Corey Kruitbosch

Senior Technical Level Designer · Unreal Tools & AI Workflows · Open-World Gameplay

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SUMMARY

Senior technical level designer with 30 years and 20+ shipped titles, most recently leading open-world level design at Warner Bros. Games on Hogwarts Legacy and an unannounced AAA title (UE5). I design readable, playable spaces from blockout through finalization, and build the World Partition pipelines, editor tools, and AI workflows that let a team produce them at scale.

OPEN-WORLD HIGHLIGHTS

- **Open-world leadership (Hogwarts Legacy).** Grew from the solo level designer prototyping open-world workflows to co-leading Open World Areas: hiring, 1:1 mentorship, and creative feedback to outside studios on enemy types, loot balance, and puzzle difficulty.
- **Blueprint Marker System (Hogwarts Legacy).** Tracked significant gameplay assets across the open world and fed the game database for the mini-map, full UI map, and an HTML developer debug map shared with outside studios.
- **Self-wiring gameplay Blueprints (Hogwarts Legacy).** Built Blueprint prototypes for enemy camps, treasure vaults, loot, and puzzles, plus custom editor events that spawn, bind, and link elements (a teleport and its destination, about 20 unique vault entrance blockers) so designers only place them.
- **Combat readability (open world).** Coached junior designers to swap sightline-blocking solid cover for breakables, so fights stay easy to read.

OPEN-WORLD PRODUCTION — WARNER BROS. GAMES

Unannounced AAA Open-World Title (UE5) · 2023 – Present

Advanced Level Designer (IC) · 2026 – Present · **Open World Level Design Lead** · 2023 – 2026

Moved to the individual contributor track to focus on building AI and production pipelines, where I could have the biggest impact for the team.

Production foundation

- **Open-world stand-up.** Led level design's technical stand-up of a large-scale UE5 World Partition open world (Data Layers, Level Instances, Nanite blockout), and partnered with Systems and Engineering so placed content flows from planning to the developer and player-facing maps from one source.
- **Editor Utility Widget (EUW) dashboard.** Architected the team's primary control panel, evolved from tooling first built on the previous title, with sub-tools for mesh placement, fast area loading, bulk renaming, content migration, and automated data registration.
- **Design ownership and mentoring.** Designed open-world encounters, exploration spaces, and puzzles from concept through finalization; set team best practices for spawn pacing, stealth routes, and readable combat; mentored junior designers on the new engine.

AI pipeline (Cursor + MCP), started as Lead in mid-2026

- **~25 AI workflows and 13+ shareable skills in about three months,** including complex UE5 Python that Cursor authors against the Unreal Python API, wrapped as Blueprint nodes in the team's EUW tools; host a biweekly AI workflow session open to all level designers.
- **Bulk world edits and audits.** Enabled Nanite on 125 of 125 flagged meshes in one pass, swapped ~40 actors across Level Instances, and audited 296 assets to delete 52 safely, catching 9 false positives.
- **Guided setup and map data.** One AI skill cut each gameplay setup from roughly 20–40 minutes to about 5 and caught misconfigurations on 2 of the last 3 enemy camps; an AI-authored pipeline turns painted maps into verified game-ready data (~99% coverage).

EXPERIENCE

Warner Bros. Games — 2016 – Present

Hogwarts Legacy (PS5, Xbox Series X|S; ports PS4, Xbox One, Switch) · 2016 – 2023

Technical Level Design Lead, Co-Lead of Open World Areas

- Prototyped the world's topographical map from real Scottish locations (World Machine, UE4 World Composition) with a brick-pattern tile layout for streaming.
- Led enemy camp distribution and the faction map with the combat team, and set loot and enemy placement from difficulty and frequency maps with the economy team.
- Built the world's NavMesh system with its programmers (navsplines and portals for AI traversal), tuned streaming, LODs, and tile performance with the technical teams, and prototyped a VFX implementation panel.

Cars 3 (Xbox One, PS4, Switch) — Senior Level Designer, level creation

Independent Project — Solo UE5 Game Remake (personal, unreleased)

- **Multi-agent orchestration.** A coordinator agent writes scoped prompts (inputs, time box, stop rules) for specialist agents tiered by risk; every report has a mandatory "Not verified" field, and the coordinator re-runs the tests before accepting. ~210 tasks to date.
- **Generative assets and infrastructure.** Gemini concept art turned into 3D models with Tripo (image-to-3D); ~1,090 automated tests, scripted builds with smoke tests, and a versioned backup library and AI skill (v2.2.0) used on two projects.

Disney — 2010 – 2016 · Senior Artist / Level Designer

- **Disney Infinity 2.0 — Defend or Die.** Primary lead artist on a tower defense mode inside the Toybox: defined the gameplay flow and logic "toys", built 12 levels and an escalating endless-waves level, tuned AI and trap rewards to the difficulty curve, and supervised an external studio on the Marvel Super Hall of Heroes.
- **Disney Infinity 3.0 — Toybox.** As Technical Art Lead, brought story-mode content from four external studios into the Toybox's "toy" scripting system and helped swap a spreadsheet asset pipeline for a visual one.
- **Disney Infinity 1.0.** Built 7 of 44 adventures and co-developed the artists' "Adventure State Machine" scripting framework. Also Cars 2 (tutorial levels).

Earlier Career

- **Electronic Arts** (2007 – 2010) — Senior Technical Artist / Senior 3D Artist: Littlest Pet Shop I–III (DS, Wii), The Simpsons Game, Tiger Woods 2008; MEL export tools for DS.
- **Incognito / Sony** (2000 – 2007) — Senior 3D Artist / Level Lead: Twisted Metal: Black, War of the Monsters, Downhill Domination, Warhawk; led teams of 2–3 artists.
- **SingleTrac / GT Interactive** (1999 – 2000) — 3D Artist: ROCK (canceled).
- **Engineering Animation Inc.** (1996 – 1999) — Senior Animator / Art Team Lead: Trophy Buck, K'NEX: The Lost Mines, Outburst, Power: The Game; supervised 8–10 artists.

CORE SKILLS & TOOLS

- **Level design:** layout and flow, combat and spawn pacing, stealth routes, environmental storytelling, difficulty tuning; work with art, UI, combat, VFX, audio, and story
- **Unreal & scripting:** UE5 World Partition, Data Layers, Level Instances, Nanite; UE4 World Composition; Editor Utility Widgets; Blueprint; AI-authored Unreal Python and PowerShell; MEL
- **GenAI:** Cursor, Claude Opus / Sonnet, Gemini, Tripo (image-to-3D), Model Context Protocol (Unreal, Atlassian, Miro), multi-agent orchestration, AI skills and workspace rules
- **DCC & planning:** Maya, 3ds Max, Photoshop, World Machine, Perforce; Miro, Confluence, Jira, Trello; technical design docs engineering can build against

ADDITIONAL

- **Published fly-fishing photographer:** covers for *Trout*, The Drake, and Southwest Fly Fishing; ads for Toyota, Orvis, and Sage.