

Yabra Muvdi

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EDUCATION

Barcelona School of Economics – Barcelona (Spain)

Graduate institution bringing together researchers from Universitat Pompeu Fabra and Universitat Autònoma de Barcelona.

Master Program in Data Science

September 2019 - July 2020

Relevant courses: Machine Learning (A+), Data Warehousing and Business Intelligence (A), Computational Machine Learning II (A+), Data Visualization (A-), Text Mining (A+), Stochastic Models and Optimization (A+), Networks (A-)

Advisors: David Rossell, Omiros Papaspiliopoulos, and Nandan Rao

Master thesis: “Political Discourse on Twitter: An Analysis of Politicians’ Tweets Using a Structural Topic Model” (A). Available [here](#).

Universidad de los Andes – Bogotá (Colombia)

Ranked as the 6th university in Latin America.

Bachelor's Degree in Economics

July 2013 - March 2018

Graduated in the top 5% of the class.

Relevant courses: Advanced Econometrics (A-), Linear Algebra (A), Economic Theories of Justice (A+), Empirical Applications of Political Economy (A), Game Theory (A-), Analysis of Armed Conflict (A+)

University of Chicago – Chicago (US)

Data and Policy Summer Scholar Program

July 2019 - August 2019

RESEARCH EXPERIENCE

Barcelona School of Economics – Barcelona (Spain)

Predoctoral Researcher in Economics and Machine Learning

March 2021 - Present

- Currently working with professor [Stephen Hansen](#) to build models and tools for the use of unstructured data in economic analysis. Selected projects include:
 - Developing NLP models to predict the presence of remote work on over 500 million job postings. Current model can be tested online [here](#).
 - Characterizing firms within a trade network through the use of embedding models. [Here](#) is the poster I presented at a [CESifo workshop](#).
 - Measuring the evolution of economic uncertainty with word embeddings.
 - Demonstrating methods for algorithmic text analysis in economics for a chapter in the Annual Review of Economics. [Final draft](#).

TOPICS OF INTEREST

machine learning,
bayesian statistics,
algorithmic fairness,
social mobility,
income inequality,
political philosophy,
natural language
processing

PROGRAMMING LANGUAGES

Python (JAX, NumPyro,
PyTorch, dash,
transformers,
scikit-learn,
statsmodels)
R (tidyverse, glmnet,
caret, stats)
SQL
Stata

SOFTWARE

Git, Google Cloud,
AWS, Docker, Linux,
Heroku

LANGUAGES

Spanish (native)
English (working
proficiency)
French (basic)

Universidad de los Andes – Bogotá (Colombia)

Research and Teacher Assistant

July 2015 - June 2018 (3 years)

- Developed econometric models with panel data of over six million children to understand the effects of a health policy in Bogotá. [Working paper](#).
- Co-authored an article with professor Adriana Camacho on the evolution of household poverty in Colombia. [Available online \(in Spanish\)](#).
- Supported three different courses at the Economics department with professors [Andrés Álvarez](#) and [Jimena Hurtado](#).

PROFESSIONAL EXPERIENCE

Instiglio – Bogotá (Colombia)

Award winning social enterprise focused on the design of innovative financial mechanisms to improve the impact of social programs.

Data Analyst

August 2018 - August 2019 (1 year)

- Led the design of predictive models to forecast the performance of educational programs in Liberia. Supported the design of an innovative financing mechanism for a five-year educational project in the country.
- Collected, cleaned, analyzed and visualized historical data of all the company's projects in order to produce relevant insights for the Board's annual meeting.
- Supported the business development efforts of the company by writing concept notes and formal proposals to prospective clients. Two of these efforts led to important projects for the company.
- **Achievements:** Got promoted from analyst level 1 to level 2 in 6 months.

Intern

January 2018 - July 2019 (7 months)

- Analyzed the available data on educational outcomes for Liberia and Namibia.
- Developed a comprehensive literature review on the effectiveness of several educational programs in developing countries.
- **Achievements:** Got selected as one of the interns who was promoted to analyst.

Enseña por Colombia – Bogotá (Colombia)

Education NGO part of the Teach For All network.

Data Analyst

May 2016 - December 2016 (8 months)

- Provided support in the systematization and analysis of all the data produced by this institution.
- Developed an impact evaluation proposal for the program.