

Tomás de las Casas

Principal Software Engineer | Enterprise AI & Blockchain Solutions

<https://www.linkedin.com/in/tomas-casas-engel/> | <https://tomascasas.dev> | 📍 Spain

Executive Summary

Senior Software Engineer with 12+ years leading enterprise digital transformations and implementing cutting-edge AI/blockchain solutions. Proven track record delivering scalable systems for global organizations across e-commerce, finance, and telecommunications sectors.

Core Value: Transform complex business requirements into robust, scalable technology solutions that drive measurable business impact.

Technical Expertise

Category	Technologies
Languages	Java, TypeScript, Python, Go, Kotlin, JavaScript, Rust
Frameworks	Spring Boot, Node.js, React, Flask, FastAPI, Dropwizard
Cloud/DevOps	AWS, Azure, Docker, Kubernetes, Terraform, Serverless, Ansible
Databases	PostgreSQL, MongoDB, MySQL, Oracle, MSServer
Blockchain	Bitcoin, Ethereum, Zen, Block Explorers, Wallets, Solidity
AI/ML	ChatGPT, Claude Code, Gemini CLI, Vector Databases (Typesense, Weaviate)
Architecture	Microservices, Event-Driven, RESTful APIs, GraphQL, gRPC, MCP, SOAP

Professional Experience

Principal Developer | The Agile Monkeys (2018–Present)

Leading enterprise-grade solutions across multiple industry verticals

Bimba y Lola - AI Search Platform (2024–Present)

- Challenge:** Enhance e-commerce product discovery leveraging semantic search and LLM models
- Solution:** Architected AI-driven search engine using vector databases and LLM models
- Impact:** Improved search accuracy and customer engagement metrics
- Tech Stack:** Python, TypeScript, FastAPI, React, Vector Databases, AI/LLM models, AWS, Terraform

Horizen Labs - Blockchain Infrastructure (2020–2024)

- Challenge:** Develop enterprise-grade blockchain development tools
- Solution:** Designed scalable blockchain explorers, wallets and DevOps architectures for cryptocurrency platforms
- Impact:** Enabled secure, high-performance applications supporting millions of transactions
- Tech Stack:** TypeScript, Python, Bash, Terraform, Ansible, Blockchain Protocols, AWS, DevOps

Rent the Runway - System Modernization (2018–2020)

- **Challenge:** Integrate with different transportation companies to enable customer shipments and returns.
- **Solution:** Led microservices architecture for transportation vendor integrations.
- **Impact:** Reduced shipment costs for RTR allowing the dynamic selection of cheapest transportation company depending on the destination.
- **Tech Stack:** Java, Kotlin, Dropwizard, Spring Boot, Microservices, Event-Driven Architecture

Software Developer | Paradigma Digital (2016–2018)

Lowi Telecommunications - Digital Transformation

- Led monolithic application migration to microservices ecosystem on AWS.
- Implemented Netflix stack with Kubernetes orchestration
- Established CI/CD pipelines reducing deployment complexity
- **Tech Stack:** Java, Spring Boot, Kubernetes, Netflix Stack, AWS, Jenkins

Software Developer | Enterprise Roles (2013–2016)

BBVA Banking Group & Other Major Clients

- Developed high-volume data processing systems using Spring Batch
- Implemented EDI integrations with IBM Sterling Integrator
- Built enterprise Java applications for financial and retail sectors
- **Tech Stack:** Java, Spring, Oracle, IBM Sterling, Enterprise Integration

Education & Qualifications

PhD in Organic Chemistry | University Complutense de Madrid | 2010

- 6 years research experience with emphasis on Organic Chemistry
- Strong foundation in scientific problem-solving and data analysis

Professional Development: Continuous learning in AI/ML, blockchain, and cloud technologies

Key Achievements

- ✓ Successfully led digital transformation projects across multiple industries
 - ✓ Implemented AI solutions improving customer experience and operational efficiency
 - ✓ Designed blockchain infrastructure supporting millions of transactions
-

Languages & Additional Skills

Languages: Spanish (Native), English (Professional Working Proficiency) **Methodologies:** Agile, Scrum, DevOps, CI/CD, Enterprise Architecture **Industries:** E-commerce, Financial Services, Telecommunications, Retail, Blockchain