

RAMPART SIMULATION

A division of Elite Tech Media LLC · Established 2008 · Brookfield, IL — Chicago Metro Area

Real-time simulation engineering for training systems, synthetic environments, and immersive applications.

COMPANY OVERVIEW

Rampart Simulation delivers senior, architecture-level simulation engineering across Unity and Unreal Engine. With 20+ years of production engineering spanning AAA game development, applied defense simulation, and independent software development, we build real-time systems where correctness, performance, and fidelity matter — training simulators, synthetic environments, immersive and multi-display applications, and AI-integrated tooling. Principal-led, with direct access to the engineer making the architectural decisions. Available for direct engagements and subcontract work.

CORE CAPABILITIES

Real-Time Simulation Systems — Unity and Unreal Engine (UE5/UE4) systems engineering: gameplay, AI, physics, vehicles, and visual effects, with sustained high-performance under load.

Synthetic Environments & Geospatial — Geo-specific and geo-typical terrain, large-world streaming (Cesium / one-world terrain), and environmental fidelity for training and analysis.

Multi-Display & Immersive Systems — nDisplay for domes and curved screens, clustered rendering, frame-locked sync, and VR/AR/MR integration, including standalone Meta Quest.

AI & LLM Integration — Integration of AI/LLM capabilities into simulations and applications: natural-language control, scenario generation, and AI-assisted development workflows.

Training & Scenario Systems — Procedural scenario design, after-action review, and adaptive difficulty for high-fidelity training across defense, industrial, and enterprise contexts.

Distributed Simulation Interoperability — DIS integration in both Unity and Unreal for distributed simulation; experience within HLA-based simulation environments.

Custom Engineering & Integration — Physics and ballistics modeling, custom tooling, and systems integration built to specific client requirements.

PAST PERFORMANCE

- **U.S. Defense Training Customer** — Chief software architect for real-time training simulation systems; led architecture of ballistics and physics modeling, multi-display rendering, and immersive training applications in use across multiple U.S. service branches, sustained over a long-term engagement. Details available under appropriate agreement.
- **AAA Game Development** — Shipped-title engineering at Electronic Arts and Midway Games, including *Mortal Kombat: Armageddon* (Midway) and *Tiger Woods PGA Tour 2003* (EA), with programming across full console development cycles.
- **AI-Integrated Application Development** — Design and delivery of production web applications with integrated AI/LLM capabilities — natural-language features, AI-driven content generation, and validated LLM tool-use pipelines — developed and shipped through Elite Tech Media LLC and its divisions.

COMPANY DATA

UEI: P9WDDYECKMG4

CAGE: 20Z42

SAM.gov: Active

Business Type: Small Business

Registration: Illinois LLC (est. 2008)

NAICS CODES

541511 — Custom Computer Programming
(primary)

541512 — Computer Systems Design Services

541330 — Engineering Services

541715 — R&D, Physical/Engineering Sciences

611430 — Professional & Mgmt. Dev. Training

PSC CODES

DA01 — App Development Support Services

R425 — Engineering / Technical Services

R412 — Simulation

R408 — Program Management / Support

U008 / U099 — Training Services

ENGINES & PLATFORMS

Engines: Unity, Unreal Engine 5 / 4, proprietary

Immersive: VR / AR / MR, Meta Quest

Geospatial: Cesium / one-world terrain

Interop: DIS, HLA environments

AI: LLM integration, tool-use pipelines

DIFFERENTIATORS

- 20+ years senior production engineering
- Cross-engine: Unity *and* Unreal, at architect level
- AAA + defense simulation + independent background
- AI/LLM integration and AI-assisted engineering
- Multi-display, VR/XR, and geospatial specialization

Joshua Chapman

Chief Software Architect & Principal

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