Rodrigo González Linares

E-mail address: r.gonz.lin@gmail.com | Professional links: https://linktr.ee/rodgonzlin | Citizenship: Spanish (EU)

EDUCATION

MSc Artificial Intelligence
University of Vigo, Spain | 2022 – ongoing (expected – Feb 2024)

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

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

RELEVANT SKILLS

Programming languages: Python, Julia, Wolfram (Mathematica), MATLAB

Frameworks and libraries: PyTorch, Keras/Tensorflow, Scikit-learn, Hugging Face, Flux (ML for Julia), River (online ML), Flower (federated ML), NumPy, OpenCV, Pandas, Matplotlib

Languages: English (fully proficient, TOEFL IBT 102/120 in 2017), Spanish (native)

EXPERIENCE

Internship
CRIDA A.I.E., Spain | Sep 2023 – ongoing
- Creation of a virtual vertiport environment in Unity
- Development of a surveillance system capable of incorporating different versions of YOLO for detection/classification/segmentation, k-means and SAM for segmentation, and MiDaS for monocular depth estimation
- Fine-tuning MiDaS to create MiDair, a network capable of accurately estimating the depth of flying objects

Research project
School of Biological Sciences, University of Southampton, UK | Sep 2020 – Sep 2021
- Design and development of a novel nucleic acid amplification method based on rolling circle replication
- *In silico* search and characterization of CRISPR-associated transposons
- Participation in the development of a CRISPR-based diagnostic method for the detection of nucleic acids with a naked-eye readout

Master end project
Kavli Institute of Nanoscience, Delft University of Technology, Netherlands | Sep 2019 – Jul 2020
- Investigation on a CRISPR-associated transposon regarding genome engineering

Research internship
Kavli Institute of Nanoscience, Delft University of Technology, Netherlands | Feb – Jun 2019
- Investigation on the dynamics of Cas13 using single-molecule FRET and TIRF microscopy

PUBLICATION

Spoelstra, W., Jacques, J., **Gonzalez-Linares, R.**, Nobrega, F., Haagsma, A., Dogterom, M., Meijer, D., Idema, T., Brouns, S. and Reese, L., 2021. CRISPR-based DNA and RNA detection with liquid-liquid phase separation. Biophysical Journal, 120(7), pp.1198-1209.