

# IVAN ALFREDO RODRIGO ARBÓS

MATHEMATICIAN - Minor in Computer Science

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## EDUCATION

### UNIR - UNIVERSIDAD INTERNACIONAL DE LA RIOJA

2026

MSc in Mathematical Engineering and Computing

Spain

Coursework – Modeling, HPC, Machine Learning, Optimization, Mathematical Methods and Investigation.

### UB - UNIVERSIDAD DE BARCELONA

2024

Bsc in Mathematics, Minor in Computer Science

Barcelona, Spain

Coursework – Geometry, Algebra, Logic, AI, Machine Learning and Program Optimization.

## SKILLS

**Interests** Teach, Communication, Algebra, Geometry, Tech News, Sports, Automatization, Cloud, Machine Learning.

**Soft Skills** Teamwork, Decisive, Problem Solving, Proactivity, Creativity, Empathy.

**Language** Spanish (Native), Catalan (Native), English (Intermediate)

**Programming skills** Python, SQL, Java, R, C & C++,  $\text{\LaTeX}$ , Mathematica, MatLab&Simulink

**Technology Tools** Numpy, Pandas

## EXPERIENCE

### ETSAB UPC - UNIVERSIDAD POLITÉCNICA DE CATALUNYA

10/2024 – Actually

Adjunct Professor of University

Barcelona

- Teaching Algebra, Geometry, Mathematical Analysis, and Calculus, focusing theoretical concepts and problem-solving. Responsible for organizing and delivering the lessons.

### ACADEMIA MATIKS

09/2019 – 04/2020

University Academy Professor

Barcelona

- Clearly organize and explain lessons in University and high school mathematics and computer science subjects.

### PRIVATE TUTOR

06/2018 – 07/2024

Personal Professor

Barcelona and Tarragona

- Organize high school science lessons and preparing for the EBAU exam. Organize and Teach mathematics and computer science University lessons.

## PROJECTS

### MASTER'S THESIS ABOUT GEOMETRY OPTIMIZATION | ....

02/2026

- ....

### BACHELOR'S THESIS ABOUT COMBINATORY GEOMETRY | Convex hull of a random order type.

06/2024

- Result about combinatorial invariant of oriented sets in the plane.

### ALGORITHM OPTIMIZATION | Dijkstra, Seam Carving, Skyscraper Puzzle.

12/2023

- Advanced skills in Python and develop complex algorithm.

### BUILDING MACHINE LEARNING MODELS | Random Forest, Boosting Classifier, CNN model

12/2023

- Prediction of property values. Decision Tree for predict clients results. CNN for counting instances in images.

### FINANCIAL DATABASE | Advanced skills in SQL, Numpy, Pandas

06/2023

- Project that correlates market values with world events.

## ABOUT ME

I am a mathematician with a minor in Computer Science from UB, specializing in Machine Learning and Software Optimization. With experience in predictive modeling (Python), database analysis (SQL), and performance optimization, I solve complex problems and design scalable systems. Passionate about innovation and new tech, I enjoy combining technology and creativity, with the goal of transforming environments and enhancing human experiences.

One of my principal objectives is to become the best professor, sharing my passion for mathematics and inspiring others to discover the beauty of this science.