

EDUCATION

June 2025 Sept. 2020	<div>University of Barcelona Bachelor of Science in Mathematics</div> <div><ul style="list-style-type: none">Bachelor's thesis: The Riemann–Hilbert Correspondence for Flat Connections on Principal Bundles.Supervisor: Prof. Dr. Ignasi Mundet.</div>	Barcelona, Spain GPA: 9.02/10
June 2025 Sept. 2020	<div>University of Barcelona Bachelor of Science in Physics</div> <div><ul style="list-style-type: none">Bachelor's thesis: Improving Classical Shadows with Grouping Strategies.Supervisors: Prof. Dr. Bruno Julià, Berta Casas, Sergi Masot.</div>	Barcelona, Spain GPA: 8.79/10
June 2020 Sept. 2018	<div>Mireia Center of Studies Technological Baccalaureate</div> <div><ul style="list-style-type: none">1st-ranked student of the class.</div>	GPA: 10/10

WORK EXPERIENCE

Dec. 2025 July 2025	<div>Westinghouse Nuclear <i>Simulation Modeling Engineer</i></div> <div><ul style="list-style-type: none">Developing software for advanced nuclear simulations.Enhancing thermal-hydraulics models for improved accuracy and performance.</div>	Madrid, Spain
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RESEARCH EXPERIENCE

June 2025 Nov. 2024	<div>Barcelona Supercomputing Center – BSC <i>Visiting Student</i></div> <div><ul style="list-style-type: none">Developed a unified strategy to improve quantum measurement efficiency.Demonstrated significant performance gains in many-body quantum systems.Achieved high precision with far fewer measurements than standard methods.Supervisors: Prof. Dr. Bruno Julià, Berta Casas, Sergi Masot.</div>	Barcelona, Spain
Feb. 2025 July 2024	<div>Institute for Research in Biomedicine – IRB <i>Research Intern</i></div> <div><ul style="list-style-type: none">Modeled DNA flexibility using a coarse-grained approach.Optimized the model to account for DNA damage.Devised and implemented new methods to calculate DNA geometric properties.Supervisor: Prof. Dr. Modesto Orozco.</div>	Barcelona, Spain
Aug. 2023 June 2023	<div>Center for Mathematical Research – CRM <i>Research Intern</i></div> <div><ul style="list-style-type: none">Studied transcendental dynamics within the complex exponential family.Supervisors: Prof. Dr. Núria Fagella, Prof. Dr. Xavier Jarque.</div>	Barcelona, Spain

HONORS AND AWARDS

March 2025	<div>PGSM Master Scholarship</div> <div><ul style="list-style-type: none">Awarded by the Fondation Sciences Mathématiques de Paris to fully fund my Master's studies at PSL.</div>	28,000 €
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Nov. 2024	Collaboration Scholarship 2,000 € <ul style="list-style-type: none"> Issued by the Spanish Ministry of Education, this scholarship is aimed at university students to conduct research in university departments.
Oct. 2024	CRM Internship Programme Award (declined) 500 € <ul style="list-style-type: none"> Awarded to bachelor students who want to do their Bachelor's thesis advised by a researcher affiliated with the CRM.
July 2024	Maths4Life Awardee 1,200 € <ul style="list-style-type: none"> Awarded one of the five grants from IRB Barcelona's Maths4Life Programme to conduct research at the intersection of mathematics and biomedicine.
June 2025 Sept. 2021	Excellent Performance 1,900 € <ul style="list-style-type: none"> Recipient of the University of Barcelona's honor for exceptional academic performance throughout my university studies.
Sept. 2020	Honors in Baccalaureate 1,700 € <ul style="list-style-type: none"> Awarded to students with an excellent academic record during their baccalaureate. Full coverage of tuition fees for the first year of university.
Oct. 2019 Jan. 2019	Mad for Science Programme <ul style="list-style-type: none"> Catalunya La Pedrera Foundation developed the Mad for Science Programme to open the doors of the leading research institutes to exceptional High School students. I participated in the Physics course.

INVITED TALKS

Sept. 2024	Extraordinary BioMed Seminar – Maths4Life 2024 <ul style="list-style-type: none"> In this seminar organised by IRB, I presented my research work undertaken as a summer intern.
July 2023	Barcelona Introduction to Mathematical Research – BIMR 2024 <ul style="list-style-type: none"> Presented the results of my summer internship at CRM to an expert audience.

LANGUAGES

Spanish Native Speaker
Catalan Native Speaker
English Advanced Level C1

CODING SKILLS

Languages: Python, C, Mathematica, LaTeX, Bash, SageMath.
Libraries: Pandas, SciPy, NumPy, Scikit-learn, Seaborn.
Other: Experience with Unix/Linux and computational modelling.

ADDITIONAL COURSES

- **Python for Data Science and Machine Learning** – Udemy [↗](#)
- **Machine Learning with Python** – Coursera [↗](#)
- **100 Days of Code: The Complete Python Pro Bootcamp** – Udemy [↗](#)

ADDITIONAL INFORMATION

- I am part of **Science Fellows**, an initiative of the Catalunya la Pedrera Foundation to develop STEM outreach activities such as museum exhibitions and talks in high schools.
- **Private tutor** for students in high school and university (Mathematics, Physics, Chemistry, Computer Science, Statistics, Engineering).