

Johann Sebastian Cardenas Escobar

Senior Technical Artist | Video Game Developer | 3D Tools & Plugin Developer

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Professional Summary

Senior Technical Artist, video game developer, and 3D Tools Developer with 11+ years building production-grade plugins, automation pipelines, and editor tooling across Maya, 3ds Max, Blender, Cinema 4D, Rhino, Unreal Engine 5, and Unity. Background as a 3D generalist (modeling, UV mapping, texturing, animation export, asset optimization) supports practical, artist-friendly tools. Strong hands-on experience with Adobe SDKs (CEP, UXP, native C++ plugins for Photoshop and Illustrator) and DCC API development (Autodesk, Rhino, Blender, Adobe, Unreal). Combines art-pipeline engineering with modern AI/LLM integration, backend services, and an information-security background for rare cross-disciplinary depth.

Core Technical Skills

- **3D / DCC Applications:** Autodesk Maya, 3ds Max, Revit, Blender, Cinema 4D, Rhino, Marmoset Toolbag, Adobe Photoshop, Adobe Illustrator
 - **3D Generalist Workflows:** Modeling (hard-surface and organic), UV mapping, texturing, retopology, baking, basic rigging, animation export, asset optimization, format interoperability
 - **Game Engines & XR:** Unreal Engine 5 (Slate, UMG, Blueprint, Editor Utility Widgets, `.uplugin` modules, `SceneViewExtension`), Unity, Oculus SDK, VR / AR development
 - **APIs & SDKs:** Maya API, 3ds Max SDK, Revit API, Rhino SDK, Blender Python API, Adobe CEP, Adobe UXP, Adobe native C++ SDK, Unreal Plugin & Editor APIs
 - **Languages:** Python, C++, C#, JavaScript / TypeScript, MEL, MaxScript, HLSL, GLSL, Java, Kotlin, Bash
 - **Pipeline & Rendering:** Render-farm tooling, batch processing, LOD generation, scene optimization, asset validation, custom Material functions, post-process passes, custom shaders, render submission, crash recovery
 - **AI & Automation:** Prompt engineering (GPT-4, Claude, Mistral), LangChain, n8n, multi-agent workflows, AI-assisted coding, LLM code evaluation, golden-reference solutions for physics and 3D graphics
 - **Backend & APIs:** FastAPI, Django, Flask, Node.js / Express, Spring Boot, REST, GraphQL, async workflows
 - **Databases:** PostgreSQL, MySQL, MongoDB, Redis, DynamoDB
 - **DevOps & Cloud:** Docker, Kubernetes, GitHub Actions, Jenkins, AWS (EC2, S3, RDS, Lambda), Firebase, Git
 - **Security:** Penetration testing, cryptography, wireless security, digital forensics, secure API design, role-based access control
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Professional Experience

[Day for Nite](#) | Unreal Engine C++ Developer

Full-time · Los Angeles, USA & Australia (Remote) · Nov 2025 - May 2026

- Developed advanced C++ solutions in Unreal Engine 5, focused on extending and optimizing editor workflows and runtime systems for production titles in film, TV, and games (previs, postvis, techvis, and final VFX).
- Designed and shipped custom Editor Widgets, Blueprint utility libraries, and editor-mode tools (Slate, UMG) that streamlined content creation and reduced manual iteration time for artists and designers.
- Architected modular C++ plugins packaged as `.uplugin` modules, enabling one-click asset validation, LOD generation, and scene optimization with cross-project portability.
- Extended the rendering pipeline through custom Material functions, post-process passes, and `SceneViewExtension` interfaces; implemented bespoke HLSL / GLSL shaders integrated with Unreal's RHI layer for VFX and performance-critical paths.
- Partnered with technical artists and pipeline engineers to identify bottlenecks and bridge engineering and production-art teams.
- **Tech:** C++, Unreal Engine 5, Slate, UMG, HLSL, GLSL, RHI, `.uplugin`, Blueprint

