DANIYAL MIRZA

Engine Programmer / Tech Lead

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Engine programmer with more than a decade in games, working at the layer the rest of the studio builds on: memory and framerate optimization, Xbox console development, and in-editor tooling, on a heavily modified Unreal branch kept current across major versions. Now leads tech and rendering on an unannounced Obsidian project while still carrying a full engineering load.

LANGUAGES	C++ · Python · C#
ENGINES	Unreal Engine (UE4 to UE5) · Unity
ENGINE AND PLATFORM	Engine upgrades · Xbox console development · Platform certification · Middleware integration · Editor and pipeline tooling · Memory and framerate optimization
BUILD AND CI	Horde · Jenkins · TeamCity · Perforce · Git · SVN
PROCESS	Jira · Confluence

EXPERIENCE

Obsidian Entertainment
Jan 2020 - Present
Engine Programmer / Tech Lead — Irvine, CA

- Own engine-level integration of third-party middleware, holding the boundary between vendor libraries and engine subsystems.
- Drive memory and framerate optimization across projects, profiling to locate regressions and landing the fixes at the engine and asset layers.

Unannounced Title 2025 - Present, Tech Lead

- Tech lead for tech and rendering on the project, with two engine programmers and a rendering engineer as direct reports, while carrying a full senior engineering load directly.
- Continued the engine upgrade path onto the current project, taking it from Unreal 5.3 to 5.5 and then to 5.7.

Avowed shipped 2025, Xbox Series X|S, PC

- Owned the engine upgrade path from Unreal 4.20 to 5.3, including the UE4 to UE5 transition taken mid-production, integrating each release into a heavily modified branch and absorbing the fallout for every other discipline.
- Worked Xbox console development through to ship, clearing the compliance failures and cert-blocking defects that gate platform submission.
- Built and maintained the in-editor tooling design, art and animation used daily, cutting the cost of a content iteration.

The Rogue Initiative
Jul 2016 - Jan 2020
Systems Programmer — Canoga Park, CA

- Owned build maintenance and back-end engineering across every project at the studio, keeping CI and the release pipeline running as the shared infrastructure the other engineers worked against.

Unannounced Client Demo 2019: Designed the API bridging the engine to a client's proprietary library, exchanging JSON payloads and routing state through GameplayTags so behavior could be rebound without code changes.

RedpillVR 2019: Authored interpolative prediction for networked location and animation data, hiding link latency in replicated character movement rather than letting it surface as visible correction.

Unannounced Internal Project 2018, third-person action

- Wrote reusable plugin-based modules for game management, including a save/load system that moved serialization onto a dedicated I/O thread to keep the game thread clear of disk latency.
- Built editor tooling that surfaced pipeline-specific asset management operations inside the editor for the art and animation teams.

Crowe shipped 2017, VR, Oculus Rift, HTC Vive, Tech Lead: Tech lead on a shipped VR title, owning platform services, UI, game-management and analytics modules, runtime optimization, and CI-backed build management.

Possession *Lead AI Engineer (Unreal)*
Sep 2015 - May 2016

- Architected the base codebase and designed the RTS AI, running decision work across threads behind Behavior Trees layered over state machines.

Wildstyle Basketball *Systems and Gameplay Engineer (Unity)*
Jul 2015 - Jan 2016

- Built a StatSheet-driven data system that let designers drive gameplay behavior from spreadsheets without engineering in the loop.

EDUCATION

Master of Science, Computer Science Viterbi School of Engineering, University of Southern California — 2016

Bachelor of Technology, Computer Science Aligarh Muslim University, Aligarh, India — 2011