

Veteran game-industry tech leader with 15+ years in games, simulation, and entertainment software, from a 5-man Army vehicle simulator in Unreal Engine 3 to a live co-op VR title on Meta Quest. I take a game from napkin to shipped: I have led distributed engineering teams of up to 8 across 5 time zones, architected serverless multiplayer backends on AWS, built test and automation infrastructure for Unreal Engine and Fortnite Creative at Epic, and most recently co-founded an XR studio, stood it up from zero as Studio Head, and shipped its first game. Strongest where engineering leadership, backend architecture, and developer tooling meet. C++ / C# / Python.

SHIPPED

Inwigo Dirty Pearl Studios · Meta Quest, Early Access 2026 · Studio Head, live free-to-play co-op VR	Fortnite / UEFN Epic Games · 2022–2023 · Automation & test tooling for Unreal Engine and Unreal Editor for Fortnite	Codec Avatars Meta Reality Labs Research · 2020–2022 · Quality-evaluation tools and pipeline, VR + 2D
Aim Gods Finalmouse · PC, Dec 2020 · Lead Developer; UE4 + AWS GameLift, architected and shipped in 14 months	FIVE: Guardians of David Kingdom Games · PC, 2015 · Gameplay & tools; AI, combat, UI, data pipeline	T.R.I.C.T. Crew Trainer Army Game Studio · UE3, 2013 · 5-man MRAP driving simulator; vehicle physics and traffic AI

CORE SKILLS

Engines & languages	Unreal Engine 4/5 (C++, UEFN, Gauntlet, Automation Framework, Subsystems, plugins) · Unity (C#, native C++ plugins) · Python · TypeScript/JavaScript · T-SQL · Cocos2d-x
Backend & cloud	AWS serverless (GameLift, FlexMatch, Cognito, Lambda, API Gateway, DynamoDB) · Azure · .NET Core · REST/WebSockets, JWT auth · matchmaking, party and chat systems
Tooling & quality	Automated test infrastructure, SDET · CI/CD and build automation · Easy Anti-Cheat · agentic AI developer tooling · PyTorch (ML-assisted evaluation) · Jira
Leadership	Studio stand-up and hiring · distributed and offshore teams · sprint planning and code standards · contractor and vendor management · investor pitching and client demos

EXPERIENCE

- Studio Head — Dirty Pearl Studios

Jan 2024 – Present · Dallas, TX (remote)

Founding member; stood up the XR games startup from zero and shipped **Inwigo**, a free-to-play co-op VR social-horror extraction game, into Early Access on Meta Quest (2026); SteamVR to follow.

 - Built the studio end to end:** hired and onboarded the full development staff, chose the engine and technology partners, and set up the production and CI pipeline.
 - Ran production and the backend** for a live multiplayer VR title: matchmaking and parties, a carnival social hub, open proximity voice chat, cosmetics and account systems.
 - Halved code-review turnaround** (48h to 24h) with agentic AI review tooling I built and ran in production.
 - Led the team through a complete game pivot** and Meta store certification to launch; ran the public Quest 2/3 beta with an incentivized post-test survey loop.
- Quality Engineer (SDET), Fortnite Creative — Epic Games

Jun 2022 – Sep 2023 · Remote

Built automation and testing tools for Unreal Engine and Unreal Editor for Fortnite (UEFN). *Part of the September 2023 reduction in force.*

 - Rebuilt Latent Automation Commands** for the Unreal Automation Framework with user-defined timeouts and bounded retries, removing the stuck-test-never-finishes failure mode.
 - Designed a plugin extending UE's External RPC Registry:** self-registering factory types with endpoints declared inline or per module, giving developers HTTP control of Editor, client, and server from external tools.
 - Implemented a Synchronous Test Executor for Gauntlet** (own thread, non-ticking, blocking calls that never stall the main loop), which removed hand-written state machines from RPC-driven tests and significantly sped up test authoring.

Software Engineer III, Reality Labs Research (Codec Avatars) — Meta, via ICONMA

Dec 2020 – May 2022 · Dallas, TX

Lead engineer for the Quality Evaluation team: tools, systems, and process for Meta's photorealistic Codec Avatar pipeline, working directly with research scientists. C#, C++, Python.

