ALEXANDRE SPINDOLA



Senior Full-Stack, AI & Workflow Automation Engineer · TypeScript & Rust · GCP Certified

Senior Full-Stack, AI & Workflow Automation Engineer (~5 years). Core stack: TypeScript (Node.js, Bun, NestJS) and Rust (Axum). Builds self-hosted n8n & headless browser automation, transactional queues, LLM/RAG/MCP pipelines and multilingual web platforms.

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, AI & Workflow Automation Engineer

03.2026 - Present

Value AG | Germany, Remote

- Migrating legacy UiPath RPA processes to self-hosted n8n and a custom headless browser automation service for a real estate valuation enterprise.
- Built a browser & document automation platform (TypeScript, Bun, Hono, Puppeteer, PostgreSQL, SvelteKit UI) with pg-boss locks, SSE logs, RBAC, encrypted vault and audit logs.
- Architected n8n in Queue Mode (Docker Compose, workers, isolated JS/Python task runners, Redis, RabbitMQ) with Azure DevOps CI/CD and Rust validators for 1:1 output parity.
- Integrated Microsoft Graph (SharePoint, mail), REST APIs, OAuth2 and LLM workflows (OpenAI, Anthropic Claude, Azure OpenAI) for classification and structured data extraction.

Senior Full-Stack & Integration Engineer (TypeScript / Node.js / n8n)

01.2025 - 03.2026

Poropo | Spain, Remote

- Built merchant e-commerce infrastructure: NestJS (Fastify) middleware syncing Magento 2, Shopify and Holded ERP, plus SvelteKit/Firebase apps and n8n workflows.
- Database architecture with PostgreSQL/Drizzle ORM and event-driven job queues (BullMQ/Redis).
- Developed high-throughput Fastify REST APIs with OpenAPI schemas and >80% test coverage.

Full-Stack Engineer (TypeScript / Node.js / Vue & Nuxt)

10.2023 - 12.2024

TitansDev | Spain, Remote

- Frontend engineering: Built responsive web applications with Vue 3, Nuxt 3, Astro and TypeScript.
- Backend & data layer: Managed Node.js backend services and SQL databases, ensuring high availability, data integrity and secure API communication for client projects.
- Developed Vue.js/Nuxt.js automated testing suites and CI/CD quality gates.

Full-Stack Web Developer & Automation Consultant

12.2021 - 09.2023

Self-Employed | Brazil, Remote

- End-to-end delivery: Delivered 10+ full-stack web projects and integrations for international clients.
- Performance & Edge: Optimized applications for Core Web Vitals, SEO and Cloudflare Pages.
- CMS & workflows: Customized headless CMS setups (Strapi, Directus, Supabase) and automations.

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 & Systems: TypeScript (strict), Node.js, Bun, Hono, NestJS, Fastify, Rust, Axum, Tokio, SQLx, Zod, REST APIs, OpenAPI 3.1, WebSockets, SSE, Webhooks, OAuth2, Microservices, Event-Driven Architecture

Workflow & Automation: n8n (Self-Hosted, Queue Mode, External Task Runners), Puppeteer, Playwright, Headless Chrome, UiPath-to-Code RPA Migration, Microsoft Graph & SharePoint API, Gotenberg/LibreOffice PDF, ExcelJS

AI, LLM & Speech: Claude API, Azure OpenAI & OpenAI SDK (tool calling, structured outputs, streaming), Gemini, MCP, AI Agents, RAG, pgvector, Azure AI Speech (STT/TTS), Translator & Video Indexer

Frontend & Multilingual UI: Svelte 5/SvelteKit, Vue 3/Nuxt 3, Astro, Turborepo, Vite, SSR, SSG, PWA, Paraglide i18n (30+ locales), HTMX, Tailwind CSS, shadcn-svelte, Responsive Design

Databases & Search: PostgreSQL (complex queries, indexing, performance tuning), pgvector, Meilisearch, DuckDB/DuckLake, Parquet, Drizzle ORM, SQLx, MySQL, MongoDB, Supabase, Firebase, S3/Cloudflare R2

Queues & Messaging: pg-boss (singleton locks), BullMQ, Redis, Valkey, RabbitMQ, Async & Job Scheduling

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

Testing & Quality: Playwright (E2E), Vitest, Bun Test, Cargo Test, OpenAPI Contract Tests, Rust Parity Validators, Biome, Lefthook, Gitleaks

Cloud & Infrastructure: Docker & Docker Compose, Linux VMs, GCP (Certified), Azure, AWS, Oracle Cloud, Cloudflare (Pages, Workers, Tunnels), Railway, Azure DevOps, GitHub Actions CI/CD, Sentry

Auth, Security & CMS: Better Auth, Multi-Tenant RBAC, 2FA/TOTP, JWT, Encrypted Secret Vaults, Audit Logging, GDPR Compliance, Strapi, Directus

LANGUAGES

English B2- Professional | **Spanish** C2 - Fluent | **Portuguese** C2 - Native | **Italian** B1- Conversational

CERTIFICATES

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

PROJECTS

Live Event AI Interpretation Platform

- Single-binary Rust (Axum) + Svelte 5 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.
- Replay quality gates, tracing and latency metrics; ran 5 days live 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

- Ported Go API/workers to Rust (Axum, SQLx, PostgreSQL/pgvector, Valkey, Meilisearch) with OpenAPI contract tests and PDF/ePub workers; Turborepo + 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 multi-language RBAC CMS.

Gnosis Congress 2026 - Event Management Platform

- Nuxt 3, Bun, Hono, PostgreSQL (Drizzle), Better Auth and n8n: production platform with 3,905 registrations.
- Visits, lodging and transport workflows with Redsys payments, 2FA/RBAC and country-filtered analytics.

Gnosis International Websites - Germany, Netherlands & Romania

- Turborepo monorepos (Astro, SvelteKit, TypeScript, Tailwind, Supabase, Cloudflare Pages): migrated legacy sites into a reusable multilingual edge architecture.

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 18, 2026

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