

Francisco Javier Molina Cuenca

+34 627 23 59 05 | pacomolinac2003@gmail.com | pacomolina.dev
linkedin.com/in/francisco-javier-molina-cuenca | github.com/Pacolias

EDUCATION

Universidad de Málaga (UMA)

Málaga, Spain

Dual Bachelor's Degree in Mathematics and Computer Science

Sep. 2021 – July 2026

- **Academic Excellence in Artificial Intelligence:** Achieved a perfect score (10.0/10) in both Computational Learning (Machine Learning) and Intelligent Systems.
- **Mathematics Senior Thesis:** Researched and authored an academic thesis on Numerical Linear Algebra focusing on Krylov Subspace Methods (GMRES, BiCGSTAB), implementing robust mathematical solvers in **Python**. Defended with a grade of 9.0/10.
- **Computer Science Senior Thesis:** Architected and developed a production-ready Full-Stack application integrating AI microservices, graduating with an 8.03/10 GPA.
- **Academic Excellence in Mathematics:** Awarded Highest Honors in Complex Analysis, and both Local and Global Differential Geometry of Curves and Surfaces.

EXPERIENCE

Founder & AI/Software Engineer

March 2026 – Present

RedCheck (redcheckapp.com)

Málaga, Spain · Remote

- Architected a multi-tier microservices infrastructure using **Docker Compose**, orchestrating a **React/TypeScript** frontend, a **Java/Spring Boot** core backend, and a **Python** AI engine.
- Developed the core RESTful API in **Java**, designing a strict relational database schema with **MySQL** and **Hibernate (JPA)** for optimized data persistence.
- Engineered **SmartCheck AI**, a standalone microservice utilizing a **Retrieval-Augmented Generation (RAG)** pipeline to dynamically analyze user workloads and generate execution roadmaps.
- Built the AI integration layer using **FastAPI** and **Pydantic**, orchestrating the **Google Gemini** LLM and utilizing **ChromaDB** for semantic context retrieval.
- Secured backend communications by implementing **JSON Web Tokens (JWT)** and Spring Security for stateless, authenticated API access.
- Designed an automated **CI/CD pipeline** (GitHub Actions) to streamline code integration, unit testing (**JUnit/Mockito**), and Docker image building for production.

Backend Software Engineer

April 2022 – Sep. 2022

Quimify (quimify.com)

Málaga, Spain · Remote

- Engineered backend domain logic in **Java**, utilizing advanced regular expressions (Regex) to parse string-based chemical formulas and calculate molecular masses.
- Developed **SQL** scripts utilizing aggregate functions to identify and manage duplicate records, ensuring database integrity.
- Maintained application services and managed version control via **Git**, resolving technical debt and streamlining repository configurations.

TECHNICAL & LANGUAGE SKILLS

Spoken Languages: Spanish (Native), English (C1 Full Professional Proficiency – British Council)

Programming: Python, Java, TypeScript, SQL, PL/SQL

Frameworks & Libraries: FastAPI, React, Spring Boot, Pydantic, Hibernate (JPA)

AI & Data Tools: ChromaDB, Vector Databases, Google Gemini API, Pandas, NumPy

Developer Tools: Docker, Git, GitHub Actions (CI/CD), Linux, Postman

Core Concepts: Retrieval-Augmented Generation (RAG), LLM Integration, Microservices Architecture, RESTful API Design