MARTIA NOURI

Senior Gameplay Engineer | Unreal Engine C++ & Blueprints

martianouri@gmail.com | Portfolio | Alyria combat showcase

PROFILE

Gameplay programmer with five years of Unreal Engine experience, a shipped commercial game, and a released Steam demo. Specializes in C++ gameplay architecture, combat and ballistics, procedural animation, and runtime optimization. Hands-on experience with UE source modifications, multiplayer integration, and multidisciplinary development.

TECHNICAL SKILLS

Languages & engine: C++, Blueprints, Unreal Engine 4/5, custom source builds, Data Tables, soft object references

Gameplay & animation: Combat, weapons and ballistics, AI behaviors, Control Rig / CCDIK, Animation Blueprints, locomotion and cameras

Performance & tools: CPU/GPU/memory profiling, Size Map, MemReport, asynchronous asset streaming, Niagara, Jira, Git, Diversion

PROFESSIONAL EXPERIENCE

Technical Director | Bowler Hat Interactive

2026-Present | Concurrent role | Forged Fronts

- Built a modular first- and third-person locomotion, camera, and weapons framework in under two months, using data-driven configuration, soft references, and asynchronous asset loading.
- Architected an actorless C++ ballistics subsystem with asynchronous line traces, wind and drag, physical-material detection, bone-level hits, and Niagara Data Channels for projectile effects.
- Implemented procedural Control Rig / CCDIK hand and finger placement with curve-driven recoil and sway, supporting grip alignment across different weapons.
- Modified Unreal Engine source to add native C++ interaction functionality to actors and primitive components, reducing reliance on Blueprint casting.
- Optimized Animation Blueprints for worker-thread execution and Fast Path; collaborated with networking engineers on synchronized movement, aim offsets, and hit-location validation.
- Coordinated technical priorities across a multidisciplinary studio of 20+ team members using Jira and Diversion.

Technical Director | Iron Pillar Studios

2026-Present | Concurrent role | Alyria

- Built a C++ asynchronous asset-streaming system, reducing runtime memory usage from **4.3 GB to 1.8 GB (58%)**.
- Profiled and resolved CPU and GPU bottlenecks, increasing average frame rate from **97 FPS to 159 FPS (64%)**.
- Implemented combat, quests, crafting, inventory, and reactive NPC schedules driven by player proximity, character state, and health thresholds.

SHIPPED GAME & SELECTED PROJECTS

Universal Power: Blade of Persia

Game Director & Technical Director | 2023-2025 (demo development and release)

Public demo released on Steam; full game in development. View on Steam

- Designed and programmed melee/ranged combat, player locomotion, and quest state machines.
- Built NPC combat, retreat, and self-defense behaviors triggered by witnessed or reported harm to allied NPCs and civilians.

Universal Power

Lead Developer & Technical Director | 2021-2023

Full commercial release on Steam. View on Steam

- Developed gameplay mechanics, mission scripting, and UI systems from prototype through commercial release; delivered post-launch fixes, profiling, and gameplay tuning based on player feedback.