

Johann Sebastian Cardenas Escobar

AI Tools & Pipeline Engineer | Unreal Engine C++ Developer | Technical Artist

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[Portfolio](#) · [ArtStation](#) · [GitHub](#) · [LinkedIn](#)

PROFESSIONAL SUMMARY

AI Tools and Pipeline Engineer with 11+ years building production tools, plugins, and automated workflows for 3D content, games, and real-time pipelines. Specialized in Unreal Engine 5 editor tooling and C++ systems, cross-DCC automation (Maya, 3ds Max, Blender, Rhino, Adobe), and AI-assisted evaluation and development. One documented pipeline overhaul cut a manual workflow from 1-2 days to approximately 15 minutes. Delivered AI model code evaluation and 3D physics/graphics benchmarking at Scale AI. Actively seeking full-time or contract roles in Technical Art, Tools Engineering, Unreal Development, or AI Quality Assurance.

CORE SKILLS

- Unreal Engine & Real-Time: Unreal Engine 5 (C++, Slate, UMG, .uplugin, SceneViewExtension, HLSL/GLSL, RHI), Unity, Oculus/Meta Quest SDK
- DCC & Technical Art: Maya, 3ds Max, Blender, Rhino, Revit, Cinema 4D, Adobe Photoshop/Illustrator (CEP, UXP, native C++ plugins)
- AI & Quality Assurance: LLM evaluation, prompt engineering, golden references, adversarial testing, code review (Python, C++, Java, JavaScript)
- Programming: C++, Python, C#, JavaScript/TypeScript, MEL, MaxScript
- Cloud & Backend: AWS, Lambda, S3, Docker, Django, REST APIs, workflow orchestration
- Pipeline & Automation: Plugin development, LOD & asset optimization, render-farm tools, Git, CI/CD

PROFESSIONAL EXPERIENCE

Unreal Engine C++ Developer *(Full-time)*

Day for Nite — Los Angeles, USA & Australia (Remote) | Nov 2025 - May 2026

- Developed production-ready C++ editor tools, Editor Widgets, Blueprint utility libraries, Slate/UMG interfaces, and modular .uplugin systems for asset validation, LOD generation, and scene optimization across film, TV, and game production.
- Extended the Unreal Engine 5 rendering pipeline with custom Material Functions, post-process effects, batch processing tools, and SceneViewExtension implementations, improving visual fidelity and performance.
- Collaborated with artists and engineers to reduce manual iteration time in previs, postvis, and VFX workflows.

Concurrent Contract Work

AI Quality Assurance Engineer *(Contract)*

Scale AI (Remote) | Jan 2025 - May 2026

- Evaluated hundreds of AI-generated code solutions across Python, C++, JavaScript, and Java; designed adversarial benchmark tasks and validated reference implementations for correctness and performance.
- Produced structured technical feedback that contributed to measurable improvements in model performance.

Physics Simulation Prompt Engineer & 3D Graphics Evaluator *(Contract)*

Scale AI (Remote) | Jan 2025 - Sep 2025

- Designed benchmark prompts for AI-generated 2D/3D graphics systems; evaluated Three.js, Babylon.js, WebGL, GPU rendering, shaders, physics simulations, and rendering correctness/performance.

Senior Web Developer *(Contract, Part-time)*

CompassCom Software — United States (Hybrid) | Jan 2025 - Dec 2025

- Modernized a B2B website with React, WordPress, SEO optimizations, and marketing automation, improving user experience and lead conversion.

Occasional Research Participant — Developer Workflows & AI-Assisted Programming *(Occasional)*

Microsoft | Apr 2026 - Jun 2026

- Contributed periodic feedback evaluating AI-assisted development tools and modern workflows using Visual Studio Code, Git/GitHub, and Python.

Earlier Roles

Virtual Reality Specialist

ExoSolutions — Medellin, Colombia | Jun 2022 - Aug 2023

- Led full-cycle VR projects for Oculus using Unity and Unreal Engine, optimizing performance for headset constraints and managing cross-functional teams to deliver immersive training simulations.

3D Plugin Developer & Pipeline Engineer

Upwork & Direct Clients | 2015 - 2026

- Built 20+ custom plugins, automation tools, and SDK integrations across Unreal Engine, Maya, Blender, Cinema 4D, 3ds Max, Adobe applications, and Unity for games, visualization, architecture, and creative production.
- Developed Adobe CEP/UXP extensions and native C++ Photoshop plugins for pipeline validation and workflow efficiency.

Autodesk Developer & 3D Pipeline Developer

RebusFarm GmbH (Remote, Germany) | 2021 - 2022

- Developed production plugins and integrations using Autodesk SDKs, Blender, Rhino, Revit, and Cinema 4D, focused on automation, compatibility, and stability.

Lead Technical Artist

Cityscape Digital — London, UK | 2017 - 2020

- Architected artist-focused automation pipelines and custom plugins for Revit, Maya, and Rhino.
- Reduced a documented architectural-visualization workflow from 1-2 days to approximately 15 minutes.

SELECTED CASE STUDIES

- Sequencer, Rebuilt for Production — Unreal/C++ editor tooling
- Connecting Software That Was Never Designed to Work Together — Python/AWS pipeline integration
- Animation Export as a Connected Workflow — Blender/Maya/Unity

EDUCATION

BSc Systems Engineering

National University of Colombia, Medellin | 2014 - 2019

Diploma in Video Game Development & 3D Design

Unitecnica, Manizales | 2014 - 2016

(Completed concurrently with the BSc above)

CERTIFICATIONS

- Certified in Cybersecurity (CC), ISC2
- Microsoft Specialist: Programming in HTML5 with JavaScript and CSS3

LANGUAGES

Spanish (Native) · English (Advanced C1)