

Edgar Moreno Martínez

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Linkedin

1 Education

Cambridge University 2023 – 2024

MASt in Pure Mathematics (Part III)

All expenses covered by La Caixa Fellowship 2023.

Subjects: Model theory & Non-Classical Logic, Category Theory, Lattice Models, Ramsey Theory, Combinatorics.

Universitat Politècnica de Catalunya (UPC) 2018 – 2023

Degree in Mathematics Grade: 9.2/10

Degree in Computer Science Grade: 9.3/10

Favourite subjects: Discrete Maths (Honours), Algorithms I, II & III (Honours), Theory of Computation (Honours), Combinatorics & Graphs, Probability (Honours), Logic.

Full tuition scholarship for academic excellence from the Centre of Interdisciplinary Superior Formation (CFIS).

Jaume Vicens Vives 2016 – 2018

International Baccalaureate and Spanish Baccalaureate

Full tuition scholarship for academic excellence from CiMs-Cellex foundation.

2 Academic Experience

BIMR Summer 2023

Barcelona Introduction to Mathematical Research program organized by CRM (Centre de Recerca Matemàtica). A summer program with seminars and a research project on Stalling Automatas directed by Professors Enric Ventura and Jordi Delgado.

Visiting student at Maryland University 2022-2023

Undergrad thesis on Game theory at Prof. MohammadTaghi lab. All expenses covered by CFIS.

Thesis title: Maximizing Nash Social Welfare in Online Settings.

Undergraduate research on Quantum Computing 2021

I performed mathematics research on Quantum Computing focused on quantum error correction codes with professor Simeon Ball. Had an INIREC scholarship granted by Banco Santander.

Problem setting

I'm a problem setter for the Spanish Informatics Olympiad. I also proposed and reviewed problems for the Catalan Informatics Olympiad, the UPC programming contest and Codeforces rounds.

Teaching

2022

Teached courses on Logic, Gödel's theorems and Turing machines and in Quantum Computing to CFIS freshmans. Also taught an introduction to Combinatorial Game Theory for high-school students interested in Mathematics.

3 Publications

Stabiliser codes over fields of even characteristic

In preparation

With Simeon Ball and Robin Simoens.

Almost Tight Guarantees for Online Nash Social Welfare Maximization

 To appear

With Suho Shin, Keivan Rezaei, Max Springer and MohammadTaghi Hajiaghayi.

4 Work experience

Quantitative Research at G-Research

Summer 2022

I was an intern at the Summer Research program in London. I did an individual research project for 10 weeks on stochastic optimization and Reinforcement Learning.

Xanadu Trading

Summer 2021

I was employed in the software team and coded high efficiency and robust algorithms.

HappyScribe

Summer 2020

Summer internship in the software team in a startup based in Barcelona. Speech recognition and online platform with customers interaction.

EMDEP TestBoards

Summer 2019

Summer internship in the software team. Research in algorithms.

5 Achievements

SWERC-ICPC Bronze medal	2022
Spanish Olympiad in Mathematics: Bronze Medal, Silver Medal	2017, 2018
Spanish Olympiad in Informatics: Silver Medal	2018
Kangaroo Math's tests ¹ winner	2016, 2017
Spanish Olympiad in Physics: Bronze Medal	2018
SWERC-ICPC contestant	2020, 2022

SciTech Technion summer camp

2017

Summer camp hold in Haifa, Israel. In this pre-university summer camp assist young students interested in science and technology from all over the world. Worked in a research team. The tuition fee was payed by Cellex foundation.

¹Kangaroo's test is a competition of short maths problems hold in Catalonia where between 4000 and 15000 students participate. More info