# Almudena Zhou Ramírez López

almudena.zhou.rl@gmail.com +34 664661075 Madrid, Spain

www.linkedin.com/in/almudena-zhou-ramirez-lopez https://almudenazhou.github.io/

I am an experienced **Data Scientist** and **AI Engineer** with a strong background in **developing and deploying machine learning models**. With additional experience **in LLMs, RAGs, and prompting engineering**. Proven track record of collaborating with **cross-functional teams**, managing **code quality**, and ensuring compliance with industry standards. My journey is fueled by a genuine curiosity and a **passion for learning**, driving me to create more productive and optimal systems for machine learning models.

### | PROFESSIONAL EXPERIENCE

**Al Engineer, Senior Analyst at Avanade.** 02/2024 – Present Python, OpenAl, AWS, Azure, Databricks, PySpark, MLFlow, Git

- Designed and implemented three LLM-based agents (RAG batch processing and real-time chat systems) to automate financial credit processes, achieving an average client performance and satisfaction score of 9.2/10.
- Developed scalable RAG applications leveraging Azure Cognitive Systems/Al Services, including Form Recognizer, Custom Vision, Speech to Text, and Document Intelligence, to enhance process efficiency and robustness.
- Collaborated in a multi-cloud environment (AWS and Azure) to build end-toend machine learning pipelines, incorporating tools like Databricks, PySpark, and MLFlow for deployment and monitoring.

**Data Scientist/Al Developer at New Horizon Technologies.** 07/2021 – 01/2024 Python, Docker, SQL, Keras, TensorFlow, Jenkins, AWS, MLOps

#### Career Progression:

Transitioning from **Data Scientist**, to **Code Repository Manager** for the Quantitative Team, to **also connect the quantitative and DevOps teams**, and ultimately assuming the role of **coordinator for the development division** within the DevOps team.

- Responsible for integrating and maintaining team models in production, monitoring for overfitting and drift.
- Collaborated with team leads on decision-making regarding portfolio priorities, strategy acceptance, and leverage.
- Built machine learning models for portfolio optimization and trading strategies using random forest, XGBoost, and reinforcement learning.
- Designed pipelines to clean and validate financial time series data, ensuring robust inputs for modeling.
- Managed code quality and project workflow, overseeing deployments and approvals while streamlining processes with CI/CD pipelines and Docker to enhance efficiency and scalability.
- Collaborated across teams to ensure the accurate application of business logic within the production system.

#### | EDUCATION

Data Glacier - Data Science Virtual internship. 05/2021 – 09/2021.

Python, Git, Docker, Flask, Pandas, numpy, matplotlib, keras, sklearn

**International collaborative project** involving business data processing and analysis, model development and deployment on Heroku, and presenting data to non-technical audiences.

UNED - Post Graduate Master in Big Data and Data Science applied to Business and Economics. 60 credits. 01/2021 – 12/2021

BME Institute - MSc in Artificial Intelligence applied to Financial Markets 10/2019-04/2021

Universidad Complutense de Madrid - Graduated in Physics. 09/2015-07/2019

#### **I SKILLS**

- Python and libraries. Daily used
- AWS. Daily used
- OpenAI. Daily used
- OpenSearch. Daily used
- **Docker**. Daily used
- Azure Al Services. Regularly used
- Linux. Sporadically used
- SQL. Sporadically used
- Azure. Sporadically used

### | CERTIFICATIONS

- AI-102 Azure Al Engineer Associate
- Security Certificate in ECDL, MTA
- Microinformatic Systems and Networks Course

## | LANGUAGES

- Spanish. Native.
- English. C1 Certified
- Japanese. Beginner.
- Chinese. Beginner.

#### **| HOBBIES**

- Music. Professional 5<sup>th</sup> grade
- Videogames developer
- Web competitions: Google Hash Code, Codechef