Adrian Cacho

Senior Unity Developer
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Summary

Senior Unity Developer with 8+ years building real-time 3D applications and interactive experiences serving 100k+ users. Led engineering teams delivering immersive AR/VR platforms, 3D avatar systems, and WebGL experiences. Expert in graphics optimization—engineered instancing systems rendering 10,000+ objects at 60 FPS on mobile and reduced artist pipeline integration from weeks to 30 minutes. Specialized in Unity (C#), Three.js/WebGL, and 3D asset pipelines with proven ability to architect scalable solutions across mobile, web, and XR platforms.

Technical Skills

Languages: C#, Python, JavaScript, TypeScript, C++, GLSL
Game Engines & 3D: Unity, Three.js, React Three Fiber, WebGL, Blender (Python scripting)
Graphics & Rendering: Custom shaders, instanced rendering, AR/VR, spatial audio, 3D optimization
3D Asset Pipelines: Unity Asset Bundles, FBX/glTF workflows, automated Blender processing
Backend & APIs: Python (FastAPI, Flask), Node.js, REST API, WebSockets, GraphQL
Cloud & Infrastructure: AWS (Lambda, S3, SQS), Docker, Firebase, serverless architecture
Mobile Development: iOS (Swift), Android (Java), React Native, cross-platform optimization
DevOps & Tools: Git, GitHub Actions, CI/CD, FFmpeg, PIL, boto3, Linear, JIRA
UI Frameworks: React, Next.js, Tailwind, Storybook, Electron

Professional Experience

Napster Inc. — Remote (Los Angeles)
Senior Unity Developer — March 2025 - July 2025

- Engineered WebGL instancing system rendering 10,000+ 3D objects at 60 FPS on mobile devices using custom shaders and instanced geometry patterns
- Built multi-user virtual concert platform supporting 50+ concurrent users with real-time 3D interactions, avatar navigation, and touch controls in complex 3D environments
- Optimized Three.js rendering pipeline for mobile browsers, maintaining 60 FPS during simultaneous 3D scene navigation, UI interactions, and text/video communication
- Architected component library of 40+ React components with Storybook testing pipeline, reducing development time by 50% across 3 engineering teams
- Implemented real-time e-commerce integration within 3D virtual spaces, enabling in-world purchasing and interactive product displays

Looking Glass Factory — Remote (Los Angeles)
Senior 3D Developer — May 2023 - March 2025

- Engineered text-to-3D hologram generation service using Python, Docker, FastAPI, and Modal, delivering AI-powered 3D content pipeline months ahead of schedule
- Scaled 3D content management platform to serve 100,000+ digital assets using GraphQL, tRPC, and Next.js, reducing asset load times by 70%
- Developed RAG-powered AI assistants for immersive 3D experiences using Python, LangChain, and GPT-4, deployed for enterprise clients including Accenture and Marriott
- Optimized 3D asset delivery pipeline with custom PostgreSQL queries and caching strategies, improving performance for high-volume holographic content distribution
- Established component library with Storybook for 3D UI elements, reducing regression bugs by 40% and accelerating cross-team development

Parcel — Remote (Los Angeles)
Senior Web Developer — March 2022 - January 2023

- Integrated Web3 libraries (ethers.js) enabling NFT transactions and multi-wallet support (MetaMask, Coinbase, Magic) for 10k+ wallet connections
- Built reusable component library (React, TypeScript, Storybook) unifying 3 disparate codebases into cohesive design system
- Automated CI/CD pipelines with GitHub Actions, cutting build and deployment times from 45 minutes to 15 minutes

Vertebrae Inc. (acquired by Snap Inc.) Remote (Los Angeles)

Full Stack 3D Developer August 2020 - March 2022

- Architected end-to-end 3D asset pipeline using Python, FastAPI, and AWS (S3, Lambda, SQS), automating Blender processing and cloud storage for scalable AR virtual try-on experiences
- Scaled Python-based ETL pipelines to process 50,000 3D models with 95% automation, accelerating company throughput 3x and directly contributing to acquisition by Snap Inc.
- Automated retail vendor 3D asset onboarding pipeline, reducing manual intervention by 95% and accelerating time-to-market for 20+ brand partners
- Enhanced high-volume 3D CMS (PostgreSQL, REST) supporting 50,000+ assets and 1,000+ users with customizable processing controls for export formats, polygon count limits, and iframe embedding
- Developed Electron-based React application automating 3D asset processing, saving art team 15 hours of manual work per week

Genies Los Angeles, CA

Senior Unity Developer January 2020 - August 2020

- Developed Python microservices for 3D asset pipelines, reducing artist integration time from weeks to under 30 minutes and enabling in-app DLC using Unity Asset Bundles
- Architected core Unity application for mobile 3D avatar customization system with real-time rendering and dynamic asset loading
- Designed foundational UML diagrams for data flow, API fetching, caching, and client-side state management for 3D avatar platform
- Led technical planning for key Unity features including e-commerce cosmetic shop, cross-platform (SMS) sharing, and avatar persistence

PortalsXR Los Angeles, CA

Lead Unity Developer January 2019 - January 2020

- Led cross-functional team of 6 to launch 6 mobile Unity applications to app stores for high-traffic live events
- Developed core 3D graphics and AR interactivity using Unity, React Native, Java, and Swift for immersive location-based experiences
- Provided on-site production support for high-profile events including Coachella, ensuring 100% uptime for localized, time-coded AR experiences with real-time 3D content delivery
- Implemented AR tracking and spatial computing features optimized for outdoor mobile usage at large-scale venues

Moving Picture Company Los Angeles, CA

Unity Developer February 2018 - February 2019

- Delivered interactive AR/VR experiences for high-profile clients including National Geographic, building Unity applications with C# driving measurable user engagement across multi-platform marketing campaigns
- Collaborated with Magic Leap engineering team to extend SDK capabilities for spatial audio features in Spotify application prototype using C++
- Engineered Python automation scripts integrating high-volume 3D asset pipelines across VFX departments, orchestrating asset handoffs between Maya, Nuke, and proprietary rendering systems—reducing manual operations by 50%
- Optimized Unity builds for Magic Leap One and other XR platforms, ensuring performance targets across diverse hardware

Intel Corporation Santa Clara, CA

Unity Developer February 2017 - January 2018

- Led team of 4 developers building VR content delivery platform using Unity (C#), managing 300+ pieces of VR/360 media content across live sports events, with adoption for 2014 Winter Olympics coverage on ABC
- Architected full-stack VR system: designed database schema, built REST API (Python, PHP), and implemented Unity client-side logic enabling personalized content feeds based on user preferences
- Engineered automated transcoding pipeline processing 500+ VR videos for multi-platform distribution (Facebook, YouTube, native app), reducing editor turnaround by 95% using Python and FFmpeg
- Designed UX, UI, and user stories for Unity VR applications across Android, iOS, and Windows platforms with stereoscopic 360° video playback
- Integrated AWS services with Unity client for automated content streaming and caching, optimizing bandwidth and load times

EDUCATION

Polkadot Blockchain Academy - Bali **September 2025**

DApps Development

Disguise Virtual Production Accelerator - Los Angeles **March 2023**

University of California, Davis **June 2015**

Technocultural Studies B.A.