

SANJYOT DAHALE

Unreal Engine Programmer | Mumbai, India (open to relocation) | github.com/LifeisaRepo | lifeisarepo.github.io | sanjyot.code@gmail.com | linkedin.com/in/sanjyot-dahale

Six years in C++ and Blueprint, across gameplay systems, multiplayer and engine tooling. Shipped a Meta Quest Store title; most of the rest ran on expo floors and live productions. Tech lead now, looking to stay hands-on.

WORK EXPERIENCE

LIMINAL XR SOLUTIONS

Lead Unreal Engine Developer & Tech Lead | Jan 2023 - Current

- Led a 7-person team shipping the studio's first game, Riddler's Ransom, to the **Meta Quest Store**, owning the platform call, performance budgets and certification.
- Rebuilt the game from PC-VR to standalone Quest 3, holding 68-72 FPS where the prototype ran 30-40 on PC.
- Built an Unreal third-party plugin around Logitech's G29 SDK and exposed it to Blueprint as a callable library.
- Led a Blueprint-to-C++ rebuild of a live product, removing a 10-15% crash rate and raising a runtime feature's ceiling from 25 to 125 instances.
- Wrote the multiplayer core of a four-player racer, with a non-playing operator host and authoritative leaderboards. Ran crash-free for 1,000+ players.

LIMINAL XR SOLUTIONS

Unreal Developer & Virtual Production Supervisor | Sep 2020 - Jan 2023

- Designed the camera-alignment system behind a peer-reviewed **SMPTE** paper, reconciling three coordinate systems over standard Unreal replication.
- Integrated camera-tracking, motion-capture and broadcast hardware into Unreal, feeding live transform data into real-time productions.
- Set performance budgets across lighting, shaders and geometry to hold real-time frame targets on live productions.
- Standardised source control studio-wide, establishing GitHub for primary version control and deploying Perforce for specialised projects.

LIMINAL XR SOLUTIONS

Unity Developer | Aug 2019 - Sep 2020

- Built AR and VR applications in Unity, then helped migrate the studio's production pipeline to Unreal Engine.

SKILLS

Languages

C++
Unreal Blueprints
HLSL
Python
C#

Unreal

Gameplay Ability System (GAS)
Behavior Trees & EQS
Animation Blueprints
UMG
Materials & Shaders

Networking

Actor replication
RPCs
Client-server authority

Performance

Performance budgeting
GPU & CPU profiling
Draw-call & memory optimisation
Mobile performance

Tools

Perforce
Git / Git LFS
Visual Studio

Platforms

PC
Meta Quest 3
Android
HoloLens 2
Meta XR SDK
OpenXR

PROJECTS

UE_GEMMA

Solo Developer

Unreal Android build running a 270M function-calling LLM fully on-device and offline, driving five gameplay actions from speech or text. Wrote a custom Unreal plugin with a **UPL/JNI bridge** exposing native Android APIs to BlueprintCallable C++, handling async operations across the C++/Java boundary; fine-tuned the model on a self-generated ~3,000-sample dataset.

AURA - MASTER OF ELEMENTS

five-month GAS study project, course-guided

A playable top-down action RPG, built over five months to learn Unreal's **Gameplay Ability System**. Aura fights through multiple levels with six levellable elemental abilities, an attribute and spell-point progression economy, four enemy types with their own AI, and checkpoint save/load. Designed PvE multiplayer-ready.

BOW & ARROW MECHANICS

Solo Developer

Modular bow-and-arrow combat system built as a reusable actor component shared by player and AI characters, with data-separated bow and arrow classes so new weapon variants can be authored without touching core logic.

PUBLICATIONS

IMMERSIVE AND INTERACTIVE AR GRAPHICS AND ENVIRONMENTS FOR BROADCAST APPLICATIONS

SMPTE Motion Imaging Journal · July 2024 · DOI 10.5594/JMI.2024/IHPC9661

CERTIFICATIONS

COMPUTER GRAPHICS WITH MODERN OPENGL AND C++

Udemy | Jan 2025

EDUCATION

UNIVERSITY OF MUMBAI

Bachelor of Engineering, Computer Engineering | 2016 - 2020

LANGUAGES

English
Fluent

Marathi
Native

Hindi
Native