# Diego de Benito Gorrón

# AI ENGINEER AND RESEARCHER

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Ph.D. in Computer and Telecommunication Engineering, with over 6 years of experience in **Machine Learning**, **Deep Learning**, and **Generative AI**. Proven track record in both industry applications and academic research, with strong expertise in audio and text processing. Looking to leverage my skills in innovative AI-driven projects within dynamic tech environments.

#### EXPERIENCE

#### Artificial Intelligence Specialist at EVO BANCO. April 2024 - Present

- Design, implementation and validation of **Generative AI** systems for automatic analysis of contact center conversations, processing over 2000 daily conversations.
- Participated in the design, development and validation of a banking conversational assistant based on Generative AI agents (Large Language Models).
- Built a system which automatized the classification of client interactions using Generative AI and **Natural Language Processing** (NLP) techniques.
- Developed **Retrieval-Augmented Generation** (RAG) agents for Q&A conversational interfaces.
- Designed and implemented evaluation systems and guardrails for LLM-based systems.
- Assisted the creation of a text corpus designed to train guardrail systems for LLM applications.

#### Deep Learning Researcher at AUDIAS. October 2018 - March 2024

- Designed and implemented **Convolutional-Recurrent Neural Networks** (CRNN) that enhanced the performance of Sound Event Detection at the international *DCASE Challenge* (2020-2023) by leveraging multi-resolution audio features, **semi-supervised and unsupervised learning** techniques.
- Elaborated and published 8 scientific articles as first author (4 international journals and 4 international conferences). So Google Scholar
- Participated in the *SomosNLP 2024 Hackathon* for the creation of a corpus of instructions for Large Language Models in Spanish.
- Supervised 3 Master's Theses and a Bachelor's Thesis on **Data Science** and **Deep Learning** topics.
- Taught several courses in the B.Sc. in Telecommunication Engineering, Master's Degree in Deep Learning for Audio and Video Signal Processing, and Master's Degree in Data Science.

2017 – 2018, Universidad Autónoma de Madrid

2013 – 2017, Universidad Autónoma de Madrid

#### **EDUCATION**

Ph.D. in Computer and Telecommunication Engineering 2018 – 2023, Universidad Autónoma de Madrid

- Grade: Outstanding Cum Laude 🔗 Ph.D. Dissertation
- International Doctorate Mention

#### Master's Degree in ICT Research and Innovation

- Itinerary: Computational Intelligence
- Grades: GPA 9.12, Master's Thesis 9.50

## **B.Sc. in Telecommunication Engineering**

- Itinerary: Audio and Video Processing and Communications
- Grades: GPA 8.99, Bachelor's Thesis 9.35

#### SKILLS

- $\bullet \quad \mathsf{Python} \cdot \mathsf{Langchain} \cdot \mathsf{Pytorch} \cdot \mathsf{NumPy} \cdot \mathsf{Pandas} \cdot \mathsf{Databricks} \cdot \mathsf{Azure} \ \mathsf{DevOps} \cdot \mathsf{GCP} \cdot \mathsf{LaTeX} \cdot \mathsf{GitHub}$
- English (fluent) and Spanish (native)

## CERTIFICATIONS, AWARDS AND OTHER ACHIEVEMENTS

- Received the "Special mention to the best academic records of the B.Sc. in Telecommunication Technology and Service Engineering" (2017, Universidad Autónoma de Madrid)
- Participated as Guest Speaker at the Google Hotword Minitalks conference (2023, Google New York)
- Certification "AI-102: Designing and Implementing an Azure AI Solution" (2024)