

Affaf Imran

Lead Game Engineer | Technical Architect

affafimran@gmail.com | [LinkedIn](#) | [GitHub](#) | [Website](#)

PROFESSIONAL SUMMARY

Lead game engineer and technical architect with 10+ years across Unity and Unreal Engine, hands-on C#/C++, gameplay systems, multiplayer, XR, mobile, backend-connected platforms, real-time 3D, performance engineering, production tooling and product delivery. Led UE5 engineering for a large-scale World Partition platform, directed technical and product engineering across a mobile portfolio with 150M+ cumulative downloads, and scaled engineering organizations while remaining close to implementation, debugging, profiling and release constraints. Strong at translating design and product requirements into maintainable systems that teams can extend and ship.

Selected impact: 150M+ mobile portfolio downloads | Thousands of procedural land assets | Engineering organization scaled ~4 to 16 | Unity, Unreal, multiplayer, XR and real-time 3D

CORE EXPERTISE

Engines & Programming	Unity 2D/3D, Unity 6, Unreal Engine 4/5, C#, C++, Blueprints, OOP, SOLID, design patterns
Gameplay & Architecture	Gameplay systems, combat, movement, AI, interaction, inventory, quests, progression, modular/event-driven/state-based architecture
Multiplayer & Backend	Photon Fusion, Photon PUN2, PlayFab, Epic Online Services, Multiplay, matchmaking, rooms/sessions, gRPC, Protobuf, REST/API integrations
XR, Mobile & Platforms	Meta Quest, OpenXR, VR training/simulation, Android, iOS, WebGL, PC, cross-platform deployment, Ads/IAP, analytics, publishing
Tools, Worlds & Web 3D	World Partition, Editor Utility Widgets, SceneCapture2D, procedural pipelines, internal SDKs, React Three Fiber, Three.js, GLB, KTX2, LOD delivery
Performance & Leadership	Profiling/optimization, CI/CD, Git, Perforce, Azure DevOps/Jira, technical direction, architecture, hiring, mentoring, code reviews, delivery planning

PROFESSIONAL EXPERIENCE

CTO / Product Lead | Ferro Entertainment

Feb 2016 - Present | Pakistan, Remote | Part-Time

- Lead technical direction and product engineering across a cross-platform mobile-game portfolio with 150M+ cumulative downloads, defining reusable architecture and production standards across Android and iOS.
- Created FE SDK, an internal framework standardizing billing, IAP, advertising, tooling, optimization and release workflows across multiple games.
- Guide teams from prototype through launch while balancing gameplay quality, performance, monetization, maintainability, platform constraints and delivery.
- Support production and live titles through optimization, crash resolution, SDK upgrades, analytics, store publishing and post-release maintenance.

Unreal Engine Tech Lead | NeoWorlder Enterprises, Inc.

Jan 2025 - May 2026 | United States, Remote | Contract

- Led Unreal Engine 5 engineering for a large-scale World Partition platform, converting world-generation and asset-production requirements into repeatable technical pipelines, tools and backend-connected workflows.
- Built procedural systems for generating, baking, registering and managing thousands of land assets, reducing manual production overhead and improving asset consistency.
- Developed internal gRPC/Protobuf SDKs and asset-management tooling for reliable communication between Unreal clients and backend services.
- Automated content workflows with C++, SceneCapture2D, Blueprints, Editor Utility Widgets, terrain/decal systems and procedural mesh tools; also supported an R3F/GLB/KTX2/LOD browser world viewer.

Senior VR Engineer | Dolby Laboratories

Sep 2024 - Jan 2025 | Germany, Remote | Contract

- Developed an internal Unity VR experience supporting Dolby audio-visual rendering workflows, including interaction/presentation flows and stakeholder evaluation inside VR.
- Supported practical XR, Unity and environment workflows while maintaining repository structure and technical documentation for continued team use.

