

Giovanni Beijl

Senior Backend / AI Platform Engineer

Backend Engineering • AI Infrastructure • DevOps • Multi-Tenant APIs • Developer Platforms

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SUMMARY

Senior Backend / AI Platform Engineer with ~8 years of experience building production systems, developer platforms, deployment infrastructure, multi-tenant APIs, AI infrastructure, analytics tooling, identity integrations, and internal developer tooling.

Founder of Canopy and Cortex. Canopy is an EU-first developer cloud for deploying applications and AI workloads from Git. Cortex is a standalone AI infrastructure platform for knowledge bases, assistants, agents, RAG, document ingestion, scoped API access, usage analytics, training workflows, and OpenAI-compatible endpoints.

Previously co-built a developer hosting platform used by 1,000+ users and 10,000+ deployments, later acquired. Strong in backend architecture, DevOps, CI/CD, containers, databases, AI tooling, distributed systems, analytics infrastructure, and platform engineering.

TECH STACK

Languages	PHP, TypeScript, JavaScript, Python
Backend	Node.js, API design, multi-tenant APIs, queueing systems, lifecycle management, system architecture
AI / RAG	RAG, document ingestion, embeddings, assistants, agents, model adapters, QLoRA/LoRA, OpenAI-compatible APIs
Frontend	React, Vue, Vuex, internal tooling, admin interfaces, data visualization
Data	PostgreSQL, MySQL, MariaDB, ClickHouse, OLAP systems
Infra	Docker, LXC/LXD, Kubernetes, CI/CD, deployment pipelines, DNS, migrations
Domains	Developer platforms, AI tooling, financial analytics, identity/SSO, public-sector integrations

EXPERIENCE

Software Engineer | Feb 2024 - Present

SERA Business Design

- Built AI-powered financial analytics functionality for an enterprise client, enabling PowerBI-style revenue, cost, profitability, quarterly comparison, and location-based insights through natural-language queries and automated chart generation.
- Helped deliver deal-critical analytics and AI functionality that contributed to a multi-million-euro commercial opportunity.
- Designed and built production-grade queueing infrastructure for heavy and delayed background jobs, including priorities, deduplication, retries, delayed scheduling, failure logging, CLI monitoring, and correlation-based batch progress.
- Implemented analytics infrastructure with tenant-aware CLI tooling for relational-database-to-OLAP synchronization, health checks, schema drift repair, validation, and controlled cron scheduling.
- Built agent-oriented tooling for autonomous knowledge management, including correction classification, canonical rule consolidation, audit logs, route synchronization, validation/linting, memory maintenance, and autonomous commit protocols.
- Built public-sector identity integrations combining OIDC, SOAP-based government services, mutual TLS certificates, RSA-SHA256 XML signatures, encrypted identity storage, eID workflows, and native dependency fixes.
- Built external cash machine integrations for POS workflows through a unified abstraction over REST/JSON and SOAP/XML APIs.
- Worked across backend, frontend, infrastructure, AI tooling, analytics, server migrations, deployment reliability, customer-specific product development, and operational planning.

FOUNDER PRODUCTS

Founder / Software Engineer | Built solo

Canopy | canopy.pm

- Designed and built an EU-first developer cloud platform for deploying traditional applications and AI-oriented workloads.
- Built repo-to-production deployment workflows where applications can be deployed directly through repository updates.
- Built automatic project configuration, custom deployment pipelines, infrastructure orchestration, database provisioning, SSL/domain handling, and developer workflows.
- Created one-click database provisioning inside project networks, configurable Nginx handling, and custom deployment configuration parsing through config.canopy.
- Built a CLI tool for managing projects and deployment workflows, with support for Dockerfile and Docker Compose based deployment flows.
- Owned backend, infrastructure, system design, deployment automation, operational reliability, and product trade-offs end-to-end.

Founder / Software Engineer | Standalone AI infrastructure product

Cortex | The Canopy Corporation

- Designed and built Cortex as a standalone AI infrastructure platform under The Canopy Corporation.
- Built multi-tenant AI platform architecture for knowledge bases, assistants, agents, conversations, documents, scoped API keys, service accounts, provider configuration, usage analytics, and audit logs.
- Designed platform scoping around organizations, workspaces, projects, environments, customer-owned resources, and platform-owned resources.
- Built RAG workflows including knowledge-base retrieval, one-shot Q&A, persistent conversations, citations, feedback capture, retrieval scoring, and streaming Server-Sent Events responses.
- Developed ingestion pipelines for JSONL, PDFs, codebases, documentation libraries, sync sources, embedding backfills, reindexing, cleanup jobs, and asynchronous ingestion job tracking.
- Built assistant and agent configuration workflows, OpenAI-compatible endpoints, model/provider selection, system prompts, retrieval settings, tool configuration, and scoped API access.
- Built model training workflows for QLoRA, LoRA, and full fine-tuning, including dataset export/formatting, tokenizer-aware truncation, adapter-aware inference, lightweight evaluation metrics, training-run tracking, diagnostics, and hardware snapshots.

Founder / Software Engineer | Bootstrapped, team of 3 engineers

Forest | forest.host

- Co-built a developer-focused cloud hosting and deployment platform from concept to production.
- Built zero-config Git-based deployment workflows, Git integrations for GitHub/GitLab/Bitbucket, public API functionality, and deployment automation.
- Owned full-stack and infrastructure work across React, Node.js, CI/CD, LXC/LXD containers, deployment orchestration, backups, rollback systems, SSL, and environment management.
- Scaled the platform to 1,000+ users and 10,000+ deployments while balancing architecture, infrastructure cost, reliability, and maintainability.
- Product was later acquired.

SELECTED IMPACT

- Designed and built Cortex, a standalone AI infrastructure platform covering RAG, ingestion, assistant configuration, agents, scoped API access, model training workflows, observability, and OpenAI-compatible APIs.
- Designed and built Canopy, an EU-first developer cloud platform for Git-based application deployment, database provisioning, SSL/domain handling, Docker-based workloads, CLI workflows, and deployment automation.
- Built AI-powered financial analytics functionality for an enterprise client, enabling natural-language financial analysis, automated chart generation, revenue/cost/profitability insights, and location-based reporting.
- Built and operated developer platforms used by 1,000+ users and 10,000+ deployments; helped take a bootstrapped developer platform from concept to acquisition.
- Delivered regulated identity and public-sector integrations involving OIDC, SOAP, mutual TLS, XML signatures, encrypted identity storage, eID workflows, native dependency fixes, and government data services.

STRENGTHS

- Builds complex systems from concept to production with minimal supervision.
- Strong backend, infrastructure, DevOps, AI tooling, analytics, and platform engineering capability.
- Experienced in multi-tenant APIs, AI platforms, deployment systems, containers, CI/CD, migrations, internal developer tooling, and data infrastructure.
- Able to turn ambiguous product and business problems into working technical systems.
- Strong product sense from building and operating bootstrapped platforms; comfortable owning critical systems in startup and scale-up environments.