Andrew Rainsberger

Tools & Pipeline Engineer · 3D and VR

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I build Blender Python and Rust tools and Godot/OpenXR systems that get real-time 3D assets onto a Quest budget. Credited developer on Shipwreck Discovery (Steam, Meta Quest) at AquaticXR, where I own the Blender-to-Godot asset pipeline. Author of CurioMesh, an open-source retopology add-on whose Rust core cut a 1.26M-face scan from 47 to about 5 minutes. Method: AI coding agents (Claude, Codex) write most of the code; I spec, review, test and measure it.

SELECTED WORK

CurioMesh · open-source Blender add-on (GPLv3, Python + Rust) github.com/CurioCrafter/CurioMesh

- Automatic retopology for Blender. Rust core takes a 1.26M-face scan from 47 min to about 5 min; a 79,042-face mesh becomes 24,222 quads.
- CI checks the Rust core against the Python reference; ~279 tests; runs on Blender 3.6 to 5.2 on Windows, Linux and macOS.
- 46 GitHub stars and 17 releases.

Shipwreck Discovery · VR diving game, Godot 4 / OpenXR, Steam and Meta Quest AquaticXR · Jul 2026 – present

- Built and tested coral growth, planting, placement and collision systems in GDScript; tuned wildlife balance around them.
- Own the asset pipeline for Quest: retopology, UV layout, PBR baking and Godot-ready GLB delivery for coral growth stages and large wreck assets.
- Produced 37 animated seafloor species with headless Blender scripts and one shared shader that animates every limb, keeping the scene cheap on Quest.
- Diagnose VR interaction bugs and add regression tests.

Lionfish Reef Heroes · pixel-art arcade game, published on Google Play and the App Store AquaticXR · team of three

- One Godot 4.5 project builds desktop, Android and iPhone, with automated phone builds, server-verified store purchases and store listings in 20+ languages.

MORE PROJECTS

Sector War · browser RTS on a deterministic engine, online multiplayer for up to 8 players, 81 automated tests (solo build). **Clayspace** · Blender 5.1 in PC VR via OpenXR. **Music Visualizer** · Rust/wgpu Windows tray app, WGSL shaders at ~0.5 ms per frame per shader at 4K. **Cuprum** · browser studio from robot file to routed KiCad board.

SKILLS

Python (Blender API, bmesh) · Rust · Godot 4 / GDScript · OpenXR / Quest · CI and automated testing · Git · retopology, UV, PBR baking, GLB pipelines · WGSL / GDShader · TypeScript · AI coding agents (Claude Code, Codex, MCP)

EARLIER

Apprentice Electrician, Colorado (2021 – 2023) · Wildland firefighter and electrical pre-apprentice, Trapper Creek Job Corps, MT (2019 – 2021)

Also: family YouTube channel (94.5M views).