



# Fernando Mosteiro

## Backend Software Engineer

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### About Me

Backend Software Engineer with over 5 years of experience designing robust and scalable systems for high-impact enterprise applications, with a background spanning the diplomatic, healthcare, and fashion retail sectors.

Currently working at Minsait for a global fashion and retail leader, in the transport and stock control division, on projects involving automated generation of customs and regulatory documentation from invoices and shipment data, over a distributed, event-driven architecture.

Previous experience includes the diplomatic pouch management system for the Spanish Ministry of Foreign Affairs (MAEC) with Java 17 and Spring Boot, and critical healthcare SSO systems with mass coverage for the entire population of Galicia.

Additional frontend experience with Angular, React, and TypeScript. Comfortable in agile, collaborative environments and drawn to projects with real technical challenges.

### Core Skills

- Design and implementation of REST APIs in microservices architectures
- Definition and implementation of API contracts with Swagger/OpenAPI
- Integration with external APIs and third-party services (Graph API, SSO, digital signing)
- CI/CD pipeline management with automated testing and quality management
- Database optimization, distributed cache, and data flow management
- Critical production bug resolution and root cause analysis
- Use of AI agents (GitHub Copilot, Claude Sonnet, OpenCode) for code assistance, test generation, and documentation
- Technical project management and team mentoring

### Technologies

#### Backend

Java 17/21 Spring Boot Spring Security JPA / Hibernate Microservices DDD Swagger/OpenAPI WSO2

#### Databases

PostgreSQL Oracle MariaDB Redis

#### Tools & DevOps

Git Bitbucket Jira Maven Agile OpenShift SonarQube Kubernetes ArgoCD Postman Liquibase

#### Frontend

Angular React TypeScript Bootstrap ApexCharts Figma

#### Other

Digital Signing Apache POI JasperReports Microsoft Graph API REST

### Experience

#### Minsait

Global leader in fashion retail

## Senior Java Developer

May 2026 — Present

## Abalia (external at Minsait)

MAEC — Spanish Ministry of Foreign Affairs

## Backend Java Developer

Jun 2025 — Apr 2026

## Balidea Consulting & Programming SL

Full-Stack Developer

Aug 2022 — May 2025

Web Developer

Sep 2021 — Feb 2022

Intern

Jul 2020 — Aug 2020

## Featured Projects

### Transport & Stock Control — Customs Documentation

May 2026 — Present

Minsait — Global leader in fashion retail

Transport and stock control division of a global fashion retail leader. Multiple projects focused on automated generation of customs and regulatory documents from invoices and shipment data, over a distributed event-driven architecture with services communicating via message queues.

#### Key Achievements:

- Automated generation of customs declarations and regulatory documents from invoices and shipment records.
- Event-driven, distributed architecture: decoupled services communicating via message queues.

Java Spring Boot Event-Driven Architecture Message Queues Distributed Systems

### Diplomatic Pouch Control System

Jun 2025 — Apr 2026

Abalia (external at Minsait) — MAEC

Backend of the diplomatic document management system for the Spanish Ministry of Foreign Affairs. Two modules: Physical Pouch and INTERDoc.

#### Key Achievements:

- Definition of REST contracts in Swagger/OpenAPI for WSO2 and implementation in Java 17 of the complete endpoint lifecycle, under hexagonal architecture.
- CI/CD pipeline management in OpenShift with unit and integration tests, code quality management via SonarQube (minimum 85% coverage and zero issues required for merge) and deployment to Kubernetes through ArgoCD.
- Daily use of AI agents (GitHub Copilot in IntelliJ and Visual Studio, chat and agent mode, Claude Sonnet 4 models) as code assistant to increase productivity, unit test generation, technical documentation, and refactoring; experience with AI interfaces like OpenCode for debugging and code analysis.
- Definition and automation of API testing via Postman, with collections generated from the OpenAPI specifications themselves; database migration management with Liquibase.
- Design, implementation, and configuration of Redis cache on distributed nodes for user session management at scale.
- Complete integration with Microsoft Graph API (OAuth2), including Outlook mailbox management and automated email and attachment import.
- Modular report generation and data export in Excel and PDF formats with diplomatic styling, using Apache POI and JasperReports, designed as a reusable utility for other system applications.
- Incorporation of digital signatures in PDF documents from signatures captured on digital tablets.
- Resolution of incidents and critical bugs in development and certification environments.
- Agile development cycle management with Scrum: sprint planning and tracking, dailys and weeklys, using Jira and Bitbucket as primary tools.

Java 17 Spring Boot JPA/Hibernate SQL Redis OAuth2 Microsoft Graph API REST Swagger/OpenAPI WSO2  
Digital Signing Apache POI JasperReports OpenShift SonarQube Kubernetes ArgoCD Postman Liquibase  
Jira Bitbucket

### Mass SMS & Email Platform

Aug 2022 — May 2025

Balidea Consulting & Programming SL

Bulk SMS/email platform integrated with Telefonica and SMTP. Modernized from monolithic Struts1/Java 8 to a decoupled Spring Boot + Angular stack.

#### Key Achievements:

- Database optimization with stored procedures
- Modernized from monolithic (Struts1, Java 8, EJB Timers) to decoupled stack
- Angular/TypeScript frontend with ApexCharts dashboard
- JWT-protected REST API

Java Spring Boot Spring Scheduler Angular TypeScript Oracle JWT REST ApexCharts SMTP

### SSO Session Manager — CAS Protocol

Aug 2022 — May 2025

Balidea Consulting & Programming SL

Single Sign-On system for Galician Health Service applications. Migration from Jasig CAS to Apereo, Java 8 to Java 17. High-impact system serving potentially the entire population of Galicia.

#### Key Achievements:

- Migration from Jasig CAS to Apereo
- Java 8 to Java 17 upgrade
- Maven WAR Overlay customization
- Multi identity provider support
- Performance testing, capacity analysis, monitoring planning

Java 17 CAS Apereo Maven WAR Overlay SSO LDAP JMeter

### Web Authentication Portal

Aug 2022 — May 2025

Balidea Consulting & Programming SL

Multi-method authentication platform. Modernized from Struts1/JSPs/Java 8 to Spring/Thymeleaf/Java 17. Integrations with LDAP, CIP, Social Security, electronic ID, and digital certificates.

#### Key Achievements:

- Modernization from Struts1/JSPs to Spring/Thymeleaf/Java 17
- Identity provider with multi-factor security
- XML attribute signing
- Integrations: LDAP, CIP, Social Security, electronic ID, digital certificates
- External services: Viafirma, Chave365, Cl@ve, Autofirma

Java 17 Spring Thymeleaf OAuth2 LDAP XML Digital Signing Viafirma Cl@ve Autofirma

## Education

### Bachelor's Degree in Computer Engineering

2017 — 2021

University of Santiago de Compostela

## Spoken Languages

Spanish

Native

English

C1 Advanced

## Talks

### JMeter Load Testing: When Load Gets Heavy

Technical talk on load testing with JMeter, addressing technical and organizational challenges in real environments.