
Shawn Mervin

Full-stack developer and systems lead — web, mobile, and native.
Custom ERP, field applications, and the infrastructure underneath them,
for businesses that move real equipment and real money.

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■ EXPERIENCE

Systems lead — Super Sonic Inc.

May 2008 — present

Equipment rentals, stucco, and construction — Edmonton, AB · supersonicrentals.ca · supersonicstucco.ca

- Built and operate the open-source ERP the business runs on end to end: assets, billing, employees, jobs, maintenance, and payroll.
- Modernized it in place — replaced the legacy CodeIgniter UI with a React web app and a React Native field app, screen by screen, and retired the old UI in October 2026 with no maintenance window.
- Retrofitted explicit tenant separation, role-based access control, and white-label branding so the system is resold as [Rental Pilot](#) to rental businesses in 18 industries, each on its own domain through one multi-tenant CloudFront distribution ([try it](#)).
- Shipped the field app to the App Store, and a desktop app kept at parity with the web app.
- Built Radar, the help assistant inside Rental Pilot, and AI assistants on three company websites, on Claude through Amazon Bedrock: tool use, a daily spend cap, and every question logged and reviewed.
- Built and shipped [Lend Pilot](#), a multi-tenant SaaS for private mortgage lenders, solo — Node, Express, PostgreSQL, React, Docker Compose on EC2.
- Integrated Claude into Lend Pilot for structured extraction from borrower documents, deliberately keeping all qualification arithmetic in deterministic code.
- Created an IoT solution for tracking rented equipment.
- Run the AWS estate for both companies — EC2, S3 and CloudFront, SES, Route 53, WorkMail, CodePipeline and CodeDeploy, CloudWatch — with security headers, DMARC, and CAA on every domain ([every service, what for and how](#)).

Technology lead — Brikers Inc.

May 2015 — Jan 2020

Heavy machinery parts and sales · brikers.com

- Designed and oversaw delivery of an end-to-end ERP on a LAMP stack with SuiteCRM and Twilio, driving inbound sales funnels and IVR.
- Used Twilio Autopilot to unify customer experience across applications, email, SMS, web, and voice.
- Managed the team delivering the ERP, website, I/T infrastructure, and security systems.
- Designed, documented, and built an annual inventory system and a warehouse bin-location system.
- Built a customer-facing solution for tracking customer assets, and Cordova apps published to Google Play and the App Store.
- Scraped machine make, model, and type data worldwide to seed the parts catalogue.
- Maintained and extended the company intranet toolset in JavaScript, HTML, PHP, and MySQL.
- Designed and documented the I/T build-out for a building expansion and directed the trades delivering it.

Application developer and network administrator — Metal Mountain Resources Inc.

May 2008 — June 2016

Gold, silver, and copper mining

- Built an object-oriented Flex, PHP, and MySQL CRM tracking investors, investment activity, and user statistics, including tax issuance and shareholder communication.
- Built the AGM shareholder mailing system — merged, addressed, and printed 1,800 letters for each of Eagle Peak, Metal Mountain, and Rich Rock ahead of the annual general meetings.
- Designed, documented, and delivered custom applications against company requirements.
- Managed the team delivering ERP, website, infrastructure, and security work.
- Network administration, design, documentation, maintenance, and support.
- Content, design, and delivery for print, presentation, web, and CD/DVD.

Independent contracts — I/T service provider

Jan 1995 — ongoing

Self-employed

- Delivered several hundred websites across thirty years and a wide range of technologies.
- Produced hundreds of one-off multimedia pieces — 3D turnarounds, interactive CD-ROMs, and presentations — plus print production for many clients.
- Built customer-tailored solutions in ActionScript, AJAX, Flex, Corona, HTML, JavaScript, MySQL, and PHP.
- Completed London Drugs contracts upgrading point-of-sale systems, and rolled out end-to-end POS solutions including Starbucks across British Columbia.
- Built the public website for the Zero Cut Tax Disability Society pro bono — twelve pages, no framework, no third-party requests.
- Built and deployed railandsailmh.ca for Rail & Sail Montessori House, Richmond — eight pages in Next.js, statically exported to S3, CloudFront, and Route 53.

