

# ORIOL BUSTOS MARTÍNEZ

GIRONA, SPAIN | ORIOL.BUSTOS2002@GMAIL.COM | +34 678 877 348

LINKEDIN.COM/IN/ORIOL-BUSTOS

## EDUCATION

### University of Girona

*Master in Data Science (Incoming)*

Girona, Spain

Oct 2024 – Jun 2025

### University of Barcelona

*Bachelor in Biomedical Engineering*

Barcelona, Spain

Sept 2020 – Jun 2024

- Grade 8.3/10 - Honours in Multivariate Calculus
- Represented the BME degreee during annual evaluations performed by AQU.
- Link for my final thesis here. (Related to Micelab's role).

### University of Twente

*Exchange Student*

Enschede, Netherlands

Sept 2022 – Feb 2023

- Subjects: Signals & Actuators, Signal Processing, Machine Learning II, Biomedical Materials, Telemedicine
- Associations: First Basketball Team

## PROFESSIONAL EXPERIENCE

### MiceLab, University of Girona

*Junior AI Research Scientist*

Girona, Spain

Mar 2023 – Present

Involved in two roles. First, working on Generative Deep Learning:

- Developed models of the glucose/insulin dynamics in type 1 diabetic patients using Generative Adversarial Networks (GANs).
- Structured and optimized the group's deep learning code, reducing training time by 65%. It involved careful attention to detail in optimizing TensorFlow and Python implementations.
- My latest project has been accepted for oral presentation in the 24th Annual Diabetes Technology Meeting, in San Francisco, California, in October.
- Contributions include the addition of exercise and circadian rhythms as conditions in a Generative Deep Learning model.

And in the European Project PROMETEUS ("Preterm Brain-Oxygenation and Metabolic Eu-Sensing: Feed the brain"):

- In charge of developing the Nutritional Clinical Advisor for preterm babies.
- Using PID and MPC control in MATLAB, to optimize Glucose Infusion Rates (GIR) for the neonates.

### Clinical Hospital Center Rijeka

*Internship*

Rijeka, Croatia

Jul 2022 – Aug 2022

Collaborated with the bioethics unit, engaging with diverse healthcare stakeholders including doctors, nurses, patients, educators, researchers, and policy advisors to analyze and report on healthcare inequalities across European systems

## LANGUAGES & SKILLS

Spanish (Native), Catalan (Native), English (Fluent, C2 Certificated), German (Basic), R, C++, Mathematica (Basic), Python, TensorFlow, git, MATLAB (1 year Working Experience), LaTeX (Advanced), MS Office 365 (Intermediate)

## ADDITIONAL INFORMATION

- Selected for participation in one of ESADE's biggest competitions: IdeaUp Challenge 2022, where a business idea is developed from scratch in teams in a 6-month program.
- Science and Technology Baccalaureate with a grade of 9.51/10. Scored 13.16/14 on the University Access Exams (PAU).
- Reached high-level regional and national basketball competitions, playing for 15 years.
- I coached 11-12 years old kids, which improved my communication and leadership skills and my ability to manage responsibility.
- Gave private teaching lessons to 10+ students, ranging from middle school to university level STEM subjects, specializing in mathematics.
- Driver's license and available car.