- **Restructured the avatar quality-evaluation process:** 2 hours saved per evaluation and a 200% increase in the team's evaluation capacity.
- **Built VR and 2D evaluator tools in Unity** for defect detection, plus automated data-collection tools (in-engine and native C++ plugins) that deliver debug data straight to researchers.
- **Refactored a highly interdependent component set** into event-driven, decoupled, testable infrastructure that runs threaded.
- **Co-led a PyTorch machine-learning initiative** to automate and scale quality evaluation through automated testing.

Lead Game Developer — Finalmouse

Nov 2019 – Feb 2021 · Dallas, TX

Architected and shipped **Aim Gods**, the company's first game: a competitive objective-based multiplayer FPS in Unreal Engine 4 / C++, from zero to launch in 14 months (Dec 2020).

- **Led 8 engineers across 5 time zones;** owned code standards, review process, sprint planning, and integration across UE4 and AWS for developers, designers, artists, and product owners.
- **Designed the backend** on GameLift dedicated servers + FlexMatch and a fully serverless AWS stack (Cognito, Lambda, API Gateway, DynamoDB); automated build, upload, and fleet launch.
- **Built the client services layer:** JWT-authorized UE4 HTTP wrapper with token refresh, custom chat and party systems, and Easy Anti-Cheat (Hydra, Cerberus, Scout) in production.
- **Fixed a UE4 WebSockets engine bug** that truncated requests at 300 characters and broke authenticated WSS; submitted upstream to Epic for a future engine release.

Associate Director of Technology → Chief Product Officer — Wit Innovation

Apr 2018 – Nov 2019 · Irving, TX

Software architect and product lead for **hitgoalz Battlegroundz**, a gamified sales-performance platform: Unity mobile game (C#) on an Azure REST backend with a .NET Core / Angular web app.

- **Managed 8 on-site and offshore developers;** built the scrum process, CI/CD for web and Unity, and the App Store and Google Play release pipelines.
- **Owned Azure cost management,** pitched to VCs and investors, and ran software demos for new clients.

CTO & Co-Founder — ATAT Tech

Jul 2016 – Nov 2019 · Dallas–Fort Worth

- **Co-created Project EvE,** an AR robotics game: UDP link between Unity and a Raspberry Pi with camera video streamed over IP to the engine; a mobile text-adventure spin-off with a real-time camera description engine and IBM Watson dialogue.

Sr. Software Engineer — Exigo Office

Jan 2017 – Apr 2018 · Dallas, TX

- **Commissions backend** for a direct-selling e-commerce PaaS; co-created a high-performance shared library (about 30% faster processing) and a dynamic-programming N-level tree traversal that scales with tree size.
- **Point of contact for multi-million-dollar clients;** gathered requirements, set expectations, and mentored junior and mid-level developers through code review.

Earlier career

Jul 2013 – Jan 2017

- **Sr. .NET Application Developer — Courtroom Sciences, Inc.** (Jul 2015 – Jan 2017): enterprise back-office lead; MVVM for WinForms, a multithreaded late-binding task engine, selective SQL sync for travel databases, WPF juror-survey app.
- **Gameplay & Tools Programmer — Kingdom Games** (Jul 2014 – Jun 2015): *FIVE: Guardians of David* (PC, Unity): AI, stealth, vehicle combat, abilities, inventory, UI, and a Google Sheets importer that became the team's data pipeline; acted as technical producer.
- **Gameplay Programmer — Zynga** (Apr – Jun 2014): *Riches of Olympus* and *Duck Dynasty Slots* (iOS/Android, Cocos2d-x): rebuilt QA tools, leaderboards, and a producer-driven featured-machine system.
- **Gameplay Developer — Army Game Studio** (Jul 2013 – Apr 2014): *T.R.I.C.T.*, a 5-man MRAP RG-33 / M-ATV crew trainer in Unreal Engine 3: PhysX vehicle physics across terrain, tire pressure, and armor weight; agent-based traffic and civilian AI.

EDUCATION

B.S., Game & Simulation Programming — DeVry University

Senior project *Turbine*: C++ / DirectX 9 / Havok racing game, team of 5, 16 weeks

CREDENTIALS & COMMUNITY

Six Sigma Green Belt — Siemens Building Technologies

Member, International Game Developers Association (IGDA), since 2012

Unreal Engine contributor: WebSockets fix submitted upstream to Epic (2020)