ALEXANDRE SPINDOLA



Senior Full-Stack, Applied AI & Forward Deployed Engineer (FDE) · GCP Certified

Forward Deployed & Applied AI Engineer with ~5 years of professional experience. Core stack: TypeScript and Rust. Works with stakeholders from discovery to production: LLM/MCP features, n8n and browser automation, real-time STT/TTS and REST APIs.

Address: Bucharest, Romania | **Date of Birth:** 19.11.1988

Mobile: +34 642 887 239 | **Email:** alexandre@spindola.me

Nationality: Spanish (EU Citizen) | **Availability:** Select remote B2B projects | **Portfolio:** spindola.me

LinkedIn: linkedin.com/in/alexspindola | **GitHub:** github.com/alexandrespindola

WORK EXPERIENCE

Senior Full-Stack & Automation Engineer

03.2026 - Present

Value AG | Germany, Remote

- Migrating UiPath RPA processes to self-hosted n8n and a custom browser automation service for a German real estate valuation company.
- Built a browser automation service (TypeScript, Bun, Hono, Puppeteer, PostgreSQL, SvelteKit UI) with pg-boss queues, SSE logs, RBAC, encrypted vault and audit logging.
- Run n8n in Queue Mode (Docker Compose, workers, task runners, Redis, RabbitMQ) with Azure DevOps CI/CD; Rust validators check output parity.
- Integrated Microsoft Graph, REST APIs, OAuth2 and LLM workflows (OpenAI, Anthropic) for classification and data extraction, using AI agents under explicit guidelines.

Full-Stack & AI Automation Engineer

01.2025 - 03.2026

Poropo | Spain, Remote

- Built merchant-facing e-commerce infrastructure: NestJS middleware integrating Magento 2, Shopify and Holded ERP, plus Svelte apps backed by Firebase.
- Database architecture with PostgreSQL/Drizzle ORM and asynchronous processing (BullMQ/Redis)
- RESTful API development with Fastify achieving >80% test coverage

Full-Stack Developer Node.js (Frontend-Focused)

10.2023 - 12.2024

TitansDev | Spain, Remote

- Frontend development: Built responsive web applications using Vue.js, Nuxt.js and Astro
- Backend & data layer: Managed Node.js backend services and databases, ensuring high availability, data integrity and secure API communication for client projects.
- Developed Vue.js/Nuxt.js testing suites and component debugging strategies.

Freelance Web Developer & Consultant

12.2021 - 09.2023

Self-Employed | Brazil, Remote

- End-to-end delivery: Delivered 10+ web projects for international clients.
- Performance & SEO: Optimized websites for Core Web Vitals and page speed.
- CMS enablement: Customized WordPress and headless CMS setups (Strapi, Directus).

EDUCATION

MBA in Information Security
10.2026 - Present

Descomplica College

Focus: Cybersecurity, Network and Cloud Security, Incident Response, Cryptography, GDPR

Postgraduate in Full-Stack Development
11.2025 - 09.2026

Descomplica College

Focus: Node.js, REST APIs, SQL, microservices, Docker/Kubernetes, CI/CD, AWS & DevOps

MBA in Software Engineering
10.2023 - 08.2025

University of São Paulo (USP)

Focus: Software Architecture, Full-Stack Development, DevOps, CI/CD, Cloud Computing

Bachelor in Psychology
02.2008 - 12.2014

University of São Paulo (USP)

SKILLS

Backend: TypeScript (strict type-safety), Node.js, Bun, Hono, NestJS, Fastify, Rust, Axum, Tokio, SQLx, Zod, REST APIs, OpenAPI, WebSockets, Webhooks, OAuth2, JWT, API Design, Microservices, Event-Driven Architecture

AI & LLM: OpenAI SDK & Azure OpenAI (chat completions, function/tool calling, streaming, structured outputs), Anthropic Claude API, Gemini, Prompt & Context Engineering, Context Management, RAG, Embeddings, pgvector, Model Context Protocol (MCP), AI Agents, Speech-to-Text & Text-to-Speech (Azure AI Speech), Azure Translator

AI-Assisted Development: Claude Code, Codex, OpenCode, GitHub Copilot, Agent Guidelines (CLAUDE.md/AGENTS.md), Spec-Driven Development, Prompt Writing, AI Output Review