Scale AI | AI Quality Assurance Engineer

Remote · Jan 2025 - May 2026

- Supported the training of generative AI models through structured QA, code evaluation, and benchmark design.
- Reviewed, classified, and provided structured feedback on AI-generated code for accuracy, efficiency, and standards compliance across Python, Java, JavaScript, and C++.
- Developed and validated computer-science problems used to benchmark model capability and reliability.
- Collaborated with researchers to enhance model precision and consistency through high-quality, repeatable feedback.
- Earlier sub-role (Jan 2025 - Sep 2025), *Physics Simulation Prompt Engineer & 3D Graphics Evaluator*: designed adversarial prompts and golden-reference solutions for AI-generated 2D / 3D physics simulations using Three.js, Babylon.js, WebGL, and GLSL; evaluated shader-based physics, particle systems, rigid- and soft-body dynamics, transformation matrices, quaternion rotations, and frame-coherent timesteps.
- **Tech:** Python, Java, JavaScript, C++, LLMs, Three.js, Babylon.js, WebGL, GLSL, Cannon.js, Ammo.js

CompassCom Software | Senior Web Developer

Part-time · United States (Hybrid) · Jan 2025 - Dec 2025

- Led front-end development and modernization of a B2B / public-sector website serving DOT, Public Works, Federal, and Energy customers (mission-critical GPS, AVL, and fleet-tracking products).
- Built reusable WordPress templates and component-based page systems to keep ongoing content updates fast and consistent.
- Implemented SEO architecture (keyword mapping, internal linking, on-page SEO, metadata) and performance optimizations to improve search rank and page-load times.
- Automated marketing and ops workflows, connecting forms, CRM pipelines, email sequences, scheduling, and lead-routing to reduce manual handoffs and lost leads.
- Translated brand and product documentation into clear site architecture, reusable components, and SEO-optimized industry / partner pages for technical GIS and telematics products.
- **Tech:** WordPress, HTML, CSS, JavaScript, React, REST APIs, SEO tooling, CRM and automation integrations

Exo Solutions | Virtual Reality Specialist

Full-time · Medellín, Colombia (Hybrid) · Jun 2022 - Aug 2023

- Led the full VR project lifecycle for Oculus targets: planning, design, development, deployment, and client demos.
- Built immersive simulations in Unity and Unreal Engine, optimizing rendering and runtime performance for headset constraints.
- Managed a cross-functional team of developers, architects, and 3D designers; set milestones and coordinated delivery against tight deadlines.
- Developed custom plugins and AI-driven interaction features that improved user experience and application efficiency.
- Owned QA, debugging, and deployment processes, ensuring stability across all target devices.
- **Tech:** Unity, Unreal Engine, Oculus SDK, C#, C++, Python, Git

Addendo | Django Developer

Full-time · Oct 2021 - Dec 2022

- Designed and shipped REST integrations across Facebook, Instagram, Google, and CRM platforms, enabling smooth bi-directional data exchange and reducing manual input.
- Developed and optimized Django backend services for scalability and maintainability; reduced API latency by ~35% through Redis caching and improved error handling.
- Built automation scripts that minimized human error and accelerated repetitive data-processing workflows.
- Managed Git branching strategies and produced clear documentation to support cross-team development.

- Increased system uptime through automated testing and CI/CD pipelines.
 - **Tech:** Python, Django, REST APIs, PostgreSQL, Redis, Docker, JSON, Git
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RebusFarm GmbH | Autodesk Developer (3ds Max & Multi-DCC)

Part-time · Germany (Remote) · Jan 2021 - Jan 2022

- Built and deployed custom plugins and scripts for Autodesk 3ds Max, Revit, Rhino, Cinema 4D, and Blender, extending the cloud render-farm submission and workflow ecosystem.
 - Analyzed existing 3D workflows and shipped tooling that cut time on repetitive tasks, accelerating project turnaround for end users.
 - Integrated third-party services and SDKs to extend application functionality and improve user experience inside DCC environments.
 - Implemented error analysis and crash-recovery handlers, increasing plugin stability and reducing render-submission failures.
 - Delivered cross-platform plugins ensuring consistent behavior across DCC environments; provided end-user support and training.
 - **Tech:** Autodesk 3ds Max SDK, Revit API, Rhino SDK, MaxScript, Python, C++, Blender Python API
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Cityscape Digital | Lead Technical Artist

