

# María Aguilera García

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## PROFESSIONAL SUMMARY

Big data, machine learning, coding, coding and data science passionate. Eager to learn and create value by leveraging my strengths: people, initiative, numbers, and languages. A self-sufficient, motivated, and hardworking student inspired by highly demanding challenges and learning opportunities. Upbringing spent in a wide range of countries fostered a great sense of multiculturalism and respective linguistic skills allowing me to relate and feel comfortable with every kind of person.

## EDUCATION

### IE School of Human Sciences and Technology

*Master in Business Analytics and Big Data (specialization in Applied Artificial Intelligence)*

Madrid, Spain

SEPT. 2021 – JUL. 2022

- Relevant courses: Python | Machine Learning | Deep Learning | Reinforcement Learning | NLP | Time Series Forecasting | SNA

### Carlos III University of Madrid

*Bachelor in Business Administration*

Madrid, Spain

SEPT. 2016 – JUN. 2021

- Honours in Financial Economics | Excellence in Game Theory, Econometrics, Statistics, Information Skills

## PROFESSIONAL EXPERIENCE

### Ernst & Young (EY)

*Audit Intern Analyst*

Madrid, Spain

JAN. 2020 – MAY 2020

- Assigned to two clients: a major client in the Renewable Energy sector that was subject to PCAOB regulation and listed on the NASDAQ, and a less demanding client that resulted in a smaller team with more responsibility.
- Prepared, analyzed, and validated annual reports to develop comprehensive audit working papers and communicated with global team members around developed advanced Microsoft Excel and attention-to-details skills.

### Compañía Española de Algas Marinas S.A (CEAMSA)

*Tech & Finance Intern*

Vigo, Spain

JUN. 2019 – JUL. 2019

- Helped the Finance department with banking activity reconciliation, month-end close, and journal entries. As a tech assistant, received training from the IT department on SAP Business One in order to give support and resolve technical issues in all other departments.

### Santander Bank Polska

*M&A Intern*

Warsaw, Poland

JUN. 2018 – JUL. 2018

- S&P Capital IQ, Bloomberg and Merger Market were used to conduct and monitor corporate and industry-specific analysis, in order to create reports and presentations for superiors to use in negotiation meetings.

## TECHNICAL SKILLS

- **General Knowledge:** Statistics | Econometrics | Machine Learning | Deep Learning | Reinforcement Learning | NLP | MSOffice | Advanced Excel | Git | GitHub
- **Programming Languages:** SQL | R | PySpark | Spark | Scala | Python (Pandas, Matplotlib, Seaborn, Scikit-learn, NumPy, XGBoost, TensorFlow)
- **RDBMS:** IBM DB2 | MySQL | Spark SQL
- **NoSQL:** MongoDB
- **Analytics:** Power BI | Google Data Studio | Google Analytics
- **Big Data Frameworks:** Hadoop HDFS | Apache Spark
- **Streaming & Messaging:** Spark Streaming | Apache Kafka | Apache NiFi

## MAJOR PROJECTS

### Corporate Data Breaches and Narrative Disclosures (Undergraduate Thesis Project & 2019,2020 INNCYBER Innovation Award, Grade 9.7/10)

- The goal was to examine how data breaches affect corporate communication of public U.S. data breached firms by examining whether managers engage in managerial discretionary disclosure behaviour in the 10-K annual reports or whether they provide incrementally useful information aimed at enhancing decision making by filing infrastructure gaps.
- **Skills:** R (Tidy verse, ggplot2, lubridate, PostgreSQL) | Fuzzy Matching (Fuzzy Lookup Add-in | Econometrics & Statistics (DID, Logit, Fixed Effects)

### Raw Material Forecasting of Industrias Duero (Master Thesis Project)

- With five classmates, optimized the supply chain cycle to improve the company's inventory turnover by predicting the demand and volume of raw material.
- Implemented predictive modelling strategies using machine learning, data science and time series forecasting techniques (e.g., ARIMA, ARMA, SARIMA, GARCH) and big data analysis (>1.5 M data points)
- **Skills:** Python | Facebook Prophet | Time Series Analysis & Forecasting | XGboost | Catboost | Microsoft Power BI

### Forest Cover Type Prediction (Machine Learning II Project, Grade: 10/10)

- Goal was to attain the highest accuracy score compared to the other teams. Analyzed, cleaned, pre-processing and feature engineering for the creation of machine learning models.
- **Skills:** Python | Matplotlib | Seaborn | Plotly | Scikit-learn Pipelines | Grid search | Hyperparameter Configuration | Data Visualization

### Bike Sharing Analysis (Python II Group Project, Grade: 10/10)

- Goal was to predict the total number of Washington D.C bicycle users on an hourly basis.
- **Skills:** Exploratory Data Analysis | Data Cleaning & Analysis | Time- Based Cross Validation | Python

### Analysis of Formula 1 User Interactions on Twitter (Modern Data Architectures Project)

- Using five datasets containing circuit information, and ingesting tweets with the hashtag "#F1" we analysed the ways in which teams, cities and sponsors can gain returns on their investments.
- **Skills:** Apache NiFi | HDFS | Apache Spark | PySpark

### Instagram Graph Analysis and Community Detection Algorithms (Social Network Analysis Project)

- Using GraphX and graph algorithms to analyze and explore different patterns and communities.
- **Skills:** Python | GraphX | Community Detection Algorithms

### Elemetrica LLC Text Classification Model (Natural Language Processing Project)

- As the company's data was structured differently in each POS, developed a text classification model to unify each product into a unique code.
- **Skills:** TF-IDF | Stemming | NLP | Scikit-learn | NLTK | Pandas | Class Imbalance

## LANGUAGES

English (Native) | Spanish (Native) | French (Conversational) | Portuguese (Basic)

## VOLUNTEER EXPERIENCE

- Took care of orphan children living in poor conditions in the village of Holeta and helped them learn some essential math and English skills (**Cooperating Volunteers** - Ethiopia Jul. 2017)
- In charge of kids in the worst conditions whose parents were sick (**Hospital Municipal Miguel Couto** –Brazil, May 2016)
- Participated in a cataract surgery expedition. Setting up, cleaning, sterilizing equipment as well as the proper transfer of materials between materials between non-sterile environment and surgeon (**Fundación Barraquer** –Dominican Republic, Aug. 2015)

## OTHER INTERESTING INFORMATION

Lived in Rio de Janeiro, Athens, Mexico City, Montreux, Barcelona | Enthusiastic traveller, skier, sailor, gym, tennis & paddle player.