

EDUCATION

Present Sept. 2025	<div>Université Paris Sciences et Lettres</div> <div>Master of Science in Mathematics</div> <div><ul style="list-style-type: none"><li>All expenses covered by the FSMP Master Scholarship 2025.</li></ul></div>	Paris, France
June 2025 Sept. 2020	<div>University of Barcelona</div> <div>Bachelor of Science in Mathematics</div> <div><ul style="list-style-type: none"><li>Excellent with honors in 12 subjects.</li><li>Thesis: “The Riemann–Hilbert Correspondence for Flat Connections on Principal Bundles.”</li></ul></div>	Barcelona, Spain GPA: 9.02/10 Grade: 10/10
June 2025 Sept. 2020	<div>University of Barcelona</div> <div>Bachelor of Science in Physics</div> <div><ul style="list-style-type: none"><li>Excellent with honors in 10 subjects.</li><li>Thesis: “Improving Classical Shadows with Grouping Strategies.”</li></ul></div>	Barcelona, Spain GPA: 8.79/10 Grade: 9.7/10
June 2020 Sept. 2018	<div>Mireia Center of Studies</div> <div>Technological Baccalaureate</div> <div><ul style="list-style-type: none"><li>1<sup>st</sup>-ranked student of the class.</li></ul></div>	Barcelona, Spain GPA: 10/10

WORK EXPERIENCE

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

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

## HONORS AND AWARDS

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March 2025	<b>FSMP Master Scholarship</b> • Awarded by the Fondation Sciences Mathématiques de Paris to fully fund my Master's studies at PSL.	28,000 €
Nov. 2024	<b>Collaboration Scholarship</b> • Issued by the Spanish Ministry of Education, this scholarship is aimed at university students to conduct research in university departments.	2,000 €
Oct. 2024	<b>CRM Internship Programme Award</b> (declined) • Awarded to bachelor students who want to do their Bachelor's thesis advised by a researcher affiliated with the CRM.	500 €
July 2024	<b>Maths4Life Awardee</b> • Awarded one of the five grants from IRB Barcelona's Maths4Life Programme to conduct research at the intersection of mathematics and biomedicine.	1,200 €
June 2025 Sept. 2021	<b>Excellent Performance</b> • Recipient of the University of Barcelona's honor for exceptional academic performance throughout my university studies.	1,900 €
Sept. 2020	<b>Honors in Baccalaureate</b> • Awarded to students with an excellent academic record during their baccalaureate. Full coverage of tuition fees for the first year of university.	1,700 €
Oct. 2019 Jan. 2019	<b>Mad for Science Programme</b> • 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

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June 2025	<b>Research Seminar at BSC</b> • Presented the outcomes of my research stay at BSC.
Sept. 2024	<b>Extraordinary BioMed Seminar – Maths4Life 2024</b> • In this seminar organized by IRB, I presented my research work undertaken as a summer intern.
July 2023	<b>Barcelona Introduction to Mathematical Research – BIMR 2023</b> • Presented the results of my summer internship at CRM to an expert audience.

## LANGUAGES

**Spanish** Native Speaker  
**Catalan** Native Speaker  
**English** Advanced C1 Level

## CODING SKILLS

**Languages:** Python, C, Fortran, R, Mathematica, LaTeX.  
**Libraries:** Pandas, SciPy, NumPy, Scikit-learn, Seaborn.  
**Other:** Experience with Unix/Linux and computational modeling.

## ADDITIONAL COURSES

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