



Rubén García Hernando

Technical Leader, Platform Architect, AI Researcher

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Zetesis

Profile

Engineer and entrepreneur building Zetesis, a RAG-as-a-Service SaaS platform for AI-powered document exploration. Deep experience in GitOps/Kubernetes infrastructure, Python/FastAPI backends with AI integrations, and modern React/Next.js platforms. I build and operate end-to-end systems—from declarative infrastructure with ArgoCD and Talos Linux to DDD+CQRS backends with multiple AI providers and type-safe frontends. Passionate polymath with broad interests spanning technology, economics, and history. My applied research explores knowledge-graph-augmented retrieval (KG-RAG) and agents as instruments to assist research, with a particular interest in the Austrian School of Economics and liberal thought.

- [Bilbao, País Vasco](#)
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Experience

IronTec

Jan 2025 – Present

AI Researcher / Software Engineer

Led backend development of Nixon, a multi-provider audio transcription platform for enterprise clients. Designed the DDD+CQRS architecture with event-driven pipelines, integrated four AI transcription providers, and built a RAG system for automated report generation. I also research and develop knowledge-graph systems, augmented retrieval (RAG), and agents to assist document exploration, underpinning the Zetesis Portal and Nexus platforms.

- Implemented a RAG pipeline for intelligent document retrieval and automated report generation
- Full-text search with Typesense
- Frontend built with React and TypeScript using Vite, MUI, and Keycloak for authentication
- Monorepo with pnpm and Turborepo, with auto-generated TypeScript types from OpenAPI schema
- PostgreSQL 17 with pgvector for vector embeddings, Redis for background jobs, MinIO for object storage

Python

FastAPI

DDD

CQRS

Deepgram

OpenAI Whisper

Google Cloud Speech

Groq

RAG

Typesense

React

TypeScript

PostgreSQL

pgvector

Redis

MinIO

Zetesis

Jun 2023 – Present

Founder & Platform Architect

Founded Zetesis to build an AI-powered documentation management SaaS (RAG-as-a-Service). The platform evolves PayloadCMS into an intelligent document explorer backed by vector databases and MCP-based AI querying, serving researchers and organizations. Alongside the SaaS, provide freelance consulting and custom deployments for enterprise clients.

- Built and deployed the Sarekin website with React, Remix, and Docker
- Developed and published npm packages: payload-indexer, payload-typesense, payload-lexical-blocks-builder, payload-taxonomies, chat-agent
- Migrated infrastructure to a full GitOps stack: Kubernetes on Talos Linux with ArgoCD, Cilium, Traefik, Harbor, Gitea, Infisical, K8up, CrowdSec
- Managed Kotlin Multiplatform project as freelancer for NaizFit after downsizing
- Monorepo architecture with pnpm workspaces and Turborepo, deployed on Kubernetes with ArgoCD and Helm

React

Next.js

TypeScript

Kubernetes

ArgoCD

Docker

Helm

Kotlin

GitOps

Naiz Fit

Feb 2024 – Nov 2024

Technical Leader & Senior iOS/Kotlin Developer

Built the entire Compose Multiplatform architecture for a fashion-tech app that enabled dynamic survey creation — configurable via Firebase — for managing clothing testing campaigns. Started as iOS developer, quickly assumed Tech Lead responsibilities spanning Android, iOS, and parts of the Scala backend.

- Led development of iOS application using iOS 17 stack with SwiftUI
- Took over legacy Android project, learning Kotlin and Jetpack Compose from scratch
- Assumed responsibilities for parts of the backend developed in Scala
- Managed CI infrastructure with Jenkins

Swift

SwiftUI

Kotlin

Jetpack Compose

iOS

Android

Scala

Jenkins

Tyris Software

Aug 2023 – Feb 2024

Senior Software Engineer

Senior iOS Developer on the LaLiga team, building SwiftUI-based features for a sports platform used at scale. Focused on async/await migration, coordinator-pattern navigation, and functional programming patterns in Swift.

- Migrated project to Async Await
- Implemented coordinator pattern within the League team
- Worked with Scrum methodology using Jira, Figma, and Jenkins for CI

Swift

SwiftUI

iOS

Jenkins

CERN

Oct 2019 – Oct 2022

Software Engineer

Worked on the CERNphone project, replacing Skype for Business by integrating with CERN's telecommunication systems. The system serves over 5,000 users and handles approximately 30,000 calls daily.

