

Sol Omayoglu

Full-stack software engineer — ships complete production systems | Open to mid-level permanent roles and contract work

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PROFILE

Full-stack engineer who takes systems from architecture to live production for paying clients — and builds the automation that makes a one-person shop deliver at that pace. In the last twelve months I've delivered four systems that four Australian businesses now run on — two Odoo 18 ERP platforms (18 custom modules between them) and two Next.js products taking live traffic — each owned from scope through build to handover. Comfortable owning a system end to end across Python, TypeScript, Rust, Go, Java, and SQL. A decade leading product and operations before moving full-time into engineering — so I model the domain first, find the real bottleneck, and ship the smallest useful thing that works.

TECHNICAL SKILLS

Languages: TypeScript, Python, Rust, Go, Java, SQL, C#

Backend: Next.js/Node, FastAPI, Spring Boot, Odoo 18, Payload CMS, gRPC, REST/OpenAPI, SMTP/email infrastructure

Frontend: React, Next.js, Angular, TypeScript, Tailwind, Phaser, Tauri

Data / Infra: PostgreSQL, TimescaleDB, MySQL, Redis, Docker, Nginx, Vercel, AWS, Cloudflare Tunnel, NATS JetStream, data migration & ETL

AI / LLM: Anthropic Claude, OpenAI, MCP servers, structured/typed outputs, eval and gate loops, multi-agent harnesses, multi-model adversarial review

Delivery: legacy migration, security hardening, CI/release gating, cost reduction, Playwright/E2E, technical writing, mentoring

EXPERIENCE

Software Engineer & Founder — PicoDevCo

Independent software studio, Remote (Australia) | Oct 2025 - Present

Client delivery plus the platform and tooling behind it. Four client engagements to date, each owned from requirements through architecture, build, hardening, and deployment.

- **Courier operations platform — VANTIX Courier (Sydney).** Built the company's operating system on Odoo 18: seven custom modules covering CRM and lead capture, dispatch, route and stop planning, a driver portal with photo proof-of-delivery, pricing, and the public booking/quote funnel. Website enquiry forms flow straight into CRM leads and convert into operational dispatches. Dockerised deploy behind Nginx with HTTPS enforcement and correct proxy/websocket handling, Australian tax localisation, module-tagged test suite, and nightly automated backups (database, filestore, and addons) on a 7-day retention cycle.
- **ERP replacement & data migration — regional IT services company (Western Victoria).** Rebuilt an entire business off a legacy website and CRM onto a single Odoo 18 platform: 11 custom modules (e-commerce, job management, printer leasing, BYOD school portals, barcoding, passkey/FIDO2 auth) plus the migration tooling that carried the full legacy history — jobs, parts, pricing, stock — across without losing operating continuity. Dockerised deploy behind Nginx with HTTPS/HSTS and Australian tax/BAS localisation.
- **Marketing + CRM products, live.** Shipped ratesmartfinance.com.au — a finance-broker site with a guided quote funnel and repayment estimator, deployed on Vercel against the client's own domain — and a Next.js + Payload CMS marketing, enquiry-funnel and lead-management platform for a landscape design practice, built on a shared base I factored out of the first engagement so the second shipped in a fraction of the time. Lint, typecheck, unit and Playwright gates run before every deploy.
- **Architecture comparison in production.** Runs a live consumer web platform (Hatchyverse) on three architectures simultaneously — the original always-on backend, a serverless line on Vercel, and an experimental peer-seeded build distributed across seeding nodes rather than served from one origin — so cost, cold-start behaviour and failure modes are measured rather than argued. Drove the AWS cost-reduction work behind it, and carried real accounts across each cutover (existing Google and wallet-linked identities had to survive) via a

surface-by-surface parity verification pass. Rebuilt authentication as a progressive sign-in ladder and closed session-revocation gaps server-side.

- **Automation & review discipline.** Working without a colleague to review me, the review has to come from somewhere — so it's automated. Nothing lands without passing lint, typecheck, unit and end-to-end gates, and architecture decisions go through a multi-model adversarial review before they ship. I treat model output as untrusted input: typed interfaces, evidence-gated verification, and a live end-to-end proof against a running system rather than a passing mock. Also ship MCP servers, `agent-router-oss` (multi-provider LLM router with fallback/cascade), and a codebase knowledge-graph integration used for blast-radius analysis before refactors.
- **Systems & infrastructure.** Rust MMO game server with server-authoritative combat, equipment refinement, and runtime-tunable live-ops rates, each vertical proven by live end-to-end tests rather than unit mocks. `picoMM`, a multi-tenant monitoring platform (Go gRPC agent, FastAPI control plane, TimescaleDB, NATS JetStream, typed Claude analysis behind a per-tenant policy engine) with refresh-token replay defence, MFA, and rate limiting. `mass-mailer`, a campaign and transactional email system with hardened SMTP transport and full deliverability config (SPF/DKIM/MTA-STS).

Product Design Lead & Systems Engineer — Lemonsky Studios

Remote | May 2023 - Oct 2025

- Owned product architecture for a flagship third-person shooter, turning ambiguous business goals into shipped systems, economies, and production workflows.
- Worked with engineering on monetization, telemetry, and data flows; built internal Python tooling to close gaps between design intent and production behaviour.
- Mentored junior designers and technical staff, running reviews focused on reliability, edge cases, and shipping discipline.

Creative & Technical Director — Game/Media Startup

Remote | Feb 2021 - Jan 2025 | hatchyverse.com

- Led architecture and delivery of a public-facing product API: Node/TypeScript, Express, TSOA-generated OpenAPI and C# clients, MikroORM/PostgreSQL, Firebase Auth, and AWS (DynamoDB/S3/Cognito/Lambda) with PDF and image pipelines.
- Took a digital product from concept to live users, reaching top-150 in its category.
- Hired and led a cross-disciplinary design, engineering, and operations team; owned on-chain integration and the deterministic backend systems that enforced product rules.

Earlier — Self-taught Developer & Cross-industry Operator

Sydney / Remote | 2005 - 2018

- Learned to build by shipping five mobile/tablet products; earlier operating roles across finance, construction, logistics, manufacturing, and hospitality built the domain-modeling instincts that now help untangle messy software systems.

LIVE WORK

- **RateSmart Finance** — `ratesmartfinance.com.au` — finance-broker site, guided quote funnel and repayment estimator, deployed to the client's own domain.
- **Artscience Landscape Designs** — `artscience-landscapes.vercel.app` — Next.js + Payload CMS marketing site, enquiry funnel, and CRM/kanban lead operations.
- **Hatchyverse, on three architectures** — the same live platform running as an always-on backend (`hatchyverse.com`), serverless on Vercel (`freehatchy.omayoglu.com`), and peer-seeded across distribution nodes (`picohatchyverse.omayoglu.com`).
- **Portfolio & write-ups** — `omayoglu.com` · `github.com/picoSols`

EDUCATION

Self-directed, learning from primary sources, open-source code, and production release cycles. Recent focus: production LLM systems and multi-agent harnesses, Odoo 18 / business platform engineering, Rust service and game-server architecture, Next.js and Payload CMS delivery, and email deliverability.