

Samuel Lozano Iglesias

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Education

Complutense University of Madrid

Madrid, Spain

Mathematics and Physics Bachelor. Average grade: 8.95 over 10.

September 2019 - June 2024

Obtained eleven Honours, with an outstanding performance in Algebra, Geometry and Topology (9.57 on average).

Final Degree Projects in development:

- *Application of Machine Learning Techniques for Water Turbidity Prediction*: theoretical study of predictive models with Machine Learning, going deeper into LSTM networks and successfully applying them to the prediction of water turbidity in desalination plants operated by ACCIONA.
- *Chaos and statistical physics in quantum systems*: study of quantum chaos and Random Matrix Theory.

Université de Genève

Geneva, Switzerland

Exchange year in Mathematics and Physics. Average grade: 5.65 out of 6.

September 2021 - June 2022

Obtained three Honours, with special interest in the subject *Random Matrices at Finite N*.

Instituto de Ciencias Matemáticas, ICMAT (CSIC)

Madrid, España

Recipient of grants from the Severo Ochoa Research Introduction Program.

June 2024 - July 2024

Study of Kolmogorov-Arnold networks and differential equations, with Professor Rafael Orive.

Theoretical Physics Institute (CSIC)

Madrid, Spain

Educational stay: Introduction to research in particle physics.

March 2017 - April 2017

IES Clara Campoamor

Mostoles, Spain

Baccalaureate of Science with fifteen Honours out of a possible seventeen.

Spanish university entrance exam (EvAU) score: 13.75 out of 14.

Experience

ACCIONA

Madrid, Spain

Data Scientist and Machine Learning

September 2023 – May 2024

- Development of predictive models with Machine Learning focused on the needs of the different business units, using LSTM networks and programming in Python (Keras).
- Study of cause-effect relationships and possible opportunities for improvement in project planning through the analysis of large volumes of data.

Redsys Servicios de Procesamiento S.L.

Madrid, Spain

Financial Data Analyst

July 2022 – January 2023

- Development with SQL of ETL processes for the optimisation of data processing in the BIZUM service, using IBM's own tools such as Datastage and Netezza.

Publications & Awards

Historia de España: 2º Bachillerato

November 2021

Compilation of the History of Spain divided into sections and aimed at preparing for the Spanish university entrance exam (EvAU).
ISBN: 979-8768042295 ([Link](#))

Triple winner of the Spring Mathematics Competition

Madrid, Spain

Complutense University of Madrid: editions XVI, XIX and XXIII.

2012, 2015 and 2019

Competences & Interests

Technical skills: Programming in Python (Keras and Tensorflow), Matlab and SQL.

Languages: Spanish (native), English (C1 - CAE) and French (B1).

Interests: Machine Learning (Deep Learning), mathematical modelling, numerical analysis and optimization.