately assigned to the competitive team to give senior architectural and engineering leadership across 8 contractors.
- **C++ and Custom Rendering Code:** Sole UI Engineer driving Fortnite in-game HUD refresh; implemented rasterization technique for spline-based storm visualization using low-level C++ and custom rendering code
- **Architecture:** Architected ViewModel data debugger in collaboration with tools team; enabled real-time debugging of UI state. Lead architectural refactor of competitive game flow codebase; restructured interconnect systems to improve reliability.
- **AI Adoption:** Created the team-level framework for AI use in Fortnite's UI engineering teams and gave department-wide presentations and documentation for the roll-out.

Manticore Games - Software Engineering Manager | April 2021 - December 2024

- **Engineering Management:** Promoted to lead engineer in year one as the client-side UE5 gameplay lead, a peer to the Director of Backend Engineering with both reporting to the CTO. Built and led a gameplay team that grew from 4 to 6-7 at its peak, steering it through layoffs and onboarding without losing delivery, while keeping a 50/50 split of management and hands-on Unreal Engine C++ work.
- **Client Tech Strategy:** Owned client tech strategy planning and architectural proposals to c-suite executives. Pushed for generic gameplay systems to support specific visions, which mitigated 2 full design pivots.
- **Mentorship:** Mentored 5+ engineers on technical growth; promoted 3 team members during tenure and managed 1 PIP through to improvement
- **Team Efficiency:** Established code review culture emphasizing architectural clarity and best practices.

Super Evil Megacorp - Senior Client Engineer | San Mateo, California | October 2017 - April 2021

- **Proprietary Engine:** Architected and led complete front-end UI rewrite using proprietary NUO engine

- **Architecture:** Re-architected entire front-end of Vainglory mobile from legacy codebase to modern component system and established architectural patterns for widget composition
- **Performance Optimization:** Implemented flexible memory usage for UI elements in the custom engine.

KIXEYE - Senior Gameplay Engineer | San Francisco, California | May 2012- April 2015

- **Unity and C#:** Engineer on War Commander: Rogue Assault for client in Unity/C#, server in C#, refactored its matchmaking system using asymmetric ELO scores.
- **Full Stack Development:** Owned full stack feature development; design, implementation, playtesting

Zynga - Software Engineer | San Francisco, California | May 2010- May 2012

- **Features and Bug Fixes:** Shipped features to FarmVille's monetization pipeline; supported content management system development