# Devesh Beniwal

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## **Summary**

Full-Stack Unity Developer with 7+ years of experience in AR/VR, multiplayer, and cross-platform game development. Skilled in C#, Unity3D, Node.js, Photon, Colyseus, WebRTC, Firebase, and MongoDB, with strong expertise in Game architecture, Performance optimization (up to 30% in my last project). Delivered scalable real-time multiplayer solutions, integrated hardware (Arduino, Leap Motion, Kinect), and deployed projects across Android, iOS, Web, and Cloud

## **Skills**

- **Game Development**: Unity Engine, C#, Game Architecture, Design Patterns, Performance Optimization, Crossplatform Deployment (Android, iOS, Web, PC)
- Multiplayer & Networking: Photon (PUN, Fusion v1/v2), Colyseus, WebSockets, WebRTC, Socket.IO, REST APIs, Real-time Synchronization, Matchmaking Systems
- AR/VR & Immersive Tech: ARFoundation, ARCore, ARKit, VR SDKs (Oculus, Pico), 3D Interaction Systems, Hardware Integration (Arduino, Kinect, Leap Motion)
- Backend & Cloud: Node.js, TypeScript, JavaScript, Express.js, MongoDB, Firebase (Firestore, Auth, Hosting, Analytics, Messaging), Nginx, Ubuntu/Linux Servers
- Tools & Frameworks: Git/GitHub, Agile/Scrum, Jira, Project Management, Addressables/Asset Bundles, IAP, Localization, In-App Update
- Other Expertise: WebGL, Native Plug-Ins, AI for Games, Physics Simulation, Animation Rigging, UI/UX Implementation

## **Work Experience**

## **Senior Unity Developer**

Sparkshift Technologies • Bengaluru, Karnataka

05/2024 - Present

- Built POCs for Web3 & multiplayer integration using Sequence SDK, WalletConnect, and Photon Fusion (v1 & v2).
- Enhanced **Project Anarchy Warzone** with improved vehicle physics (car/helicopter/bike) and new gameplay features.
- Achieved up to 30% physics optimization and 20% draw calls reduced through profiling and advanced Unity techniques.
- Integrated WebRTC and Vivox to enable real-time video/audio calling in multiplayer games

# Senior Unity Developer

Aarrsol Digital Pvt. Ltd. • Jaipur, Rajasthan 09/2023 - 03/2024

- Designed and developed **core game architecture** in Unity and Node.js using Colyseus framework.
- Built and deployed **REST APIs with MongoDB** to support scalable multiplayer systems.
- Implemented end-to-end encryption for secure communication between clients and servers.
- Conducted **cross-platform testing & debugging** to ensure stability across Android, iOS, and Web.
- · Created a bridge between Unity WebGL and Javascript for handling the game on website.

# **Senior Unity Developer**

Logic simplified Pvt. Ltd. • Dehradun, Uttrakhand

07/2021 - 09/2023

- Integrated Addressables, IAP, Localization, and Firebase (Firestore, Storage, Messaging, Hosting, Auth) into Unity projects.
- Built real-time multiplayer features using Socket.IO & Colyseus with scalable backend services.
- Explored WebXR and implemented decoupled architecture using design patterns for multi-platform deployment.
- Developed WebGL solutions for Audio/Video/Screen Sharing via WebRTC & Jitsi integration.
- Mentored junior developers and resolved complex bugs to maintain delivery efficiency.

# **Unity Developer**

Addonvision Infotech • Jaipur, Rajasthan

12/2019 - 07/2021

- Learned and developed 5+ multiplayer projects using photon, Helped the company achieve recognition as Top 1% Unity Developer organisation on Freelancer during my tenure.
- Reviewed project documentation to define timelines, resources, and feasibility before development.
- Wrote clean, modular code from scratch or optimized existing systems for client and in-house projects.

# **Unity Game Developer**

HuriyaSoft Studios • Jaipur, Rajasthan 02/2018 - 02/2019

- Conceptualized, pitched, and developed **original game ideas** from prototype to release.
- Built and optimized existing games with improved performance and gameplay features.

# **Selected Projects**

## Anarchy Warzone (<u>Playstore</u> | <u>Appstore</u>)

- Integrated advanced vehicle physics (cars, helicopters, tanks) with realistic controls.
- Migrated networking from **Photon Fusion v1 to v2**, improving stability and synchronization.
- Implemented core gameplay systems including combat, objectives, and progression.
- Optimized performance across platforms, achieving smoother gameplay and scalability.

## TeenPatti Hangout (Playstore)

- Built a casino multiplayer game (2-5 players) with integrated video calling.
- Used Colyseus (Node.js + TypeScript) for backend services and real-time gameplay.
- Implemented MongoDB with horizontal scaling and deployed on Ubuntu cloud servers.
- Configured Nginx and Mongoose for secure, scalable server management.

#### KhoKho World Cup (Playstore | Appstore)

- Collaborated with the **KhoKho Federation of India** to create India's first official 3D KhoKho game.
- Developed AI teammates, attack/defend modes, team selection, and polished VFX/animations.
- Integrated IAP, Firebase, and Google Play Games for leaderboards, authentication, and monetization.
- Applied Inverse Kinematics (IK) for smooth and realistic character animations.

# Headball (<u>Video</u>):

- Created a **physics-based 2-player football game** with synchronized multiplayer.
- Developed backend in **Node.js** + **Colyseus**, handling all callbacks and real-time logic.
- Ensured smooth **networked physics replication** for competitive gameplay.

## LudoSamrat (Website):

- Developed a real-money Ludo game supporting multiple gaming modes.
- Integrated **Photon networking** for fast and reliable multiplayer.
- Designed a **secure game flow** for competitive and fair play.

Surf Sharks (<u>Playstore</u> | <u>Appstore</u>):

- Developed an **endless surfing adventure game** with Firebase integration.
- Added **custom admin panel** to manage skins, enemies, and in-app content.
- Implemented IAP, in-app updates, deep linking, analytics, and crashlytics for live operations.

## AR Drawing (<u>Video</u>):

- Built an AR app allowing users to draw in real-world coordinates using Unity + ARFoundation.
- Designed smooth **3D** interaction mechanics for immersive creative experiences.

DuckHunt using Leap Motion (Video):

- · Created an AR shooting game using Leap Motion for gesture-based hand tracking.
- Implemented real-time gun control via hand gestures and Unity physics.

For a complete list of 30+ projects including AR/VR apps, hyper-casual games, and enterprise solutions, visit my portfolio: <a href="https://deveshbeniwal.github.io/Portfolio">deveshbeniwal.github.io/Portfolio</a>

### **Education**

# **B.Tech in Computer Science & Engineering**

Global Institute of Technology, Jaipur | Rajasthan Technical University 2014 – 2018 | Graduated with Honours

# Senior Secondary (12th) - Science

H.K.H Public School, Ajmer | State Board | 2014 - 77%

# Secondary (10th)

H.K.H Public School, Ajmer | State Board | 2012 - 66%

## **Certificates and Links**

Certificate (Verify): Data Structures and Design Patterns for Game Developers

LinkedIn: https://www.linkedin.com/in/devesh-beniwal-ba4460143

Portfolio: https://deveshbeniwal.github.io/Portfolio

## Languages

English, Hindi