JAKE ROSE

Gameplay and Systems Engineer

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Software Engineer with 5 years of experience building gameplay, systems, networking, AI, and deployment infrastructure in Unreal Engine with a C++ backbone. Shipped commercial titles across PC, PS5, Quest, and cloud-streamed platforms, with experience spanning multiplayer gameplay, performance optimization, VR interaction systems, build automation, and AI-driven experiences. Known for creating scalable, designer-friendly systems and delivering features at all stages from prototyping through to production and release.

Experience

UNREAL ENGINEER | **PERSONA AI** | NOV ’24 – JAN ’26 | LOS ANGELES, CA
AI Avatar Agent (UE5) [Linux AWS Pixel Streaming, PC, Mac]

- Created processes for deploying Naughty Dog quality visuals on Linux AWS instances that were streamed to users at stable 1080p 30fps. 99.9% success rate, with ability to gather traces and logs on deployed hardware.
- Ensured high quality, low-latency video stream from Unreal while working in inconsistent network conditions.
- Owned deployment process to production and ensured stability for consistent weekly investor demos.
- Developed artist pipeline for ensuring and correcting visual parity between Windows and Linux. Built automated build, cook, and deployment pipelines for Windows, Mac, and Linux, reducing manual release overhead.
- Diagnosed LLM state machine failures that users encountered and resolved prompt alignment issues.
- Implemented Unreal to LLM behaviors, presentation mode, and conversation-state fixes for agent interactions.

SOFTWARE ENGINEER | **SURVIOS** | APR ’24 – NOV ’24 | LOS ANGELES, CA
Alien: Rogue Incursion (UE5) [PCVR, PSVR2, Quest 3] | **Game Awards VR GOTY Nominee**

- Solved many progression and quest blockers in the 8hr campaign to ensure QA unblocked as game went gold.
- Owned critical systems including pause world, adaptive triggers, grab slots, tablet interaction, custom item interactions, grenade throw - assist, player/AI synced animations, and five major scripted moments.
- Utilized PS5 debug attachment to solve platform-specific issues in packaging in the final stage of development.

GAMEPLAY ENGINEER | **DEVIATION GAMES** | SEP ’22 – MAR ’24 | LOS ANGELES, CA
Unannounced Cancelled IP (UE5) [PS5, PC] | **In Collaboration with PlayStation**

- Architected and implemented client predicted multiplayer systems including: player/weapon abilities, projectile system, procedural weapon attachments/modifiers, net synced timers, server-driven particle systems, enemy traversals + coordinated abilities, HUD elements, metagame menus, and currency/inventory systems.
- Utilized Unreal Insights to analyze and improve performance and ensure 30fps tick on a single-core server.
- Ensured systems scalable to live service with quality comparable to Call of Duty. Utilized Gameplay Ability System extensively for performant, scalable, and network ready player systems.
- Facilitated cross-team discussion to establish clear deliverables and ensure designer needs met.
- Achieved feature deliverables weeks in advance, including timelines for designer onboard/integration.

ASSOCIATE SOFTWARE ENGINEER | **SURVIOS** | JUN ’21 – SEP ’22 | LOS ANGELES, CA
Creed Champions (UE4/UE5) [PCVR, PSVR2, Quest 3]

- Upgraded original Creed VR from heavily modified UE4 engine to UE5, deploying to latest Quest 3.
- Converted UE4 PhysX to modern Chaos physics (+ many engine mods to it) and ensured parity.
- Restored feature parity during UE5 migration while meeting project delivery timelines.
- Developed improved runtime statistics system for player facing analytics.

Alien: Rogue Incursion (UE5) [PCVR, PSVR2, Quest 3] | **Game Awards VR GOTY Nominee**

- Developed foundational technology for VR interaction like multi-handed item interaction, hand magnetism + posing, and throwing aim assist.
- Prototyped early AI explorations with complex traversal animations and indirect pathing logic for xenomorphs.

B.S. GAME PROGRAMMING | **CHAMPLAIN COLLEGE** | SEP ’17 – MAY ’21 | BURLINGTON, VT

Languages: C++, Python
Unreal: GAS, Gameplay Tags, Enhanced Input, UMG, Slate, Async Loading, Metahuman, State Trees
Networking: Client Prediction, Replication, Network Optimization, Protobuf
Tools: Perforce, Git, Unreal Insights, AWS, Pixel Streaming