Jianeng Huang

Full-Stack Engineer (backend-leaning) — TypeScript, Next.js, Node.js, PostgreSQL

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PROFILE

I take products from an empty repo to production as the only engineer: architecture, data model, backend, interface, deployment and operations. 3+ years of professional work across startups and solo client projects. My main platform has run in production for two years with many users' data in one PostgreSQL database, built and maintained by me, so I can explain each architectural decision, what it cost and what I changed when usage grew. Native English and Spanish.

EXPERIENCE

Independent Software Engineer · Autónomo, multiple clients — Nov 2024 – Present

Centreurope — platform managing content on 3,300+ websites across 23 servers · Nov 2024 – Present

- **First and only engineer:** designed, built, deployed and maintain the whole platform. ~2 years in production, used by 41 of the client's customers across 47 packages.
- **Many customers, one database:** all users share one PostgreSQL database; role-based access (admin / user) with each user's access scoped to their packages, then directories, then sections. Data model evolved through 20+ Alembic migrations with rollback coverage.
- **Authentication and secrets:** JWT auth, bcrypt password hashing, server credentials encrypted at rest (Fernet); closed public database and API ports and routed all traffic through Nginx after a security incident.
- **Architecture decisions and trade-offs:** chose direct file edits over the "dynamic HTML" the client pictured, as the most reliable option; one server interface with FTP, FTPS, SFTP and API backends; an idempotent job re-applies the expected state twice daily, so overwritten files fix themselves.
- **Changed my own design as usage grew:** per-operation connections hit rate limits, so I moved to a per-server pool (5,000+ TLS connections per refresh down to a handful per server), switchable at runtime; removed an N+1 query; background jobs survive browser close and resume progress.

Python, FastAPI, asyncio, SQLAlchemy, Alembic, PostgreSQL · React 19, TypeScript, Astro, Tailwind · Docker Compose, Nginx, Hetzner

Aceites de las Heras — migration & operations · Jul 2026 – Present

- Scoped and priced a three-phase fixed-price project, delivered on time and in scope; set up the Linux server stack myself, migrated the site, automated backups and run monthly maintenance.

Software Engineer · Comisio (startup), Barcelona — Jun 2024 – Aug 2024

- Led a team of 5 integrating the API with the product frontend; code reviews and issue triage. React, Next.js, TypeScript.

Software Engineer Intern · Solatom (solar-thermal startup), Valencia — Sep 2023 – Feb 2024

- Proposed and built a tool to update hundreds of plant microcontrollers in parallel, cutting manual wait time by 90%+; fixed a bug that blocked a key feature for 30%+ of users. Python, Django, JavaScript.

PROJECTS

Club Management SaaS · clubs.jianeng.dev

- Membership platform built solo, end to end: role-based admin and member views, subscription billing, the full membership lifecycle. Next.js 16, React 19, TypeScript, PostgreSQL on Supabase (Drizzle ORM), Clerk (auth and roles, Google sign-in), Stripe subscriptions, Vercel.

AI Dungeon Master · dungeon.jianeng.dev

- LLM agent whose every state change goes through tools that own the rules, so the model can't invent outcomes. Next.js, Python, PostgreSQL (Neon). Empty repo to live playtest in one week.

apply-agent · in progress

- Node.js service with no dependencies: pulls postings from 6 job-board APIs into one normalised schema, with a local dashboard that writes back to a markdown store.

SKILLS & EDUCATION

Frontend & Node TypeScript, React, Next.js (SSG/SSR), Node.js, Astro, Tailwind

Backend & data PostgreSQL, SQL, data modelling and migrations (Alembic, Drizzle, Prisma), Python (FastAPI), REST APIs

Auth & payments JWT, bcrypt, Clerk, role-based access, Stripe subscriptions

Infra Docker, Nginx, Linux, Vercel, Supabase, Neon, CI/CD (GitHub Actions)

Education & languages BSc Computer Science, UPV (2025), 7 Honors, ARA Distinction · English (native), Spanish (native)