

Omar Teixeira González



> Profile

Software Engineer with a Master's degree in Artificial Intelligence, specialized in machine learning, deep learning, and full-stack software development.

Experienced in research projects applying AI to the healthcare sector, with a focus on biomedical data analysis, wearables, and audio processing.

Passionate about creating innovative solutions that combine software engineering and data science to generate real-world impact.

> Contact me

✉ omartg24@gmail.com

☎ +34 684 60 44 54

🌐 [Omitg24](#)

🌐 in/omar-teixeiragonzalez

> Personal Information

Languages: **Spanish** (Native), **English** (B2 Certified)

> Tech Stack

- Python, Java, SQL, JavaScript
- Machine Learning, Deep Learning
- PyTorch, Tensorflow, Scikit-learn
- Git, Docker
- Web development: HTML5, CSS, React
- Mobile development: Android
- Databases: MySQL, SQLite, MongoDB
- Computer Vision, LLMs
- Liferay, SpringBoot, Node
- Data Science, Data Pipelines
- Microsoft Office (Word – Excel, advanced)

> EXPERIENCE

● Academic Researcher - *ITCL*. 2025.12-2026.01

- Audio source separation using Spiking Neural Networks (SNNs).
- Developed a scalable and maintainable training framework for SNN models with multiple audio encoders and filtering techniques.

● Intern - *AI Biomedical Engineering*. 2024.01-2024.07

- Research project focused on sleep quality analysis in arthritis patients using wearables and Artificial Intelligence.
- Built Python-based data pipelines and applied machine learning, deep learning, and transfer learning techniques.
- Co-author of a paper presented at AINISE 2024.

● Intern - *Hiberus Tecnologías SL*. 2023.07-2023.08

- Developed enterprise applications within the Liferay Department.
- Full-stack development: backend and frontend.

● Student Mentor - *Universidad de Oviedo (Volunteer)*. 2023.09-2024.07

- Guided and supported junior undergraduate students.
- Shared academic experience and technical knowledge acquired throughout the degree

● Campus TIC Mentor - *Universidad de Oviedo (Volunteer)*. 2024.06

- Introduced teenagers to AI and programming through interactive workshops.
- Conducted machine learning sessions using Scratch, including gesture recognition and voice-controlled games.

> EDUCATION

● Master's Degree in Artificial Intelligence - *Polytechnic University of Madrid*. 2024.09-2025.07

Average Grade: **8.42/10**

- Neural networks, machine learning, biomedical informatics, autonomous robotics.
- Computer vision, simulation methods, metaheuristics.
- **Master's Thesis:** Intelligent Multivariate Sleep Data Analysis to Study the Influence of Equine-Assisted Therapy on Arthritis.

● Bachelor's Degree in Software Engineering - *University of Oviedo*. 2020.09-2024.07

Average Grade: **7.87/10**

- Programming, algorithms, databases, computer architecture, software engineering.
- Cybersecurity, intelligent systems, mobile development, web systems, augmented reality.
- Collaboration with the Metrology and Models Research Group (Biomedical Engineering).
- **Bachelor's Thesis:** Sleep Quality Study in an Equine Therapy Pilot Trial Using Transfer Learning.

> PUBLICATIONS

Sleep Quality, Artificial Intelligence, and Equine Therapy: Calibration of Low-Cost Actigraphs. *AINISE - International Conference on AI and Neuroscience in Engineering*. 2024.11 (Publicación pendiente)

- Validation of low-cost actigraphs against polysomnography.
- Machine learning models for sleep-stage classification in arthritis patients.

> CERTIFICATIONS

English Certificate – B2 Level. *Escuela Oficial de Idiomas de Langreo*. 2019.09

- Credential ID: PA-A-366697.