

FERNANDO DANIEL MARTÍNEZ CORTÉS

Technical Artist | Unity Developer

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Guanajuato, Mexico (UTC-6 · open to remote)

SUMMARY

Technical artist and Unity developer focused on shaders, rendering and tools. Writes custom HLSL and Shader Graph shaders, builds VFX Graph effects and cinematics, and creates C# editor tooling. Optimizes for mobile VR frame budgets, work published at PMW-2026. B.A. Digital Arts, GPA 9.4/10, graduating December 2026.

EXPERIENCE

Technical Artist

Rassone Studios

06/2026 – 09/2026 C# · Unity · HLSL

- Wrote a custom two-pass toon shader to complete the game demo.
- Built the animation and VFX setup, plus the C# editor tools behind it.
- Profiled to a CPU-bound baseline and removed 1,832 unused components with renderer and prefab counts unchanged.

Graphics Programmer & Developer

Universidad de Guanajuato × Secretaría de Salud

01/2025 – 08/2026 Unity · C# · HLSL · Mobile VR

- Built an AR/VR mental-health app in Unity and C#, owning the shader and rendering layer.
- Reduced shader instruction count and overdraw to hold a strict mobile frame budget.
- Co-authored the resulting paper, accepted at the PMW-2026 international conference.

Web Developer

Universidad de Guanajuato, Postgraduate Program in Biosciences (DICIVA)

01/2025 – 08/2026 Salamanca, MX

- Built and shipped the program's official website end to end; now its primary public presence.
- Integrated a CMS so faculty publish news and updates with no developer in the loop.
- Deployed the site on the university's internal servers, coordinating with university IT.
- Turned unstructured program material into a clear information architecture for prospective students.

AR Developer, Comunidad Universitaria Scholarship

Universidad de Guanajuato, Division of Engineering (DICIS)

01/2026 – 06/2026 Unity · AR

- Built an interactive outreach app for career fairs, with flows non-technical staff operated on-site.

EDUCATION

B.A. Digital Arts

Universidad de Guanajuato

Expected 12/2026 Salamanca, MX GPA 9.4 / 10.0

SKILLS

Engine & Rendering

Unity (URP), HLSL, Shader Graph,

VFX Graph, Custom render passes,

Cinemachine, Timeline,

Profiling & optimization

Programming

C#, Editor tooling, C++, OpenGL ES,

Python, Java

Art & Platforms

Maya, Substance Painter, Rigging,

Animation, Meta Quest 3, Mobile VR / AR,

Git LFS

Languages

Spanish (native), English (conversational)

PROJECTS

Sentinela, VR Game

youtu.be/NvtyiGGKYJ8

VR game built with ISAPEG Guanajuato. Lead programmer and technical artist; implemented features and interactions.

Granted Wish

fernandocortes.dev/#shaders

Ray-traced water, responsive drizzle, volumetric fog and clouds, and a custom skybox in URP.

Hammer of Dawn

youtu.be/lanOS08ilwl

Real-time recreation of the Gears of War attack: beam strike, building destruction and a burned-sky effect.

XibalHa, INAH Game Jam 2026

luizaguilar001.itch.io/xibalha

2D WebGL minigame. Programmed responsive controls: keyboard on desktop, on-screen controls on mobile.

PUBLICATION

Resource-Efficient Shader Implementation for Immersive Narratives on Legacy Mobile VR Platforms

Co-author · PMW-2026, Lviv-Kharkiv, Ukraine