

Lluc Santamaría Riba

📍 Lausanne, CH 📩 lluc.santa@gmail.com ☎ +34 639 41 25 89 🔗 linktr.ee/lluc_santamaria

Profile

Computer Science student at UPC (ranked 1st of 400, GPA 9.25/10), currently on exchange at EPFL. I apply my research in compiler engineering and HPC to build robust systems that are secure, efficient, and robust. I am dedicated to democratizing AI and strengthening the open-source ecosystem.

Experience

Scala Center, Research Assistant

- Designed divergence check algorithm for Match Types in Scala 3 compiler
- Supervised by Martin Odersky (Scala creator and javac author) and Matthieu Boval
- Prevented compiler crashes by replacing recursion limits with termination proofs

Lausanne, CH
Sep 2025 – Present

Investment Society Lausanne, Student Association - IT Market Analyst

- Collaborated in five-person team to identify undervalued tech stocks.
- Successfully defended Melexis and Magyar pitches before 50+ members

Lausanne, CH
Sep 2025 – Jan 2026

Barcelona Supercomputing Center, Summer Internship - LLM Researcher

- Fine-tuned and evaluated a CodeLlama-based model on the MareNostrum 5 supercomputer to generate PyCOMPSs-parallelized code
- Updated and expanded the repository of PyCOMPSs examples, making it a solid foundation for training
- Designed and implemented a dataset generation pipeline, fully automated
- Gained expertise in distributed computing, cluster execution, and reproducibility

Barcelona, ES
Jul 2025 – Aug 2025

Eixos Creativa, Creative Technology Instructor

- Taught extracurricular creative technology program to 10–12-year-olds
- Led activities that promoted collaboration, creativity, and STEM engagement

Barcelona, ES
Apr 2025 – Jun 2025

ALBA Synchrotron, Software Engineer Intern

- Developed web applications using Django, RESTful API, and AngularJS
- Worked in Agile Scrum methodology and used CI/CD technologies
- Helped to automate and speed up enterprise internal processes

Cerdanyola del Vallès, ES
Oct 2024 – Apr 2025

Barcelona School of Informatics (UPC), Lecturer in Mathematics (Scholarship)

- Delivered lectures on discrete mathematics to first-year university students.
- Served as the coordinator for some lecturers, ensuring alignment and consistency

Barcelona, ES
Feb 2024 – Jun 2024

Education

EX École Polytechnique Fédérale de Lausanne (EPFL), Exchange Program

- Erasmus exchange program during 5th semester
- Awarded three scholarships for the exchange

Lausanne, CH
Sept 2025 – Present

BE Universitat Politècnica de Catalunya (UPC), Computer Engineering

- Top 1 student of my cohort with a GPA 9.25/10
- Honors in 16 courses
- Elected as delegate for three courses

Barcelona, ES
Sept 2022 – Present

HS	Institut-Escola Frederic Mistral , Technological High School	Achieved honors in the university entrance exams (grade 12.7 out of 14)
		Completed high school with distinction (grade 8.72 out of 10)

Barcelona, ES
Sept 2020 – June 2022

Awards and Scholarships

Universitat Politècnica de Catalunya (UPC), Highest GPA Award

- Ranked #1 of nearly 400 students in the first two years of the degree program

Heyning-Roelli Foundation, Exchange Scholarship

- Competitive merit-based scholarship supporting exchange studies at EPFL.

Fundación Banco Santander, Exchange Scholarship

- Merit-based scholarship awarded to top Spanish university students for international exchange at EPFL

SUI Hackathon, Winner

- Winner at the SUI Foundation Hackathon 2025 (Lausanne) for the Healix blockchain project

Minister of Research and Universities, Honor Letter

- National recognition for outstanding results in the university entrance exams

Projects

Healix, SUI Hackathon Winner Project

tinyurl.com/SUIHacking ↗

- Decentralized platform for sharing emotions securely on the Sui blockchain
- On-chain encryption using SEAL and Move smart contracts.

Snap2Shop, HackUPC, Inditex Challenge

tinyurl.com/HackUPC ↗

- Computer Vision solution for visual search of fashion clothes

Volunteering

Anegx, Viu la natura al Parc Natural de la Garrotxa

Olot, ES

- Forest conservation, community work, and awareness activities in the volcanic area

Jul 2021

Fundesplai, Recuperem el patrimoni de la Vall de Sau

Vilanova de Sau, ES

Jul 2020

- Forest restoration, wildlife monitoring, maintenance, and signposting of hiking trails

El Teix, Muntanyes del Terraprim

Viladamat, ES

Jul 2019

- Restoring fire-damaged forests and connecting cultural heritage sites

Languages

- Catalan and Spanish:** Native
- English:** Proficient. Cambridge English C1 Advanced, Score: 183

Technologies

- Programming:** Python, C++, C, Java, Scala, Haskell, SQL, JavaScript, HTML, CSS, Bash
- Frameworks & Libraries:** Django, React, AngularJS, Flutter, PyTorch, Numpy, Scikit-learn
- Parallel/Distributed:** OpenMP, COMPSs, AsyncIO.