

ALBERTO BAQQARI

Senior Full-Stack & Backend Engineer · TypeScript · Node.js · Next.js · AI Integration

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PROFESSIONAL SUMMARY

Ex Graphic Designer, turned Full-Stack and Backend Engineer with 5+ years delivering production-grade B2B platforms and internal automation tooling. Expert in the TypeScript/Node.js ecosystem (Next.js, NestJS, Express) with hands-on ownership across the full delivery lifecycle: architecture, CI/CD, Docker infrastructure, and post-launch reliability. I lean into legacy complexity, integrating with existing systems rather than rewriting them, to ship value faster. Straightforward, async-first, problem solver and comfortable as the technical owner in a fast-moving product team.

Currently looking for a fully remote Fullstack, Backend, or Platform Engineer role where I can contribute to a strong engineering team, keep growing, and build things that actually matter.

KEY SKILLS & HIGHLIGHTS

Languages: TypeScript, JavaScript (ES2022+), Python, SQL, Bash, English (native), Italian (native)

Frontend: React 19, Next.js 14 (App Router, Server Components), Tailwind CSS, TanStack Query, Zustand

Backend & API: Node.js, NestJS, Express.js, FastAPI (Python), Prisma ORM, REST, GraphQL

Databases: PostgreSQL, MySQL, Redis, pgvector (Vector DB)

AI & Automation: LLM API integration (OpenAI, Anthropic/Claude), MCP (Model Context Protocol), LangChain, n8n

DevOps & Infra: Docker, Docker Compose, Nginx, Proxmox (bare-metal hypervisor), Linux SysAdmin, WireGuard VPN, CI/CD pipelines

Tooling: Git, GitHub Actions, Jira, Linear, Slack

Event Management: Independently organised and represented the company at an industry trade show directly contributing to 2 new client acquisitions.

EXPERIENCE

Senior Full-Stack Engineer · [ADTS srl](#) · Hybrid Remote, Italy Jan 2023 – Present

Developer for the railway infrastructure diagnostics industry — processing high-volume acquisition data from track geometry sensors, linear camera hardware

- ▶ Architected and shipped a multitenant B2B platform from scratch using Next.js 14 (App Router), TypeScript, Prisma ORM, and PostgreSQL; implemented granular RBAC and real-time data visualisation serving multiple enterprise clients.
- ▶ Built a Python CLI toolchain that integrated directly with legacy C++ desktop software, automating diagnostic report generation — saving an estimated 6–8 weeks of rewrite effort and cutting manual reporting time by 80% with 100% data integrity on PDF output.
- ▶ Sole TypeScript migration owner: rewrote the full JavaScript codebase to strict TypeScript, eliminating a class of runtime errors and enabling safer refactoring across the entire product.
- ▶ Owned Docker/Nginx infrastructure end-to-end, achieving 99.9% uptime for both internal tooling and client-facing services; set up automated deployments via CI/CD pipelines.
- ▶ Independently diagnosed and resolved a critical data-pipeline correctness bug by learning and applying advanced graph-traversal algorithms — shipped the fix without delaying the release milestone.

- ▶ Designed a geo-distributed file storage architecture using AWS S3 and MinIO, routing user uploads to region-local buckets — reducing transfer latency for high-volume uploads (100s of GB) and ensuring data residency compliance per jurisdiction without requiring architectural changes at scale.
- ▶ Served as the primary technical point of contact for enterprise clients globally translating complex diagnostic data requirements into product features and communicating directly with non-technical stakeholders at an international scale.
- ▶ Built data pipelines handling large-scale railway acquisition datasets including track geometry, fastener inspection, corrugation analysis, and AI-assisted tunnel defect detection — designed for reliability and integrity at the volume that physical infrastructure diagnostics demands.

Full-Stack Developer & Designer · [Freelance](#) · Remote 2020 – 2022

End-to-end e-commerce and web platforms for SMEs across Italy

- ▶ Worked on 6+ custom e-commerce platforms using Node.js, TypeScript, and React; integrated Stripe payments and third-party logistics APIs with custom checkout flows.
- ▶ Improved average Lighthouse/PageSpeed scores by 35% through PostgreSQL index optimisation, server-side caching strategies (Redis), and asset pipeline improvements.
- ▶ Managed full project lifecycle solo: UX prototyping, full-stack development, server provisioning, and deployment — consistently delivering on time and within budget.

Graphic & Web Designer · [Top Display & Publidarma](#) · Italy 2015 – 2019

Modernised print-based workflows; introduced digital-first tooling

- ▶ Built custom internal management tools (JavaScript/PHP) to replace manual production-tracking spreadsheets, reducing reporting overhead for a team of 10.
- ▶ Maintained corporate IT infrastructure and introduced version-controlled web assets, cutting design iteration cycles significantly.

Passion Projects

[MCP Tool Suite for LLM Agents](#) – [TypeScript](#) · [MCP](#) · [Node.js](#) · [PostgreSQL](#)

Developed server-side MCP tools enabling AI agents (Claude, GPT-4) to securely query local databases and file systems. Implemented auth, sandboxing, and structured JSON response schemas for reliable agent integration.

Production Homelab (24/7 Self-Hosted Infrastructure) – [Proxmox](#) · [Docker](#) · [WireGuard](#) · [Linux](#)

Operate a bare-metal Proxmox hypervisor self-hosting 15+ services (Bitwarden, n8n workflow automation, NAS, monitoring stack). Managed entirely via Docker Compose and secured with WireGuard VPN — mirrors a real production environment.

[Event-Driven Discord Bot](#) – [Node.js](#) · [TypeScript](#) · [Discord.js](#) · [PostgreSQL](#)

Scalable Discord bot with persistent PostgreSQL storage, external gaming API integrations, and event-queuing for high-throughput message handling.

[EasyJson](#) - [TypeScript](#) · [React](#) · [Tauri/Rust](#) · [Tailwind](#)

Built **easyJson**, a cross-platform desktop JSON editor with an embedded local SLM allowing non-technical users to query via AI and navigate complex JSON files in plain language, fully offline with no data leaving the machine.

EDUCATION & CERTIFICATIONS

Full-Stack Web Development (Advanced) — Professional Certification

Diploma in Graphic Design — Foundational design & systems thinking