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PROFILE SUMMARY

Lead Unity Game Developer | Optimization, DOTS Awareness, Multiplayer Systems, Team Leadership, Game design

5+ years of hands-on Unity development, specializing in **performance optimization, multithreaded systems, and awareness on data-oriented design**. Proven leadership as **Dev Team Lead at MAD VR**, driving rendering and gameplay optimization in real-time environments. Experienced in building scalable systems for VR and multiplayer, with deep expertise in shaders, rendering pipelines, and cross-platform deployment (including mobile).

CORE SKILLS & EXPERTISE

- **Unity Engine** (5+ years, VR and Games prototyping, mobile optimization)

- **Performance Optimization** (profiling, memory management, rendering optimization)

- **Multithreading & Async** (thread-safe gameplay systems, background streaming, parallel processing)

- **Multiplayer Systems** (Photon Fusion, Mirror, NGO; server-authoritative gameplay)

- **Leadership** (Led team of Unity developers, code reviews, technical direction, mentoring)

- **Rendering & Shaders** (HDRP/URP, HLSL, Shader Graph, GPU compute, VFX Graph, custom pipelines)

- **Platforms**: VR, PC, Mobile (iOS/Android), WebGL

PROFESSIONAL EXPERIENCE

Mad VR Solutions Pvt. Ltd.

Team Lead – R&D & Lead Unity and VR Developer | *Remote* | **June 2024 – August 2025 (Company went bankrupt and got dissolved)**

- Led the development of **high-performance VR surgical simulators**, improving real-time physics, interaction fidelity, and rendering efficiency.

- Designed and built **scalable XR frameworks**, enabling rapid prototyping for new simulators.

- Spearheaded **performance optimization**, ensuring **Meta Quest store compliance** and achieving **72+ FPS** on standalone VR hardware.

- Developed **VR hand tracking & physics-based interactions** using **Photon Fusion 2** for multiplayer collaboration.

- Engineered **custom shaders (HLSL)** for advanced VR rendering, including **screen-space effects, inverted hull outlines, and triplanar textures**.

- Trained and mentored **junior developers** in VR fundamentals, rendering pipelines, and networking solutions.

- Provided **technical guidance** for integrating new **VR hardware and motion-tracking systems**.

One Immersive Pvt. Ltd.

Senior Unity Developer & XR R&D engineer | *Hyderabad, India* | **Nov 2023 – June 2024**

- Developed **AR-based outdoor navigation** using **Mapbox VR** for virtual real estate tours, enabling **video streaming at landmarks**.

- Built **indoor AR navigation systems** using **Microsoft Spatial Anchors & Azure DB** for precise indoor positioning.

- Designed a **Geospatial AR Quest system**, displaying **AR banners and interactive content** at significant city landmarks.

- Created a **VR capture system** similar to **NVIDIA Ansel**, using **compute shaders** to stitch **stereo VR images** inside Unity.

Turing – Crew Crafts Media

Unity Developer | *Remote (California, USA)* | **Aug 2022 – Aug 2023**
📌 *Project: Dance Kitchen (Retired app on Play Store) ([Available on app store](#))*

- Led the development of **Dance Kitchen**, an **interactive dance training app** teaching **Salsa, Bachata, and Mambo**.

- Designed a **dynamic content system** using **Timeline & Custom Data Events**, enabling **real-time updates** via **Digital Ocean**.

- Engineered **custom UI shaders** for enhanced **visuals and rendering performance**.

- Built **scalable footwork and body weight shift mechanics**, allowing seamless **instructor-led guidance in VR**.

- Developed and optimized **real-time audio synchronization** with character animations for immersive **dance lessons**.

- Managed the **full app development lifecycle**, from **UI programming to backend integration and optimization**.

IACG Multimedia

Unity Developer & Game Dev Professor | *Hyderabad, Telangana* | **Oct 2021 – Dec 2023**

- Developed **custom shaders & rendering solutions**, including a **Triplanar Shader** for **far LOD objects**, optimizing texture performance.

- Engineered **IK systems** using **Unity's Animation Rigging**, collaborating closely with the **3D team** for **character animation**.

- Taught **advanced game development** skills to students, covering **modular systems, Unity's lightmap switching, and optimization techniques**.

- **Mentored teams** for **Dancing Atoms' WCP Program**, ensuring **technical excellence** in their projects.

- Worked on **outsourced projects** for **Go Live Gaming, 5th Ocean Entertainment, and 7 Seas Entertainment**.

- Introduced **Utility AI & GOAP** for complex **NPC decision-making systems**.

KEY PROJECTS & ACHIEVEMENTS

- **High-Fidelity VR Surgery Simulator (Meta Quest & PCVR)**
  → Optimized performance, reducing **frame time from 56ms to 11ms** on **Quest 2**.
  → Implemented **inverted hull shader outlines**, cutting **post-processing costs by 85%**.

- **Multiplayer VR Training System (Photon Fusion 2)**
  → Designed **real-time networked hand physics & collision-based finger tracking**.
  → Developed **latency-compensated animations & pose synchronization**.

- **Space Game – Custom Flight & Navigation System**
  → Implemented **physically accurate spaceship controls** & **procedural environment generation**.
  → Engineered **adaptive AI behavior for NPC ships**.

- **AR/VR Product Visualization for Architecture & Simulators**
  → Created **interactive product showcases** using **Unity HDRP & Ray-traced rendering**.

- **Open World Streaming** → Developed a system for unity using **unity's addressables** system to load **massive worlds**. For example something similar to GTA sanandreas and bigger.

- **Third person shooter controller** → In my hobby time I was working on a project that was inspired from the original freedom fighter video game released in early 2000's, so far in that particular project i have created **modular weapons systems**, **gore systems**, s**mart triggers for game play**, **active ragdolls for game juice**, **anatomy dismemberment**.

⚡ Extras / Passion Projects

- Built custom **volumetric cloud & black hole shaders** using SDF raymarching.

- Developing a modern reimagining of *Freedom Fighters*, with focus on AI, weapons, and dynamic mission systems.

- Startup R&D on **3D Depth Estimation + Unity integration**.

EDUCATION

🎓 **Master of Arts (Game Design & Development)** | *IACG Multimedia* | **2021**
🎓 **B.Tech (Electronics and Communications Engineering)** | *KL University* | **2019**

TECH STACK & TOOLS

- **Engines & Frameworks**: Unity, Unreal Engine (Basic), DOTS (Basics), ECS

- **Networking & Multiplayer**: Photon Fusion 2, Netcode for GameObjects, Mirror

- **Programming Languages**: C#, HLSL, Python (for automation, ML integration)

- **Version Control**: Git, Plastic SCM, Perforce

- **VR SDKs & APIs**: OpenXR, Oculus SDK, SteamVR, VRTK, MRTK

- **3D & DCC Tools**: Blender, Maya (Basic), Substance Painter, photoshop

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NOTICE PERIOD & PREFERENCES

Notice Period: Null, **Can join immediately.**

Willing to Relocate: Yes, **within India & abroad**

WHY GAME DEVELOPMENT?

Game development is more than just a career—it's a passion. Since childhood, I've been fascinated with interactive worlds, leading me to **programming, physics, rendering, and optimization**. I thrive on solving complex technical challenges and aim to create immersive experiences that **engage, challenge, and inspire**.