# PABLO MIRALLES PH.D. CANDIDATE

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LUU	CAI	IUIN

## Technical University of Madrid

Madrid, Spain 2024 - Now

Ph.D. in Artificial Intelligence

• Advisor: Prof. Alejandro Martín

• Research area: Deep Learning for Natural Language Processing

Technical University of Madrid

Madrid, Spain

M.Sc. in Machine Learning and Big Data

2023 - 2024

• GPA: 9.65/10.00, Rank: 1st

University of Murcia

Murcia, Spain 2017 - 2022

B.Sc. in Mathematics

• GPA: 9.74/10.00, Rank: 1st

University of Murcia

B.Sc. in Computer Science

Murcia, Spain 2017 - 2022

• GPA: 9.57/10.00, Rank: 2nd

### **PUBLICATIONS**

- 1. Miralles-González, P., Huertas-Tato, J., Martín, A., & Camacho, D. (2026). Not all tokens are created equal: Perplexity Attention Weighted Networks for AI-generated text detection. *Information Fusion*, 125, 103465. https://doi.org/10.1016/j.inffus.2025.103465
- 2. Miralles-González, P., Huertas-Tato, J., Martín, A., & Camacho, D. (2025). LLM one-shot style transfer for Authorship Attribution and Verification. *arXiv*. https://doi.org/10.48550/arXiv.2510.13302
- 3. Miralles-González, P., Huertas-Tato, J., Martín, A., & Camacho, D. (2025). On the locality bias and results in the Long Range Arena. *arXiv*. https://doi.org/10.48550/arXiv.2501.14850
- 4. Miralles-González, P., Huertas-Tato, J., Martín, A., & Camacho, D. (2025). Pushing the boundary on Natural Language Inference. *arXiv*. https://doi.org/10.48550/arXiv.2504.18376

### Industry Experience

### Fever | Software Engineer

2023.02 - 2023.08

- Backend development with Python, Flask and Django.
- Lead and single developer in a project for automatic structuring of information and content generation using LLMs.

#### **Orenes** | Software Engineer Intern

2021.07 - 2021.08

- Backend development with C# and ASP.NET.
- Frontend app development with ReactNative.

# Projects and Grants

#### FPU Fellowship (University Teacher Training Programme)

Spanish Ministry of Science and Innovation

2025.01 - Now

• Highly competitive predoctoral contract aimed at training future university lecturers and researchers.

XAI-DisInfodemics: eXplainable AI for disinformation and conspiracy detection during infodemics

European Union NextGenerationEU/PRTR

2024.05 - 2025.01

FightDIS: Fighting against Information DISorders in Online Social Networks

Spanish Ministry of Science and Innovation

2023.09 - 2024.05

Awards and Honors	Best academic record, M.Sc. in Machine Learning and Big Data	
	• Extraordinary End of Degree Award, BSc. in Mathematics	
	• Extraordinary End of Degree Award, BSc. in Computer Science	
	• Academic Excellence Award in joint BSc. programs, BSc. in Math+CS	2023
	• 23th/97, Southwestern Europe Regional Contest (SWERC) 2021-2022,	2022
	• 17th/109, Southwestern Europe Regional Contest (SWERC) 2020-2021,	2021
	• National Collaboration Grant, Spanish Ministry of Science and Innovation	2021
	• 18th/98, Southwestern Europe Regional Contest (SWERC) 2019-2020,	2020
SKILLS	Languages: Spanish (pative) English (C1)	

SKILLS

**Languages:** Spanish (native), English (C1).

**Programming:** Python, C++, Java.

Deep Learning: PyTorch, HuggingFace, vLLM, Triton (basic), CUDA (basic).

Data Science/Machine Learning: SKLearn, Numpy, Pandas.

Experiment management/distributed: WanDB, RAY.

Other: Docker, Linux, Git, Latex.

**TEACHING** 

Classical Prediction Methods | Data Science BSc (Asst. Prof.) 2025/26 — present

• Lectures and practical sessions on linear regression, clustering algorithms, and time series models.

Data Structures | Computer Science BSc (Asst. Prof.)

2025/26 — present

• Teaching core data structures including queues, stacks, lists, trees, graphs, and hash

Generative Models | Master in Deep Learning

2024/25 — present

• Teaching generative modeling: VAEs, GANs, autoregressive models, and diffusion

Deep Learning for NLP | Master in Deep Learning

2024/25 — present

• Instruction on real-world NLP applications using HuggingFace, LangGraph, vLLM, and vector databases.

Algorithms and Data Structures | Data Science BSc (Asst. Prof.)

2024/25

• Taught graph theory fundamentals and greedy algorithm design.