

HENRY PRICE

Backend Engineer & Database Architect | Remote, USA Citizen

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SUMMARY

Backend Engineer and Database Architect with 15+ years of experience delivering and owning scalable, high-performance systems using Node.js, TypeScript, SQL, and Vue. Proven ability to own database and backend infrastructure, architect distributed platforms, and integrate AI/LLM-driven solutions into back-end and web applications.

TECHNICAL SKILLS

- **Backend:** Node.js, Express, TypeScript, JavaScript, API Development, WebSockets
- **Databases:** PostgreSQL, MySQL, MariaDB, SQL Server, Redis, Prisma ORM
- **Frontend:** Vue, Vuetify, React, Next.js, Electron, HTML5, Canvas Rendering, Pixi.js, CSS3, Tailwind
- **AI/LLM:** LangChain, Claude Code, OpenAI, Codex, GitHub Copilot
- **DevOps & Cloud:** Docker, Google Cloud, AWS, Heroku, DigitalOcean, Git, n8n

PROFESSIONAL EXPERIENCE

Database Architect / Backend Engineer (Full-time, Salaried)

Mastermind.com, Scottsdale, AZ (Remote) | Feb 2025 – Present

- Owned the data layer for a platform serving millions of customers and students, running MySQL with Prisma ORM across development, staging, and production on AWS and GCP.
- Helped architect and launch AI Advantage, a new AI training product, on a short turnaround, drawing 200K users in its first 2 days, and stayed hands-on through launch with live operational monitoring to keep it reliable.
- Led the data side of high-volume platform launches, migrating and reconciling hundreds of thousands of records before go-live, including 361K user accounts and 54K billing and login records.
- Built and ran the team's data tooling, a comprehensive TypeScript ETL suite across MySQL, Google Cloud Storage, and BigQuery, plus automated weekly reporting for the business using n8n.
- Became the go-to engineer for production incidents, fixing a race condition in a billing pipeline that moves millions of dollars and eliminating database deadlocks under load.
- Co-led an integration platform that keeps billing, CRM, community, and login systems in sync, with a full audit trail.
- Architected and delivered the internal admin platform in React/Next.js, giving the business team (200+ employees) full control of customers, payments, courses, and content.
- Designed and developed an AI course generator built on multi-agent LLM workflows, with 13k+ courses generated in production.
- Mentored 5 engineers, from junior to senior, and turned business requirements into the diagrams and API contracts the team built from.

Senior Full Stack Developer (Full-time, Contract)

McKinsey & Company (via staffing agency), Remote | Aug 2024 – Dec 2024

- Brought in to rescue a behind-schedule product launch with my backend expertise in real-time, multi-user systems. Delivered on schedule and was invited back for a second engagement.
- Took ownership of the real-time backend for a multi-user web game used in live McKinsey workshops, built on Node.js, TypeScript, AdonisJS, and WebSockets.
- Partnered with business leaders, researchers, scientists, QA testers, and developers to turn research goals into clear requirements, then delivered them as working features, taking ownership of the entire feature from start to end.
- Optimized state sync across a distributed server network, supporting hundreds of concurrent users across dozens of live workshops.
- Designed horizontal scaling with Redis and Postgres to carry high-volume socket traffic under load.
- Built the backend automation that let workshops run without a facilitator, a projected \$100K a year in savings.
- Built a real-time Splunk monitoring dashboard that gave the team live visibility into system health during workshops, catching issues while sessions were running, and providing alerts of outages.

- Upgraded the platform to current LTS Node.js and Vue 3, and reviewed code across a remote team of designers, cloud engineers, and front-end developers.

Lead Developer & Project Manager (Founder)

Phanxgames LLC, Remote | Jan 2021 – Present

- Founded and led an indie game studio, formalized as an LLC in 2021, delivering an MMORPG and multiplayer title that supported hundreds of concurrent real-time players.
- Led a remote team of five developers, running weekly stand-ups and mentoring and coaching them as they designed, built, and launched content patches, while estimating costs and controlling scope to hit milestones on time.
- Owned the architecture end to end, from the game engine and client to the servers, database, and content tooling.
- Built a custom game engine, client, and tools, backed by Node.js, TypeScript, and Express socket servers.
- Designed a backend system built around PostgreSQL with transactions and index optimizations to handle game content and player states updating concurrently and in real time.
- Developed a multi-user, Vue-based game editing platform with custom canvas rendering and drag-and-drop visual editing, taking some content tasks from 3 hours down to 5 minutes.

Freelance Full-Stack Developer (Independent Contractor)

Direct to client, Remote | 2011 – 2020

- Ran my own practice for ten years, owning every project end to end, from requirements and quotes to architecture, delivery, hosting, and support, and built the database and backend foundation everything since stands on.
- Owned a membership platform as its sole developer for six years, serving over 10,000 users, from database design and security hardening to deployment and server administration.
- Cut report generation from over five hours to under five minutes through SQL query optimization, indexing, caching, and parallel processing.
- Architected database-driven ecommerce, CMS, and marketplace platforms on PostgreSQL, MySQL, and SQL Server, including a single backend powering three storefronts with payment integration.
- Built real-time web applications in Vue and WebSockets, with third-party APIs for maps, login, and messaging.
- Managed every client relationship directly, gathering requirements, quoting budgets and timelines, and delivering against the agreed spec.

PROJECTS & EXPLORATION

- DevThicket (devthicket.org): an open-source game-engine ecosystem I architected and built through AI-orchestrated development.
 - Architected a new embeddable scripting language, known as ThicketScript, TypeScript-inspired, including a bytecode VM, language server, and debugger.
 - Designed a display-tree rendering system, known as Willow, inspired by Starling and Pixi.js, built within the ThicketScript ecosystem, providing graphical rendering for web, desktop, and mobile devices.

EDUCATION

George Mason University, Fairfax, VA · Bachelor of Science, Information Technology (Database and Programming)

Graduated Jan 2011 – Areas of interest: programming, project management, database development and administration.