

Maria Oros Data Scientist

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Services

My research mainly focuses on Bayesian statistics, machine learning, and dynamical systems. I have experience in both industry and research, developing innovative solutions that bridge theoretical advancements with practical applications. This work has enabled me to tackle complex real-world challenges, collaborate with multidisciplinary teams, and contribute to high-impact projects.

Links [Data Science Institute](#)
[Portfolio](#)
[My Web Page](#)
[LinkedIn](#)
[GitHub](#)

Education

UNIVERSITY OF NAVARRA
 DATA SCIENCE - 2022
 CENTER OF RESEARCH IN
 MATHEMATICS AND UNI-
 VERSITY OF GUANAJUATO
 MATHEMATICS AND
 PROBABILITY AND STATISTICS

Skills

PROGRAMMING
 Python • R • C/C++ • SAS • SQL

CLOUD SOLUTIONS
 AWS • GCP

VISUALIZATION
 Tableau • Streamlit •
 AWSQuickSight • R shiny

BACKEND N FRONTEND
 FastAPI • PostgreSQL • HTML • CCS

Disclosure of Science

UNAM - SPEAKER

SPEAKER: [\[RECORDED VIDEO\]](#)
 An introduction to Theoretical Physics at 9th Mathematical event at the Faculty of Science.

SCIENTIST SPECIALIST

Disclosure of science. Math scientist to elementary school students from 2012-2015.

TEACHER ASSISTANT

At the University of Guanajuato and University of Madison-Wisconsin.

Experience

DATA SCIENTIST OVCR - RESEARCH ASSISTANT

DATA SCIENCE INSTITUTE AT UW-MADISON - AMERICAN FAMILY INSURANCE
 06/23-Present

Madison WI, EU

Data Science Institute Portfolio

- I developed the Open source crop disease forecasting tool: API and APP deployed in posit connect a cloud server from UW-Madison.
PROJECT OVERVIEW Python, R
- Lead and conducted causal inference **META ANALYSIS** on CBD trials in plant pathology (corn, soybean and alfalfa) to evaluate effectiveness of fungicide applications. I conducted a econ inference to evaluate fungicide profitability under an economic inference. Outcomes: paper submission and ROI app deployed in AWS. **ROI CALCULATOR** SAS, R
 - Developed a comprehensive SAS framework and automated R procedure for meta-analysis, successfully implemented on different settings. Planned to be extended for clinical trials.
 - Submitted a scientific publication to stats journals.
- Collaborated with Safe Set Business applying foundational models and time series techniques for anomaly detection of workforce schedules data. Deploying an LLM model in databricks.
- Phillies hackathon 2024 - finalist. Mentoring 2 undergraduates from UW-Madison and deployed a solution in AWS lambda for baseball characterization of hits dynamics as per sensor data.

SENIOR DATA SCIENTIST-ANALYST

ADVANCED ANALYTICS (CREDIT RISK DIVISION) - BBVA MEXICO

- Credit Card Risk Modeling:** Led the development and management of Mexico's National Credit Loan model at BBVA, the country's leading bank. Provided actionable insights to executive leadership in Mexico and Spain, supporting data-driven strategic decisions. Provide documentation and be in charge of answering audit processes needed in banking.
- Attrition model for insurance sector:** conducted and deployed a ML model for attrition risk in the banking sector.
- House pricing model:** conducted and deployed a ML model to predict housing prices in Mexico City. The model was deployed via API in AWS lambda. I created a CI/CD workflow to automate the pipeline for deployment.

DATA SCIENTIST-ANALYST FROM 2019 TO 2022

BISONIC INC, APRENDE INSTITUTE

- Analyst and software developed of game monitoring systems:** develop the game monitoring and models behing a MMORPG game. Deploy solutions using AWS lambda, EC2 and RDS to save gamer actions in database, automate workflow of metrics of interest for the game and deploy in-house models for specific business questions.

Certifications

- a) **TOEFL**. b) **THE POWER OF STATISTICS** c) **CERTIFICATE IN MICROECONOMICS** d) **ATTENTION MECHANISM**
- CERTIFICATION OF PROFESSIONAL SKILL-SETS IN DATA SCIENCE**
 UNIVERSITY OF NAVARRA SPAIN