

EDUCATION

Present Sept. 2025	<div>Université Paris Sciences et Lettres</div> <div>Paris, France</div> <div>MSc in Mathematics</div> <ul style="list-style-type: none"><li>Joint master's between École Normale Supérieure and Université Paris Dauphine.</li><li>All expenses covered by the FSMP Master Scholarship 2025.</li></ul>
June 2025 Sept. 2020	<div>University of Barcelona</div> <div>Barcelona, Spain</div> <div>BSc in Mathematics</div> <div>GPA: 9.02/10</div> <ul style="list-style-type: none"><li>Excellent with honors in 12 subjects.</li><li>Thesis on flat connections and principal bundles.</li></ul> <div>Grade: 10/10</div>
June 2025 Sept. 2020	<div>University of Barcelona</div> <div>Barcelona, Spain</div> <div>BSc in Physics</div> <div>GPA: 8.79/10</div> <ul style="list-style-type: none"><li>Excellent with honors in 10 subjects.</li><li>Thesis on classical shadows in quantum information. ↗</li></ul> <div>Grade: 9.7/10</div>

WORK EXPERIENCE

Present July 2025	<div>Westinghouse Nuclear</div> <div>Madrid, Spain</div> <div>Simulation Modeling Engineer</div> <ul style="list-style-type: none"><li>Developing software for nuclear power plant simulations.</li><li>Improving thermal-hydraulics models for accuracy and performance.</li><li>Contributing to validation and documentation workflows.</li></ul>
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RESEARCH EXPERIENCE

June 2025 Nov. 2024	<div>Barcelona Supercomputing Center – BSC</div> <div>Barcelona, Spain</div> <div>Visiting Student</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: Prof. Dr. Bruno Julià, Berta Casas, Sergi Masot.</li></ul>
Feb. 2025 July 2024	<div>Institute for Research in Biomedicine – IRB</div> <div>Barcelona, Spain</div> <div>Research Intern</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>
Aug. 2023 June 2023	<div>Center for Mathematical Research – CRM</div> <div>Barcelona, Spain</div> <div>Research Intern</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>

## HONORS AND AWARDS

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March 2025	<b>FSMP Master Scholarship</b> 28,000 € <ul style="list-style-type: none"><li>Awarded by the Fondation Sciences Mathématiques de Paris to fully fund my Master's studies at PSL.</li></ul>
Feb. 2025 Sept. 2021	<b>Excellent Performance</b> 1,900 € <ul style="list-style-type: none"><li>I was awarded "Excellent with Honors" in 16 subjects across the two Bachelor's degrees at UB.</li></ul>
Nov. 2024	<b>Collaboration Scholarship</b> 2,000 € <ul style="list-style-type: none"><li>Issued by the Spanish Ministry of Education, this scholarship is aimed at university students to conduct research in university departments.</li></ul>
Oct. 2024	<b>CRM Internship Programme Award</b> (declined) 500 € <ul style="list-style-type: none"><li>Awarded to bachelor students who want to do their Bachelor's thesis advised by a researcher affiliated with the CRM.</li></ul>
July 2024	<b>Maths4Life Award</b> 1,200 € <ul style="list-style-type: none"><li>Awarded one of the five grants from IRB Barcelona's Maths4Life programme to conduct research at the intersection of mathematics and biomedicine.</li></ul>
Sept. 2020	<b>Honors in Baccalaureate</b> 1,700 € <ul style="list-style-type: none"><li>Awarded to students with an excellent academic record during their baccalaureate. Full coverage of tuition fees for the first year of university.</li></ul>
Oct. 2019 Jan. 2019	<b>Mad for Science Programme</b> <ul style="list-style-type: none"><li>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.</li></ul>

## INVITED TALKS

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June 2025	<b>Research Seminar at BSC</b> <ul style="list-style-type: none"><li>Presented the outcomes of my research stay at BSC.</li></ul>
Sept. 2024	<b>Extraordinary BioMed Seminar – Maths4Life 2024</b> <ul style="list-style-type: none"><li>In this seminar organized by IRB, I presented my research work undertaken as a summer intern.</li></ul>
July 2023	<b>Barcelona Introduction to Mathematical Research – BIMR 2023</b> <ul style="list-style-type: none"><li>Presented the results of my summer internship at CRM to an expert audience.</li></ul>

## LANGUAGES

<b>Spanish</b>	Native Speaker
<b>Catalan</b>	Native Speaker
<b>English</b>	C1 Level
<b>French</b>	A2 Level

## CODING SKILLS

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

## 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 [↗](#)