

EDUCATION

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| Present Sept. 2025 | <div>Université Paris Sciences et Lettres</div> <div>Master of Science in Mathematics</div> <div><ul style="list-style-type: none">All expenses covered by the FSMP Master Scholarship 2025.</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">Excellent with honors in 12 subjects.Thesis: “The Riemann–Hilbert Correspondence for Flat Connections on Principal Bundles.”</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">Excellent with honors in 10 subjects.Thesis: “Improving Classical Shadows with Grouping Strategies.”</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">1st-ranked student of the class.</div> | Barcelona, Spain GPA: 10/10 |

WORK EXPERIENCE

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| Present July 2025 | <div>Westinghouse Nuclear</div> <div>Simulation Modeling Engineer</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

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| June 2025 Nov. 2024 | <div>Barcelona Supercomputing Center – BSC</div> <div>Visiting Student</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 fewer measurements than standard methods.Supervisors: Dr. Bruno Julià, Berta Casas, Sergi Masot.</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">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</div> <div>Research Intern</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

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| March 2025 | FSMP Master Scholarship • Awarded by the Fondation Sciences Mathématiques de Paris to fully fund my Master's studies at PSL. | 28,000 € |
| Nov. 2024 | Collaboration Scholarship • Issued by the Spanish Ministry of Education, this scholarship is aimed at university students to conduct research in university departments. | 2,000 € |
| Oct. 2024 | CRM Internship Programme Award (declined) • Awarded to bachelor students who want to do their Bachelor's thesis advised by a researcher affiliated with the CRM. | 500 € |
| July 2024 | Maths4Life Awardee • 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 | Excellent Performance • Recipient of the University of Barcelona's honor for exceptional academic performance throughout my university studies. | 1,900 € |
| Sept. 2020 | Honors in Baccalaureate • 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 | Mad for Science Programme • 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 | Research Seminar at BSC • Presented the outcomes of my research stay at BSC. |
| Sept. 2024 | Extraordinary BioMed Seminar – Maths4Life 2024 • In this seminar organized by IRB, I presented my research work undertaken as a summer intern. |
| July 2023 | Barcelona Introduction to Mathematical Research – BIMR 2023 • 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, Mathematica, LaTeX, Bash, SageMath.
Libraries: Pandas, SciPy, NumPy, Scikit-learn, Seaborn.
Other: Experience with Unix/Linux and computational modeling.

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 [↗](#)