

Mikel Villota

Software Engineer

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PROFESSIONAL SUMMARY

Software Engineer with a passion for technology and programming. I started at 14 out of pure curiosity and haven't stopped since. I specialize in backend development with Java and Python, with a strong focus on clean architecture, microservices, and other approaches that help build robust and scalable services. I have worked across banking, fintech, consulting, and data-focused companies, on projects ranging from core banking microservices to LLM-based applications. I'm currently learning Go and Rust, exploring AI inference and how models run in production, and discovering what artificial intelligence makes possible.

CORE COMPETENCIES

Microservice Design & Architecture

Java / Spring Boot

Python / FastAPI / Django

DDD & Hexagonal Architecture

Event-Driven Systems (Kafka / RabbitMQ)

CI/CD (GitHub Actions / GitLab / Jenkins)

AWS / Azure / OpenShift / Kubernetes

LLM Applications & RAG Pipelines

WORK EXPERIENCE

WANNME

Jul 2025 – Present

Software Engineer

Madrid, Spain

- Worked on the **Settlement Cycles** domain, per-marketplace settlements, and internal management of collections and refunds, building and evolving backend services with **Java and Spring Boot**, the team's primary stack, and developing services for the **Risk department** using **Python and FastAPI**.
- Drove technical and design decisions alongside another engineer: defined domain boundaries, contracts, and a progressive migration strategy from monolith to microservices without disrupting production.
- Introduced **CQRS** and other design patterns on top of the team's hexagonal architecture where read/write separation added clarity and performance.
- Carried out complex **refactors** of legacy monolith code, reducing coupling and unblocking the extraction of **~5 modules** into independently scalable services.
- Set up CI/CD pipelines from scratch for new microservices; deployed services on AWS (Elastic Beanstalk and EKS) using Kubernetes for horizontal scaling.

inAtlas (Freelance, in parallel)

Mar 2025 – Aug 2025

Data Engineer

Barcelona, Spain

- Designed and implemented distributed scraping pipelines using Scrapy and Playwright across **5–10 web sources**, deployed on Kubernetes.
- Automated data processing through asynchronous queues with **AWS SQS**, managing large volumes of concurrent tasks.
- Built extraction, cleaning, transformation, and normalization pipelines for structured and semi-structured data from multiple sources.
- Integrated outputs with storage and analytics systems feeding search engines, recommendation systems, and analytical visualization tools.

NTT DATA

Sep 2024 – Jul 2025

Software Engineer

Santander, Spain

- Built and evolved multiple microservices in the **banking sector** across Python (Django) and Java (Spring) stacks.
- Designed from scratch a **token-vault microservice** backed by Redis, handling **thousands of daily requests** across backoffice workflows.
- Used Kafka as the backbone for **event-driven architecture** between services and as a structured log pipeline, decoupling producers from consumers.
- Modeled and designed new tables in existing **Oracle and DB2** schemas to support new use cases.
- Deployed and maintained services on **OpenShift** with CI/CD on GitHub Actions; quality gates via SonarQube and Fortify in a regulated banking environment.

LIS Data Solutions

Sep 2023 – Sep 2024

Software Engineer

Santander, Spain

- Worked across multiple clients including the **Regional Government of Castilla y León**, a real estate developer, and an international logistics company.
- Moved to the **R&D team** and contributed to the early architecture of an in-house **LLM-based product** built with LangChain.
- Designed two proof-of-concept demos that shaped the product direction: driver profitability analytics (ETL + operational data normalization) and a knowledge base over SharePoint with event-driven index consistency via content hashing.
- Built ETL pipelines (Pandas, Selenium, Scrapy) feeding analytical and AI workloads.
- Owned the full deployment cycle on **Azure App Service** with CI/CD on GitLab.

Zarttech

Mar 2023 – Sep 2023

Intern Backend Developer

The Hague, Netherlands

- Sole backend developer, owning the full backend lifecycle end-to-end as first professional experience.
- Built authentication, business services, REST endpoints, PostgreSQL data model, and test suite from scratch with **Java and Spring Boot**.
- Set up deployment pipeline on **AWS Elastic Beanstalk** with GitHub Actions, leaving the backend in a near-production-ready state.

PROJECTS

ytm-player 450+ stars · contributor

Open-source YouTube Music TUI client with terminal-based playback, playlist management, and a customizable user experience.

Python, Textual, mpv

perplexity-webui-scraper 110+ stars · contributor

Python scraper exposing Perplexity AI via an OpenAI-compatible REST API, MCP server, and CLI. Integrated as the Perplexity engine in tunnel-agent.

Python, FastAPI, Playwright, MCP

tunnel-agent 24+ stars

Native Windows desktop app routing local CLI agent traffic through AI provider subscriptions via a local OpenAI-compatible proxy. Supports Claude, Gemini CLI, Copilot, Codex, Perplexity, and custom providers.

C#, .NET 10, Avalonia

dotfiles 5 stars

Cross-platform developer environment managed with chezmoi. Covers terminal, shell (PowerShell 7 / zsh), window managers (GlazeWM / Hyprland), and automated install scripts.

chezmoi, PowerShell, zsh, GlazeWM, Hyprland

goopdl

CLI for downloading APKs from Google Play Store with anonymous authentication.

Python, protobuf

masamune

Terminal UI for building Morphe artifacts from user-supplied local APKs.

Python, Java, TOML, GitHub Actions

holded-tt

Python CLI for automating time tracking on Holded. Interactive auth, 2FA, dry-run previews, and PDF/XLSX export.
Python, Typer, Rich, httpx

Beyond Humane

Independent brand co-founded with three colleagues to explore and develop AI agent solutions. Designed and built voice-agent MVPs using LangGraph and LiveKit, integrating ElevenLabs for voice synthesis and Twilio for outbound calls. Although the Voice Agents product was not launched, Beyond Humane remains active as a brand, and the initiative provided hands-on experience in developing agent-based products.
LangGraph, LiveKit, ElevenLabs, Twilio

EDUCATION

Higher Education in Multiplatform Application DevelopmentSep 2021 – Jun 2023
IES Augusto González de Linares — Santander, Spain

SKILLS

Languages	Java, Python, Kotlin, JavaScript / TypeScript, C#, Dart
Cloud	AWS, Azure, OpenShift
Frameworks	Spring, FastAPI, Django, Angular, React, Flutter
CI/CD	Jenkins, GitLab Pipelines, GitHub Actions
Testing	JUnit, PyTest, Mockito, WireMock, Cucumber, Spock
Databases	Oracle, PostgreSQL, MySQL, SQL Server, DB2, MongoDB, Cassandra
Other	Docker, Kubernetes, Kafka, RabbitMQ, Redis, SQS, gRPC, Spark, Grafana, Prometheus, DDD, TDD, SOLID, Hexagonal Architecture, JOOQ, Flyway, SonarQube, Fortify, Apigee

LANGUAGES

Spanish	Native
English	Advanced (C1 Cambridge)