Ash Connell

Product engineer and founder. I design and build whole products: web apps, real-time 3D, AI agents.

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PROFILE

I design and build whole products: the interface, the architecture underneath, and the decisions about what to build. For 11 years I led product and engineering on a research platform used by Telstra, HSBC and Nielsen. I founded an open source 3D engine with no outside funding, and built a multiplayer space game on my own. Most of my recent work is AI: I write agent harnesses from scratch and build with AI every day. My strength is making complicated things simple, for the people using them and the people maintaining them.

EXPERIENCE

Starwild · Creator — 2026 – present

A multiplayer open-world space sandbox that runs in the browser, in alpha at starwild.io. Seamless flight between planets, ships you build and walk around inside, bases, farming, fishing, crafting and combat.

- One person, the whole game: design, a custom engine on three.js, real-time networking, server, tools and art pipeline. 800+ commits in ten weeks.
- Built an AI character system: NPCs with their own senses, memory, movement and real-time voice, using the same abilities players have, with per-character cost tracking and local-model support.
- 700+ players have tried the alpha, and the regulars have put in hundreds of hours each.

Hyperfy · Founder — Nov 2021 – present

A platform for building 3D virtual worlds on the web: drag in 3D models and avatars, add interactive apps, share a link. Bootstrapped: over half a million dollars earned with no outside investment.

- Built most of the product myself, competing with much larger funded teams.
- One of the first web platforms to build worlds from standard GLB models and VRM avatars, both now common across the industry.
- Helped bring NVIDIA PhysX to the browser: published physx-js (100+ GitHub stars) and ran it in production.
- Designed .hyp, a portable app format that packs 3D models, images and sandboxed JavaScript into one file that works in any self-hosted world: drivable cars, doors, mini-games, quests.
- Rewrote the engine from scratch and released it as open source in January 2025: 300+ GitHub stars, 100+ forks, outside contributors. The community token funding it reached about $275M in market value within a day (covered by The Defiant).
- Also wrote Firebolt, an open source React web framework (130+ stars) that my later projects are built on.

Glow · Software Engineer, Lead UI/UX — Jun 2014 – Jun 2025

A market research platform: build a survey, send it to any of 110 million people through 50+ consumer panels, and explore the results. Used by thousands of researchers and by companies including Telstra, Mondelez, HSBC, Puma, Nielsen and Tourism Australia. Rated 4.9/5 on G2.

- Led the product and the technology for eight years after the CTO left in my third year: set the frontend and backend architecture and designed the product, with a team that never grew past four engineers.

- Made complex research self-serve: designed and built the survey builder, which lets people with no research background run logic-driven studies, and the reporting side, with real-time results and dashboards.
- Top contributor to the main codebase: about 7,000 of its 20,000 commits.
- Integrated the platform with the consumer panel providers.
- Built the native Android app for in-store feedback kiosks and rolled it out to thousands of tablets for retailers including Woolworths.
- Trained and mentored the frontend engineers. Continued part time on contract into early 2026, advising on the architecture of Glow's AI survey builder.

Regency Media · Software Engineer, Full Stack — Mar 2013 – Apr 2014

- Led development of Cumulus, one of Australia's first streaming services (TV, movies, music, podcasts and games), on web, iOS and Android, before Netflix launched here.
- Built the in-house systems for ingesting, transcoding and streaming media, and custom Android devices that let hotel guests watch TV and buy and stream content.

Freelance · Software Engineer — May 2009 – Mar 2013

- Websites and web apps for clients, and later helping startups bring their SaaS products to market.

OTHER PROJECTS

- **AI agent harnesses (2026).** Simber and Halo: agent runtimes with tools, skills, vector memory (sqlite-vec) and cloud sandboxes, on the Anthropic and OpenAI APIs. Evercraft: a multiplayer world where AI "crafters" generate characters, vehicles and whole worlds from a prompt.
- **Game and 3D engines.** A web voxel engine with coloured flood-fill lighting and worker-based meshing; an infinite streamed 3D world with single-draw-call clipmap terrain, tuned to run on phones.
- **Fight (Minecraft plugin).** Class-based combat arenas. The MobArena plugin credits it as its inspiration.

SKILLS

Product	Product design, UX and UI design (Figma), technical leadership, software architecture
Frontend	JavaScript, React, three.js / WebGL, custom component and design systems, AngularJS
Backend	Node.js, WebSockets and real-time multiplayer, PostgreSQL, SQLite, MongoDB, Docker
AI	Agent harnesses, tool use, real-time voice, Anthropic and OpenAI APIs, AI-assisted development
Apps	Electron, Cordova, native iOS and Android wrappers

EDUCATION

Whitireia Polytechnic, New Zealand · Electrical Engineering