- Developed CERNphone Desktop App for macOS, Windows, and Linux using Electron with React, Redux, WebSockets, and SIP.JS
- Built Python-based REST API deployed in OpenShift for session management
- Developed CERNphone iOS mobile application using Swift
- Collaborated with multicultural teams, communicated in English, and provided in-person support to end-users worldwide
- System now in production serving 5,000+ users with ~30,000 daily calls

Electron

React

Python

Swift

iOS

OpenShift

LIN3S

Mar 2017 – Aug 2019

Software Web Developer

Backend developer working with Symfony, Silius, and Drupal 8. Progressed to software architect role, designing frontend architecture with React and Redux, and implementing Docker/DevOps practices.

- Developed backend for Euskaltel's website using Symfony, DDD, BDD/TDD, CQRS, and Clean Architecture
- Assumed software architect role for a new internal project
- Designed and built frontend architecture with React and Redux
- Implemented Docker and DevOps automation for testing and deployment environments

PHP

Symfony

React

Docker

DDD

CQRS

Clean Architecture

Research Fellow

First professional experience in a research environment, working on an Industry 4.0 IoT platform for the Basque industrial sector. Developed event processing pipelines and gained foundational skills in .NET, real-time systems, and applied research methodology.

Projects**Konect Web**

Jul 2025 – Present

The product behind the IronTec engagement. A multi-tenant transcription platform combining four AI speech providers with a RAG pipeline for intelligent document retrieval. Full-stack: FastAPI backend with DDD+CQRS, React/TypeScript frontend, PostgreSQL with pgvector, and Typesense for full-text search.

- Backend DDD+CQRS with event-driven command/query bus and repository pattern
- RAG pipeline for intelligent document retrieval and automated report generation
- Multi-provider transcription: Deepgram, OpenAI Whisper, Google Cloud Speech, Groq
- Auto-generated TypeScript client from OpenAPI schema
- PostgreSQL 17 with pgvector for semantic search, Redis job queues, MinIO object storage

Python

FastAPI

DDD

CQRS

RAG

Typesense

React

TypeScript

PostgreSQL

pgvector

Redis

MinIO

Mileto Infrastructure (GitOps)

Jun 2024 – Present

GitOps repository for declarative infrastructure management. Kubernetes cluster on Talos Linux with ArgoCD App-of-Apps pattern, Cilium CNI, Traefik ingress, Harbor registry, Gitea, Infisical secrets, K8up backups with restic/MinIO, CrowdSec security.

- Talos Linux immutable OS with talhelper + SOPS/Age for secret management
- ArgoCD App-of-Apps pattern for declarative multi-environment deployments
- Cilium CNI with kube-proxy replacement and Hubble observability
- Full self-hosted stack: Harbor registry, Gitea, Infisical, K8up backups
- CrowdSec for collaborative security and Traefik ingress with automatic TLS

Kubernetes

ArgoCD

Docker

Helm

GitOps

Zetesis Portal (SaaS)

Mar 2024 – Present

AI-powered documentation management platform built as a SaaS product. Evolves PayloadCMS from a traditional CMS into an intelligent document explorer backed by a vector database and MCP-based AI querying. Designed for researchers and organizations to index, vectorize, and deeply explore large volumes of reports and documents using AI. Offers three models: self-hosted via the open-source PayloadAgents template, managed hosting with proprietary knowledge bases, or custom deployments for enterprise use cases. RAG-as-a-Service.

- Open-source PayloadAgents template and npm packages (@zetesis/*) for self-hosted deployments
- Vector database integration with AI-powered search and MCP for document querying
- Multi-tenant SaaS with Stripe payments and Keycloak authentication
- Custom enterprise deployments and consulting services

Next.js

TypeScript

React

RAG

Typesense

Kubernetes

ArgoCD

Docker

Helm

Antonio Escohotado AI Agent

Mar 2024 – Present

AI agent designed to explore and make accessible the intellectual legacy of Antonio Escohotado, a prominent figure in Spanish liberalism. Developed in collaboration with Jorge Escohotado to index, vectorize, and enable deep AI-powered exploration of Escohotado's extensive body of work.

- Collaboration with Jorge Escohotado to digitize and index the author's complete bibliography
- Typesense-backed full-text and semantic search across thousands of text chunks
- RAG pipeline with vector embeddings for contextual AI-powered Q&A
- Built on the Zetesis Portal platform, serving as first production client

RAG

TypeScript

Next.js

Typesense

Formidable

Feb 2023 – Jan 2025

iOS app released to the App Store as a personal project and entrepreneurial venture. Main code released as open source.

- Full iOS app lifecycle: design, development, App Store submission, and maintenance
- SwiftUI with modern iOS 16+ APIs and Swift concurrency
- Open-sourced core codebase on GitHub
- First entrepreneurial product — validated market assumptions and iterated on user feedback

Swift

SwiftUI

iOS

Sarekin Web

Aug 2023 – Nov 2023

Corporate website for Sarekin, a Basque industrial services company. Server-side rendered with Remix for performance and SEO, containerized with Docker for streamlined deployment.