Lead Game Engineer / Product Lead | Relymer Studio

Feb 2024 - Aug 2024 | Pakistan, Remote | Contract

- Served as primary engineer and product lead for multiplayer Unity experiences across WebGL and mobile, owning the path from requirements through implementation, QA, profiling and delivery.
- Architected and implemented C# gameplay systems using Photon Fusion, including networking integration and reusable runtime architecture.
- Owned technical scope, bug triage, platform constraints and delivery priorities while using third-party tools selectively without surrendering core gameplay architecture.

Senior Unity VR Developer | 360 Fabriek

Aug 2023 - Feb 2024 | Netherlands, Remote

- Modernized a Meta Quest 2 firefighter-training simulator by replacing tightly coupled logic with event-driven and state-based architecture.
- Built physics-based controller/hand interactions and improved standalone Quest performance through profiling, optimization and runtime cleanup.
- Added authentication, touch UI, API integration, technical documentation and structured production workflows.

Senior Game Developer | Algoryte

Dec 2022 - Aug 2023 | Pakistan

- Provided technical leadership across Unity and Unreal projects spanning multiplayer, interactive 3D, simulation and gameplay development.
- Integrated PlayFab, networking systems and Epic Online Services while providing Unreal training, architecture guidance and implementation support.
- Worked across gameplay, environment, integration and delivery problems to move commercial and institutional projects toward functional production builds.

Programming Director | Frostre Technologies

Sep 2020 - Dec 2022 | United Kingdom, Remote

- Directed engineering across Unity and Unreal projects while remaining hands-on with gameplay, architecture, technical planning and production problem-solving.
- Raised team capability through Unreal training and clearer engineering workflows; contributed to a UE4 survival project and multiplayer tactical-shooter planning/implementation.
- Improved engineering/design coordination through structured technical documentation, architecture discussions and clearer ownership of implementation decisions.

Senior Game Engineer | ZHouse Studios

Jan 2020 - Sep 2020 | United Arab Emirates

- Led a Unity-to-Unreal transition for an MMO RPG and trained Unity developers on Unreal, C++, Blueprints, project structure and production workflows.
- Implemented modular gameplay, behavioral AI, UI/animation integration and multiplayer infrastructure including server configuration, rooms, matchmaking, notifications and cross-platform services.
- Used profiling and optimization to improve runtime stability while the project was undergoing significant architectural change.

Director of Programming | Darkstar Games

Feb 2019 - Feb 2020 | United States, Remote

- Promoted from Senior Game Engineer to Director of Programming within approximately three months after taking ownership of core Unity MMORPG systems and engineering practices.
- Architected network-aware combat, movement, inventory, quest and gameplay systems; helped evolve multiplayer architecture from Photon PUN2 prototyping toward a Multiplay-hosted backend model.
- Scaled the engineering organization from approximately 4 to 16 developers within a distributed cross-functional team of roughly 70, leading hiring, mentoring, code reviews, planning and architecture while remaining hands-on.

ADDITIONAL EXPERIENCE

Game Engineer | Spartans Global | Apr 2019 - Jan 2020 | Pakistan

Mobile gameplay, codebase/architecture improvement, physics-based helicopter controls, Unreal Ads/IAP integration and technical documentation.

Senior Game Developer | Orthiyaa Technologies | Jun 2017 - Jan 2019 | Pakistan

Feature specifications, ERDs, modular architecture, casual/FPS gameplay, multiplayer functionality and Unreal asset/gameplay integration.

Unity Developer | Gizer Inc. | Sep 2017 - Mar 2018 | United States, Remote

Reusable cross-platform Unity character/equipment system with pets/items, cryptocurrency integration and web/Android/iOS/desktop support.

Game Developer | TnTn Studios | Feb 2016 - Sep 2019 | Ukraine, Remote

Shipped Unity mobile games with gameplay systems, Ads/IAP, analytics, platform plugins, Android/iOS publishing and post-release maintenance.

EDUCATION

Bachelor of Computer Science | CASE Institute of Technology, Islamabad | 2017

Professional Development: Unreal Engine C++/Blueprint development, Unity ECS, Blender and ZBrush fundamentals.