



LORENA MÉNDEZ
MATHEMATICS

GET IN TOUCH



E-Mail

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MEDIA



LinkedIn

www.linkedin.com/in/lorena-mendezg



GitHub

github.com/loremendez

LANGUAGES

ES

Spanish

Mother tongue

EN

English

C1 Level

IELTS 2022

DE

German

B2 Level

Goethe Zertifikat 2023



EXPERIENCE

GERMANY

Since 12.21

IBM - Data Scientist / AI Engineer

Full time job at IBM Client Engineering.
Development and deployment of machine learning models for different use cases using IBM and Open Source technologies.

GERMANY

02.21-08.21

Helmholtz Zentrum - Master's Thesis Student

Master's Thesis in Computational Biology.
Inference of gene regulatory networks using temporal convolutional neural networks, epigenomics (scATAC-seq) and transcriptomics (scRNA-seq) at a single cell level.

GERMANY

07.20-12.20

BMW Group - Machine Learning Research Student

Full time internship in passive security.
Development and deployment of machine learning models to improve the airbag trigger and the configuration of the seat belts using spatial features.
Creation of an outlier detection tool for crash pulse curves based on the CORA method.

GERMANY

10.19-02.20

Capital Bay - Data Innovation Lab Student

Part time working student.
Project: Revolution of real state valuation.
Data collection, data base creation and development of machine learning models to forecast sale and rent prices in Germany.

MEXICO

07.17-08.18

HSBC - Quantitative Credit Risk Advisor

Full time job in Global Risk Analytics.
Responsible for the adaptation and implementation of IFRS9 models for the Mexican wholesale portfolio.
Models: Expected Credit Loss (ECL), Probability of Default (PD) and Loss Given Default (LGD).

MEXICO

08.16-07.17

Walmart - Category Development Specialist

Full time job in Category Development.
Data analysis of top categories, development of sale strategies using machine learning, sales forecasting and supervision of strategy implementation.

MEXICO

02.14-09.14

Instituto Politécnico Nacional - Research Assistant

Social service (480 h).
Creation of a script to calculate regularity indices of ideals for code theory using Macaulay2.

MEXICO

06.11-06.12

Instituto Politécnico Nacional - Apprentice Researcher

PIFI scholarship holder.
PIFI is the institutional program of research training.
Assistant in the project: Hyperderivability and hyperholomorphy of hypercomplex functions.

TOOLS



Programming

Python
R
MATLAB
C
Macaulay2
Fortran



Machine Learning

TensorFlow/Keras
PyTorch
Scikit-learn
Pandas
Numpy
Scanpy
Seaborn



Miscellaneous

SAS
SQL
LateX
Inkscape
Figma
VBA

RECOGNITION



IBM Blue Core Mentor



IBM Recognised
Speaker/Presenter



IBM Data Science
Certified



IBM Catalyst Award
Q2 2022



2x Finalist National
Mathematics Contest
Pierre Fermat MX

HOBBIES



Drawing



Salsa Dancing



EDUCATION

GERMANY
10.18-09.21

Technical University of Munich - MSc Mathematics

Focus: Machine Learning

Thesis: Inference of gene regulatory networks using temporal convolutional neural networks

Supported financially by the Federal Trust of the Central Bank of Mexico (FIDERH).

MEXICO
01.10-05.16

Instituto Politécnico Nacional - BSc Physics and Mathematics

Focus: Pure Mathematics

Thesis: Construction of Orbital Images by Iterated Function Systems

Scholarship holder by the Institutional Program of Research Training (PIFI).



WORKSHOPS

GERMANY
2022-2023

IBM - Diverse Activities

Contestant at Vater Smart Hackathon 2022 & 2023, DLR Sustainability Hackathon 2023, Qiskit Hackathon 2023, IBM Data Science Bootcamp.

Presenter at Open Doors Event, watsonx Q3 kick-off at Watson Center Munich.

Badges: credly.com/users/lorena-mendez-g

GERMANY
2019

Leibniz Supercomputer Centre (LRZ) - Data Innovation Lab Workshops

40 hours

10 workshops to use the available resources at LRZ.

These include: introduction to GNU/Linux and the shell, R, python, compute cloud, HPC infrastructure, and 2 AI Intel workshops.

MEXICO
2017

SAS Institute - Applied Analytics using SAS Enterprise Miner

21 hours

Assemble analysis flow diagrams for pattern discovery and predictive modeling using SAS Enterprise Miner.

MEXICO
2017

The Retail Academy - Category Assortment Management

40 hours

Category management best practices and tools.

MEXICO
2017

Commission of equity and gender of the mathematical society - Gender Equality in Science

Workshop about the role of women in Mathematics in Mexico.