

MARIA LUCIA APARICIO GARCIA

Second year Math and Computer Science student

✉ apariciogarciamarialucia@gmail.com ☎ (+34) 659 11 66 36
📄 github.com/malupar in linkedin.com/in/malupar



WORK EXPERIENCE

Algorithm Development for Conmutative Algebra
Polytechnic University of Catalonia

📅 April 2023 - September 2023 📍 Barcelona

Development of a Reinforcement Learning policy
Summer Intern at i2CAT (Research Center)

📅 June 2023 - September 2023 📍 Barcelona

During this internship I was tasked with developping a Reinforcement Learning policy that complied with the Service Level Agreement (SLA) for a Multi-Link Operator (MLO).

- Creating a simulation enviroment using the ns3.
- Define the RL training model, including state, action, and reward structures.
- Train the RL policy using the defined model and run simulations and compare performances.

HONORS & AWARDS

Extraordinary Baccalaureate Award June 2022

European's Girl Olympiad in Informatics
I Edition - Bronze medal June 2021
II Edition - Silver medal October 2022

Spanish's Girl Olympiad in Informatics
I Edition - Gold medal March 2021
II Edition - Gold medal Aprl 2022

Spanish Informatics Olympiad
XXV Edition - Silver medal April 2021
XXVI Edition - Silver medal April 2022

FME Datathon - 1st in Qualcomm Challenge November 2022

International Junior Scientific Olympiad

XVI Edition - Bronze medal December 2019

Residence Scholarship and Degree Scholarship 2022 - today

PROJECTS

Development of an online judge

I am currently developping the back-end of an online judge that should execute a program, run it on different testcases stored on a database and then give a verdict/score depending on the code's performance.

Creation of an visualizer on algorithms and data structures

Using the Manim module from Python I have created different videos that show how different algorithms and data structures work.

Right now I am working on wrapping all the algorithms I have implemented so far into a website where it would be possible to choose which algorithm you would like to see.

EDUCATION

Mathematics & Computer Science
Polytechnic University of Catalonia

📅 2022 - 2027 📍 Barcelona

COURSES

Leagues of Code - Advanced Group

Programming scholarship that each year lasted 6 months and where each week there would be a contest for a specific topic

📅 2021 and 2022 📍 Harbour.Space University

Reinforcement Learning

Intensive course that combined both theory and practice

📅 June 2023 📍 UPC

SKILLS & CERTIFIED LANGUAGES

C++	Advanced
Python	Advanced
Java	Intermediate
Git	Intermediate
Cambridge English	Proficiency C2
French	DELF B2
Spanish	Native

VOLUNTEERING

Spanish Girl's Olympiad in Informatics

Teacher, tester and problemsetter

📅 2022 - present 📍 OIFem

Spanish Girl's Olympiad in Informatics

President and head of the scientific comitee

📅 2024 - present 📍 OIFem

Spanish Olympiad in Informatics

Member of the Scientific Comitee

📅 2023 - present 📍 OIE

Catalan Olympiad in Informatics

Teacher at "Taller Programa" and "Taller Demostra", workshops intended for high-school students involving Math and Programming

📅 2024 - present 📍 OICat