# Pablo Sierra



Al/GenAl Engineer Al PG in Generative Al and Applications (LLM) | BSc in Computer Engineer | BSc in Biotechnology

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**D** Open to remote work

# Resume

Thinking of leaving my little mark on this world for others to benefit from. Passionate about new artificial intelligence and LLM applications. Constantly learning, exploring and making new projects.

### Work experience

### AI/GenAl Engineer

Since October 2024 Trioteca Barcelona, CT, Spain

Led design and implementation of complex serverless RAG systems and audio transcription services as SaaS microservices. Architected scalable AWS serverless solutions utilizing SageMaker, Lambda, and API Gateway. Implemented vector databases for efficient semantic search capabilities. Applied advanced LangChain and LlamaIndex expertise to create sophisticated generative AI workflows. Conducted autonomous research in emerging AI technologies. Established CI/CD pipelines via GitHub for efficient deployment. Optimized embedder models and LLMs for production performance. Managed complete project lifecycles while providing technical leadership on AI initiatives for third-party clients.

#### Data Scientist Researcher

#### 2023 Anaxomics Barcelona

Analysis of pharmacokinetic data, **data mining**, **language models**, NER models, database creation, normalization, standardization, update pipeline, **predictive model** creation...

#### Django Full Stack Development Instructor

#### 2023 IP Informática Profesional Remote

Constructed a robust eCommerce platform, imparting hands-on experience in user authentication, product cataloging, shopping carts, and secure payment gateways.

#### Quantitative Analyst and Bot Programmer

From 2021 to 2023 Self-employed Remote

Creation of automated trading bots  $\mathcal{E}$  Quantitative analyst for clients.

#### Private Lessons Teacher

2021 Self-employed Remote

Programming and computer classes for university students Reviews

#### Chief Scientist

2016 **CSIC (Consejo Superior de Investigaciones Científicas)** Madrid, MD, Spain Stay at CSIC (CIAL) developing my research project. Awarded as 2nd best project by INJUVE. <u>See the paper here</u>

# **Personal Projects**

#### 🔆 ConsultaBOE.es

ConsultaBOE.es is a free platform that simplifies access to Spain's Official State Gazette (BOE). It allows users to search legal texts using natural language, view daily summaries of the BOE, and access official sources for verification. Web

#### PlugTrader.co

PlugTrader.co allows users to create and deploy automated trading strategies on MetaTrader 5 without programming knowledge. It includes tools for strategy creation, validation, and portfolio management, with free and paid options.

# <u>Web</u>

DataWhisper: Agent-Based Architecture for Text-to-SQL DataWhisper: is a system that converts natural language queries into SQL using an intelligent agent architecture. The agents identify tables, generate, and run SQL queries, then deliver insights.

### Link

FARMACODB: Automation of Data Extraction and Analysis

Automating **extraction** and **analysis** of pharmacokinetic data to build a comprehensive database and **predictive model** for drug half-life. Link

#### DataPredictor: AI-Powered Data Analysis Tool

Data Predictor is a web app that analyzes CSV data with AI, allowing users to upload datasets, select target columns, and get predictions. Link

# Skills

DevOps

AWS - Docker - Bash ... and more...

#### AI/ML

LlamaIndex - Langchain - AWS SageMaker - AWS Bedrock - Qdrant -OpenAl - Groq - TensorFlow - Pytorch - Pandas - Seaborn - scikit learn -AutoGen ...and more...

Programming Languages

Python - C - C++ - Bash - Java -JavaScript *...and more...* 

#### Frontend & Backend

**Django** - FastAPI - Vue.js - Bootstrap -Tailwind CSS- HTML - NGINX -RabbitMQ - MySQL - PostgreSQL -Redis - SQLite ...*and more.*..

#### Others

Linux - Git - GitHub - Postman ...and more...

### Education

- Postgraduate degree in Generative AI and Applications (LLM) Since April 2024 Aceleradora AI Madrid
- Double Degree in Computer Engineering and Biotechnology
  - From 2018 to 2024 URV Tarragona
    ERASMUS in Institut National des Sciences Appliquées (Toulouse)
  - Computer Science Specialization

Lean Startup | Escuela de Organización Industrial 2018 EOI Madrid, MD, Spain

Team Building - Business Model Conceptualization - Problem Validation - Solution Validation - Creativity - Design thinking - General marketing - User experience

Certificate of Higher Education in Clinical and biomedical diagnostic laboratory From 2015 to 2017 IES Moratalaz Madrid

### Certifications

- <u>X</u> (Currently) AWS Machine Learning Associate (MLA-COI)
   Since February 2025 Amazon Web Services (AWS) Remote
- AWS AI Practitioner (AIF-COI) From December 2024 to January 2025 Amazon Web Services (AWS) Trioteca
- AWS Academy Cloud Developing From June 2023 to July 2023 Amazon Web Services (AWS) T-Systems
- W AWS Academy Cloud Foundations From June 2023 to July 2023 Amazon Web Services (AWS) T-Systems

### Hard Skills

Enthusiasm to learn +45 courses taken in *UDEMY* and *CODELY* and currently continuing

Highly organized and people skills

Creative

### Languages

**Spanish** Native

French Cl (OLS) - B2 (DELF)

English B2

Catalan B1