Adrián Rodríguez-Muñoz

Homepage: https://adriarm.github.io

EDUCATION

Massachusetts Institute of Technology (MIT)

Cambridge, United States

PhD Student - AI and Computer Vision for decision-making advised by Prof. Antonio Torralba

September 2022 - Current

Email: adrianrm@mit.edu

Universitat Politecnica de Catalunya (UPC)

Bachelor in Mathematics; 9.53/10 (rank 3)

Barcelona, Spain 2017 - 2022

Universitat Politecnica de Catalunya (UPC)

Barcelona, Spain

Bachelor in Data Science and Engineering; 9.58/10 (rank 1)

2017 - 2022

Degrees done concurrently as part of the CFIS-UPC (Centre de Formació Interdisciplinaria Superior) program.

American School of Barcelona

International Baccalaurate (IB); 9.1/10 (41/45 points in the IB scale)

Barcelona, Spain 2015 - 2017

Work Experience

Quantitative Trading Intern at Susquehanna International Group

Trading intern in the peripheral index options desk

Dublin, Ireland June 2022-Aug 2022

Research Intern at Aspect Capital

Development of Systematic Macro Relative Value investment strategies

London, England June 2021-Aug 2021

Collaborating Student at ZeClinics

Barcelona, Spain

Development of specialized image processing pipeline incorporating Deep Learning

January 2021-June 2021 Barcelona, Spain

Co-founder and researcher at Vixnio Technologies

Development and backtesting of deep learning models for quantitative trading

June 2020-May 2021 Barcelona, Spain

Research Student at Barcelona Supercomputing Center

Using recurrent neural nets (LSTM+AdaptiveLogSoftmax) for synthetic memory trace generation – July 2019-Sept 2019

TECHNICAL SKILLS

- Deep Learning and Computer Vision with the PyTorch Python library
- Data processing and Machine Learning with Numpy, Pandas, and Scikit Python libraries
- Algorithms and Data Structures in C++
- Distributed cluster computing with SLURM (e.g. multi-node distributed training)
- Data analysis with the R Statistical Computing Language: Familiarity with the R language and the R Studio environment, and its application to basic data processing, lm, glm, PCA, CA, and others.
- Numerical processing with Matlab
- Data processing with Excel

Awards

- La Caixa Fellow 2022: Awarded scholarship to pursue graduate studies in the US by the La Caixa foundation
- Algothon 2021: 1st place at the 2021 Algothon, organized by the Imperial College Algorithmic Trading Society and Aspect Capital
- 2021 Spain G-Research Quant-Trading Challenge.: 1st place at the 2021 Spain G-Research Quant-Trading Challenge
- HackUPC2019: 2nd place at the McKinsey Challenge at the HackUPC2019 hackathon
- CFIS double scholarship: Academic-based full scholarship given to around 6 freshmen every year at UPC
- Mathematics Olympiad: Bronze medal at the 2017 Spanish Mathematical Olympiad

Non-Technical Skills

- English: Proficiency level (Michigan Test C2) and 118/120 on the TOEFL. Extensive experience in written and oral communication: 7 years of schooling at the American School of Barcelona, high school during 1 year in Los Altos, California, and 1 year as a PhD student at MIT.
- Strong analytical skills and creative and rigorous thinking: Ability to think creatively and rigorously when solving problems; trained by proving many mathematical theorems and propositions.
- Time management: Strong time management and self-scheduling skills.
- Spanish and Catalan: Native level in speaking and writing.