Frontend: Svelte 5/SvelteKit, Vue.js/Nuxt.js, Astro, Turborepo, Vite, SSR, SSG, PWA, Paraglide i18n, HTMX, Server-Sent Events (SSE), TailwindCSS, shadcn-svelte, Responsive Design

Databases: PostgreSQL (complex queries, indexing, performance tuning), pgvector, DuckDB, DuckLake, Parquet, MySQL, MongoDB, Drizzle ORM, Supabase, Firebase, Meilisearch, Data Modeling

Data & Statistics: Time-Series Anomaly Detection (MSTL), A/B and Switchback Experimentation, Confidence Intervals, Sequential Testing, Batch Ingestion Pipelines

Queue Systems: pg-boss, BullMQ, Redis, Valkey, RabbitMQ, Asynchronous Processing, Job Scheduling

Testing: Vitest, Bun Test, Playwright, Cargo Test, Unit/Integration/E2E Testing, Coverage Gates, Conventional Commits

Cloud & Infrastructure: GCP (Certified), Oracle Cloud, Azure, AWS, Railway, Cloudflare, Cloudflare Pages, Cloudflare R2, Docker, Linux, Azure DevOps, CI/CD Pipelines, Git, GitOps, Sentry, Monitoring, Logging

AI & Automation: n8n (Queue Mode), UiPath, RPA, Puppeteer, Playwright, Browser Automation, Microsoft Graph, OCR

CMS & Authentication: Strapi, Directus, Better Auth, 2FA/TOTP, Session Management, GDPR Compliance

LANGUAGES

English B2- Professional

Spanish C2 - Fluent

Portuguese C2 - Native

Italian B1- Conversational

CERTIFICATES

- GCP Associate Cloud Engineer Certification
- DIO - Automation with N8N (Santander)
- DIO - DevOps Fundamentals
- GitHub Foundations Certification
- MongoDB Node.js Developer Path

PROJECTS

Live Event AI Interpretation Platform

- Rust (Axum) + Svelte 5 single binary streaming live captions in 11 languages over WebSockets.
- Azure Speech STT (glossary phrase lists), translation by Azure Translator or switchable LLMs (Azure OpenAI GPT-4.1, Claude Haiku/Sonnet) with fallback, and per-sentence TTS.
- Tracing and latency metrics for the AI pipeline; ran 5 days live at a congress in Spain with zero downtime.

AI Value Loop: Answer-Rate Optimization Platform for a Call Center

- Rust (Axum), DuckDB/DuckLake, PostgreSQL, Valkey, Meilisearch and Svelte on Oracle Cloud: ingests ~1M calls/day in 5-minute batches and detects answer-rate drops by route and server.
- MCP server with 13 Rust tools (fixed SQL, statistics in code: Wilson intervals, MSTL baselines, switchback tests) so Claude proposes and critiques hypotheses and a human approves.
- Privacy-first: a local model triages alerts, the LLM only sees aggregates, and every experiment and AI call is logged.

David Platform - Multilingual Digital Library

- Rust API and workers (Axum, SQLx, PostgreSQL/pgvector, Valkey, Meilisearch) with OpenAPI contract tests; SvelteKit PWA in 30 languages.
- AI video pipeline: automatic subtitle extraction (Azure Video Indexer), LLM subtitle translation and a web cue editor.
- Streaming RAG chat (Claude / Azure OpenAI), Azure Speech TTS narration and an internal CMS with per-language editors.

Gnosis Congress 2026 - Event Management Platform

- Nuxt, Bun, Hono, PostgreSQL (Drizzle), Better Auth and n8n: production platform with 3,905 registrations.
- Visits, lunch and transport management with Redsys payments and country-filtered analytics.

Gnosis International Websites - Germany, Netherlands & Romania

- Astro, SvelteKit, TypeScript, Tailwind, Supabase and Cloudflare Pages: migrated legacy sites into a reusable multilingual edge architecture with zero server maintenance.

E-Commerce ERP Middleware - Holded Core

- NestJS (Fastify), PostgreSQL/Drizzle, BullMQ/Redis syncing Magento 2, Shopify and Holded ERP with event-driven + adaptive CRON architecture and >80% test coverage.

Dog Grooming Management System

- SvelteKit + Firebase: salon operations with calendar management, real-time occupancy and customer segmentation.

Bucharest, November 6, 2026

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