Rodrigo González Linares

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EDUCATION

MSc Artificial Intelligence
University of Vigo, Spain | 2022 – 2024

MSc Nanobiology
Delft University of Technology & Erasmus University Rotterdam, Netherlands | 2018 – 2020

BSc Biotechnology Engineering – graduated with honors as top graduate
Monterrey Institute of Technology and Higher Education, Mexico | 2015 – 2018

RELEVANT SKILLS

Programming languages: Python • Julia • Bash • MATLAB • Wolfram

AI/ML & Data Frameworks: PyTorch • TensorFlow/Keras • HuggingFace • Scikit-learn • OpenCV • Pandas • NumPy • Matplotlib

Tools & Platforms: Docker • Git • DVC

Laboratory: CRISPR • smFRET • TIRF microscopy • Molecular biology • Microbiology

Languages: English (fully proficient) • Spanish (native)

EXPERIENCE

Senior artificial intelligence engineer
Waizard, Spain | Feb 2026 – Present

Artificial intelligence research engineer
Gradiant, Spain | Oct 2024 – Feb 2026

- Developed a multimodal data framework with modular plugins for dataset management, active-learning workflows, local LLM/VLM querying, and xAI integration to accelerate annotation, exploration, and model development.
- Investigated adversarial attacks on deepfake detection models, enhancing transferability through ensemble strategies, expectation-over-transformation, and attention-guided perturbations.

Machine learning & computer vision intern
CRIDA A.I.E., Spain | Sep 2023 – Feb 2024

- Developed a monitoring system capable of detection and monocular 3D positioning of objects.
- Created a virtual environment in Unity, generating hundreds of synthetic data samples for model training.
- Improved depth estimation MAE for flying objects by 15% through fine-tuning a Vision Transformer (ViT) model.

Researcher
School of Biological Sciences, University of Southampton, UK | Sep 2020 – Sep 2021

- Analyzed genomic data to identify novel CRISPR systems, applying bioinformatics tools and techniques to extract insights from large datasets.
- Optimized a CRISPR-based diagnostic method for the detection of nucleic acids.
- Designed and developed a novel nucleic acid amplification method.

Master end project researcher
Kavli Institute of Nanoscience, Delft University of Technology, Netherlands | Sep 2019 – Jul 2020

- Investigated a CRISPR-associated transposon regarding genome engineering.
- Analyzed DNA sequencing data, which provided critical insights that supported the main research hypothesis.

Research intern
Kavli Institute of Nanoscience, Delft University of Technology, Netherlands | Feb – Jun 2019

- Investigated molecular dynamics using smFRET and TIRF microscopy, generating gigabytes of raw data.
- Processed and analyzed microscopy data using MATLAB.

PUBLICATION

Spoelstra, W., Jacques, J., **Gonzalez-Linares, R.**, *et al.*, 2021. CRISPR-based DNA and RNA detection with liquid-liquid phase separation. Biophysical Journal, 120(7), pp.1198-1209.