- Client-facing corporate website with responsive design
- Built with Remix for SSR and optimized performance
- Dockerized deployment with CI/CD pipeline

React

Docker

ReclamaHoy

Jun 2019 – Jun 2020

Lead-generation platform for legal claims related to abusive revolving credit cards in Spain. Built the landing page and coordinated the digital marketing campaign with agency Binima, combining paid social media ads with conversion-optimized funnels.

- Landing page optimized for lead conversion
- Social media advertising campaign management with Binima
- Legal sector: revolving credit card claims targeting affected consumers

Education

Master of Engineering in Computer Engineering · Computer Engineering

Jan 2016 – Jun 2018

University of Deusto

Master thesis on the application ofDDD, Clean Architecture, Microservices, and Docker to a real-world project built with Symfony and PHP.

- Applied Domain-Driven Design and Clean Architecture principles to a PHP/Symfony codebase
- Designed and implemented a microservices architecture with Docker containerization
- Research-driven approach combining academic rigor with practical software engineering

Engineering Degree in Computer Engineering · Computer Engineering

Jan 2012 – Jan 2016

University of Deusto

End-of-degree project focused on Industry 4.0: a customizable inference rules engine for Basque industry, built with .NET and real-time event broadcasting.

- Built a programmable rules engine for IoT event processing in industrial environments
- Real-time event broadcasting via MQTT-like pub/sub protocol
- Developed in .NET targeting Industry 4.0 use cases for the Basque industrial sector

Bootcamp in Swift Full Stack Development · Swift Full Stack Development

Mar 2023 – Sep 2023

Apple Coding Academy

Intensive bootcamp focused on Swift and the Apple ecosystem. Deepened expertise in SwiftUI, Swift Concurrency, and server-side Swift, while consolidating the Formidable iOS app already in development.

- Deep specialization in Swift and the Apple ecosystem (SwiftUI, Combine, Swift Concurrency)
- Full-stack Swift development including server-side Swift with Vapor
- Consolidated and refined the Formidable app during the program

Skills

Backend Advanced

Python FastAPI PHP Symfony Scala Swift .NET

Frontend Advanced

React Next.js TypeScript Tailwind CSS SwiftUI Electron

Mobile Advanced

Swift SwiftUI Kotlin Jetpack Compose iOS Android

Infrastructure & DevOps Advanced

Kubernetes ArgoCD Docker GitHub Actions Helm OpenShift
Jenkins Talos Linux

Business & Strategy

Freelancing Product Strategy Client Management Pricing Consulting

Tools & Workflow Advanced

Git Turborepo pnpm Figma Jira Linear

Databases Advanced

PostgreSQL pgvector Redis Typesense MinIO

AI & ML Intermediate

RAG Deepgram OpenAI Whisper Google Cloud Speech Groq

Architecture Advanced

DDD CQRS Clean Architecture Event-Driven Microservices GitOps

Security & Auth Intermediate

Keycloak SOPS/Age Infisical CrowdSec OAuth

Platforms & SaaS Advanced

PayloadCMS Stripe Typesense Keycloak Vercel

Soft Skills

Analytical thinking

Strategic vision

Uncertainty tolerance

Complex Problem Solving

Languages

Spanish · Native speaker

English · Full professional proficiency

Certifications

ITILv4 Foundation Certificate in IT Service Management

Dec 2018

PeopleCert

ITIL v4 Foundation certification obtained prior to joining CERN. Provided a solid understanding of IT service management frameworks and organizational processes.

Highlights

Assuming the responsibilities of Product Owner at NaizFit

Feb 2024

Naiz Fit

When I started at NaizFit, the idea was that my only role would be to develop the iOS app for the company on my own. However, due to the circumstances of the project, I had to assume complete responsibility for both the technical and strategic aspects of the project.

Launch of Formidable to the App Store

May 2023

Zetesis

Launching my first product to the market as a personal project and entrepreneurial venture. This experience required me to adopt an entrepreneurial mindset, taking on and prioritizing numerous responsibilities including strategic thinking about the product's future and identifying target markets.

Migrating to Geneva to work at CERN

Oct 2019

CERN

Migrating to another country and working there was a difficult but outstanding experience. It changed me both personally and professionally.

Interests

Technology

Distributed Systems

AI/ML Integrations

Platform Engineering

Domain Modeling

Economics & Philosophy

Austrian School of Economics

Liberalism

Entrepreneurship

Humanities

History

Military History

Polymathic Learning