Full-time · London, UK · Jan 2017 - Jan 2020

- Designed and implemented production pipelines for Adobe Suite and 3D software at a London-based architectural visualization studio, freeing artists to focus on creative work instead of manual prep.
 - Built custom plugins and extensions for Revit, Maya, and Rhino3D that automated repetitive tasks and reduced project completion time.
 - Led a team of artists using the in-house tooling; provided technical guidance, gathered feedback, and iterated tools to evolve with project demands.
 - Coordinated with technical directors, artists, and designers to align the tooling roadmap with production needs.
 - Identified and resolved pipeline bottlenecks; produced training and detailed documentation to onboard new team members.
 - **Tech:** Python, C++, Maya SDK, Revit API, Rhino SDK, Adobe Suite Automation, Pipeline Integration
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Independent Consulting & Contract Work

Upwork, Freelancer.com, and direct clients · Jan 2015 - May 2026

3D Tools, Plugins & Pipeline Automation (Upwork, Jan 2015 - May 2026, 11+ yrs)

- Built custom scripts, tools, and plugins for Cinema 4D, Maya, 3ds Max, Blender, Marmoset Toolbag, Unreal Engine, and Unity for international clients.
- Senior Technical Artist engagement (Jan 2020 - Jan 2024): designed end-to-end content pipelines for 2D, 3D, and real-time workflows; reduced manual effort and production friction at scale.
- Developed Adobe **CEP and UXP extensions** (JavaScript, HTML, CSS, React) for Illustrator and Photoshop, plus **native C++ Photoshop plugins** for low-level pipeline validation.
- Built procedural Python tools and addons for Maya, Blender, Rhino, and Cinema 4D: batch processing, animation export, texture-bake optimization, and procedural asset generation (e.g., Maya procedural tree generator, point-cloud conversion tools).
- Led 3D asset conversion and interoperability across Blender, Maya, Unity, Unreal Engine, Marmoset, and proprietary formats.
- Supported VR / real-time delivery for Oculus and other XR platforms, ensuring assets met runtime and performance budgets.
- **Tech:** Python, C++, JavaScript, MaxScript, MEL, Maya API, 3ds Max SDK, Revit API, Rhino SDK, Blender Python API, Adobe CEP / UXP / SDK, Unreal Engine, Unity, Oculus SDK

AI Workflow & Prompt Engineering (Upwork, 2023 - May 2026)

- Engineered advanced prompts for GPT-4, Claude, and Mistral, targeting backend code generation and DCC automation.
- Built LangChain agents and n8n workflows for CI/CD, testing, and deployment automation.
- Integrated GitHub API, Firebase, and REST endpoints to automate DevOps workflows, cutting manual effort by ~60% for client teams.
- **Tech:** GPT-4, Claude, Mistral, LangChain, n8n, GitHub API, Firebase, Python, Node.js

Security & Cryptography (Freelancer.com and direct, Jan 2015 - Sep 2021)

- Penetration Tester, Ethical Hacker, and Cryptologist for international clients across web, network, and database targets.
 - Conducted penetration testing, exploit development, and digital-forensics investigations.
 - Analyzed encryption protocols and built custom Kali Linux scripts for security assessments and wireless-security audits.
 - Built proofs-of-concept exposing weaknesses in OTP and hash-based security algorithms; produced client-ready remediation reports.
 - **Tech:** Kali Linux, Python, Bash, Wireshark, Nmap, SQLmap, Metasploit, Fiddler, cryptography and forensic tooling
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Education

- **National University of Colombia, Medellín, Colombia** BSc Systems Engineering (2014 - 2019)
 - **National University of Colombia, Medellín, Colombia** Information Systems Administration, Networking & Telecommunications (2014 - 2016, parallel program)
 - **Unitécnica, Manizales, Colombia** Diploma in Video Game Development & 3D Design / Animation (2014 - 2016)
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Certifications

- **Certified in Cybersecurity (CC)**, ISC2. [View credential](#)
 - **Exam 480: Programming in HTML5 with JavaScript and CSS3**, Microsoft. [View credential](#)
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Languages

- **Spanish**, Native (C2)
- **English**, Advanced (C1)