

Bogotá, Colombia

22 years old

# **STUDIES**

# Bachelor's degree in Mathematics

National University of Colombia Grade Average: 4.7 / 5.0 Summa Cum Laude 2018 - 2022

Certificate program in Artificial Intelligence and Deep Learning National University of Colombia 2022

#### **AWARDS**

# Scholarship «Initiation to research»

Scholarship to develop a research project in France, awarded by the National University of Colombia and the governments of both countries.

# Academic Performance Scholarship

Scholarship covering the total tuiton cost during my bachelor's degree due to my Grade Average.

#### **LANGUAGES**

· Spanish: First Language

• English: B2 (no certification).

• French: B2 (DELF certificated).

# **JUAN PABLO ORTEGA**

#### MATHEMATICIAN

Applied mathematician with experience in analysing and modeling social, ecological and cultural related problems using data, dynamic systems and artificial intelligence. Currently, I am searching for a junior data analyst position. I have experience with Python, R and SQL.

### PROJECTS AND EXPERIENCE

# Predicting the next 'Despacito'

Bogotá, Colombia

2022-2023

I am currently working on a machine learning algorithm that predicts songs popularity based on musical and contextual features. I have tried different architectures such as Random Forests and Neuronal Networks using Python, numpy, pandas, scikit-learn and tensorflow.

# Impact of Road Verge Management

Nancy, France 2022 Research internship in the ERPI (Research team on innovation processes), in collaboration with NOREMAT S.A.S., an enterprise of road verge management. There, I designed a dynamic model that found a management strategy that reduced the ecological impact their activities by 19%.

# **Models of Political Corruption**

Bogotá, Colombia

2021 - 2022

I designed predictive models of political corruption data and worked as an assitent professor in the topic at the National Chair in Integrity and Fight againts Corruption. Our models reflected some dynamics that were never explored quantitatively but were known in the Social Studies Literature (e.g., corruption's self-fulfilling nature and stability).

# **TEACHING**

# Assistent professor

Bogotá, Colombia

2022

I worked as an assistent professor on two courses throughout this year: «Mathematical Models of Political Corruption», as part of the National Chair in Integrity and againts «Fundamentals Fight Corruption, and Mathematics».





