

JEFF SLAVENS

SENIOR GAMEPLAY ENGINEER | C++ | UNREAL ENGINE

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PROFESSIONAL SUMMARY

Senior Gameplay Engineer with 10+ years of software development experience and 6+ years specializing in gameplay engineering. Expert in C++, Unreal Engine 4/5, gameplay systems, software architecture, and performance optimization. Experience building engine-adjacent systems including custom Unreal plugins, procedural world generation, vehicle physics, AI, networking, and large-scale multiplayer systems. Proven technical leadership across AA and independent game development for PC and console.

RELEASED GAME

[Outlaws of the Old West](#)

WORK HISTORY

CO-FOUNDER, DIRECTOR OF ENGINEERING 06/2018 to Current

Olympus Mons Games, Los Angeles, CA

- Architected a custom Unreal Engine 5 C++ plugin to parse large-scale BigTIFF/USGS datasets and procedurally generate planetary terrain and geographical features.
- Designed and implemented vehicle physics, controls, and gameplay abilities using Unreal Engine 5 Chaos Vehicles, balancing physical simulation, responsiveness, and gameplay requirements.
- Developed procedural narrative systems and a topic-based dialogue system with dynamic keyword encyclopedia using hyperlinks within UX.
- Implemented layered Poisson sampling algorithm for procedural settlement generation across planet surface.

GAMEPLAY ENGINEER 07/2021 to 10/2025

Otherside Entertainment, Boston, MA

- Contributed from early prototyping to vertical slice of unreleased immersive sim game directed by Warren Spector and helped shape foundational gameplay mechanics.
- Collaborated with design, art, and creative leads to develop engaging game systems for open-world immersive sim, enhancing overall player experience.
- Designed and refined systemic gameplay systems, improving interactivity and player engagement.
- Worked closely with other engineers to develop cross-system interaction in a deeply systemic game.
- Contributed to designs of systemic gameplay systems.

LEAD DEVELOPER 06/2019 to 07/2021

Swift Star Studios, Los Angeles, CA

- Led technical development across engineering disciplines, mentoring junior engineers and collaborating with artists, designers, producers, and QA to deliver gameplay systems.
- Designed and implemented player interaction with environmental items and objects for solving sandbox puzzles.
- Acted as a mentor for junior engineers to develop skills for quality code.
- Principal engineering on branching dialogue system with integration into gameplay event system.
- Interfaced with a small team of artists, producers and engineers.
- Coordinated quality assurance efforts to ensure project readiness for publisher approval.

GAME PROGRAMMER 10/2017 to 07/2019

Code Headquarters LLC, Burbank, CA

- Developed gameplay systems for an MMO sandbox survival game in Unreal Engine 4 for PC and consoles, collaborating with designers and engineers throughout development.
- Shipped [Outlaws of the Old West](#) on Steam and provided ongoing post-launch support, addressing bugs and maintaining gameplay and server stability.
- Principal engineer of AI systems. Implemented locomotion, behavior trees and perception systems.
- Implemented engine and gameplay optimizations for large-scale worlds and high player counts, improving server performance, scalability, and stability.
- Designed, reviewed, and debugged game systems including crafting AI, and UI integrations, partnering with design and QA to identify and resolve issues.

SKILLS

Languages: C++, C#

Game Engines: Unreal Engine 4/5, Unity

Gameplay & Engine: Gameplay Systems, Software Architecture, Unreal Gameplay Ability System (GAS), Blueprint, UMG, Behavior Trees, State Trees, AI, Vehicle Physics

Performance & Networking: Gameplay Optimization, Engine Optimization, Multiplayer Networking, Server Architecture

Procedural Systems: Procedural Generation, Procedural Terrain, Procedural World Systems

Platforms: PC, Console, Mobile

Tools: Visual Studio, Git, Perforce, Subversion, Jira, Asana

Development: Agile Development, QA, Debugging, Code Review

EDUCATION

Bachelor of Science : Computer Science, 05/2013

Marquette University - Milwaukee, WI