Earlier roles

Jan 1996 — May 2008

Full detail at mervinc.com/history

- B3 Communications Inc. (May 2007 — May 2008) — luxury real estate marketing. Built the interactive "Experience Engines" running in sales showrooms, including Ritz-Carlton Kapalua, Kulalani, and Chateau Heavenly Village.
- Marsh Canada Ltd. (Apr 2006 — Apr 2007) — insurance brokerage. Built a PHP and MySQL content management system for underwriting documents; document and CD-ROM production.
- NexInnovations (July 2001 — Apr 2003) — scripted IBM's Tivoli Network Management suite in Java; third-level support desk, dispatch, and service-call reporting for BC Hydro.
- IBM Canada (Jan 1996 — July 2001) — planned, documented, and tracked small teams across multiple customer environments, delivering projects from hardware installations to complex internet e-business solutions, with risk, cost, and milestone reporting to enterprise clients.

TECHNICAL

AI AND AGENTS	Claude in production with tool use, guardrails and spend caps; regulated arithmetic stays in deterministic code. Repository-level agent instructions and purpose-built verification subagents. AI Claude Amazon Bedrock Bedrock Guardrails CC Claude Code Model Context Protocol Tool use Prompt caching
AWS	28 services in production, each one explained at mervinc.com/aws. CloudFront CloudFront multi-tenant (SaaS) S3 Lambda API Gateway DynamoDB EC2 Route 53 Certificate Manager SES WorkMail CloudFormation EventBridge CloudWatch IAM and OAC Amazon Textract Amazon Polly Cost Explorer CodeDeploy
WEB, MOBILE AND DESKTOP	React web, a React Native field app on the App Store that works offline, and an Electron desktop app, kept at feature parity. React React Native TS TypeScript JS JavaScript Vite Next.js Tailwind Progressive web apps Cordova jQuery Electron Expo Expo push notifications Playwright Vitest fastlane
SERVER AND DATA	REST and JSON APIs, JWT auth, row-level multi-tenancy. Node Express PHP CodeIgniter PostgreSQL MySQL Docker nginx Apache Ubuntu Let's Encrypt SQLite Socket.IO JWT JSON Web Tokens TOTP two-factor sign-in mPDF Neo4j
AT THE COMMAND LINE	Servers, deploys, databases, DNS and AWS run from a terminal and scripted, with safety checks in every deploy. zsh and bash SSH git AWS AWS CLI rsync MySQL CLI GitHub CLI systemd cron Xcode CLI and simctl Expo EAS CLI
INTEGRATIONS	Stripe Twilio Anthropic API SuiteCRM WordPress Canada Post UPS FedEx Purolator ntfy PHPMailer
DESIGN, VIDEO, AUDIO, 3D AND GAMES	Adobe Creative Cloud Pro PS Photoshop AI Illustrator ID InDesign As After Effects Pr Premiere Pro Fc Final Cut Pro G GarageBand M Maya U Unreal Engine U Unity
DOMAIN	Equipment rental and asset management, heavy machinery parts and inventory — Caterpillar, Komatsu, and John Deere by make, model, and model year, with aftermarket cross-reference and part interchange — construction operations, private mortgage lending and B-20 qualification, investor relations and tax reporting.
CRAFT	UI/UX documentation for development, testing, and rollout. Graphic design for print and web. Team leadership and vendor and trade coordination. The full list, with what each tool is for, is at mervinc.com/stack.

EDUCATION

Game Art and Animation, Masters Program <i>Art Institute of Vancouver — Burnaby, BC</i> - Two years across the full game production pipeline: character design, storyboarding, and traditional animation through to Maya, Motion Builder, Photoshop, Flash, and Unreal Editor. - Programming for games in ActionScript alongside the art curriculum.	Oct 2003 — June 2005
IBM internal training <i>IBM Canada</i> Internet technologies, web application design, e-business solutions, and e-business security.	Jan 1996 — July 2001