

(45) 52640973  
Copenhagen, Denmark  
mgr.eco@cbs.dk

# Marcela Galvis Restrepo

Research Data Scientist

GitHub: marcelagalvisres  
LinkedIn: marcelagalvis

## SKILLS

<b>Tools and Languages</b>	Python, $\LaTeX$ , Markdown
<b>Quantitative Research</b>	Mathematical optimization, Mathematical Modeling, R
<b>Communication</b>	English (fluent), Spanish (native speaker), German (Basic understanding)

## RELEVANT TECHNICAL EXPERIENCE

**PhD Researcher / Machine Learning Group (Prof. Dolores Romero Morales)** 08 2018 — 05 2022  
*Copenhagen Business School* Copenhagen, Denmark

- Exceptional organization and project management skills demonstrated by leading the project "Feature reduction for Classification: an algorithmic approach", resulting in data validation and development of state-of-the-art statistical and machine learning methodologies
- Achieved robust statistical models by defining the problem statement, collecting data and building analytical models
- Clearly communicated the results of my statistical modeling to a variety of audiences, by using scientific computing and analysis packages such as ggplot2 resulting in collaboration across disciplines
- Reliable data handler, evidenced by veteran technical knowledge of R for data extraction, cleaning, analysis and presentation for medium to large datasets
- Achieved significant improvement of the interpretability and fairness of classification models, by designing algorithms for feature shrinkage with complex data

**Knowledge Management Consultant / Text analytics** 08 2017 — 07 2018  
*Inter-American Development Bank* Washington, District of Columbia USA

- Improved project management by extracting and analyzing text on lessons learned from the development projects financed by the Bank
- Achieved more efficient processing of text data by implementing the use of Natural Language Processing tools to the analysis of Lessons Learned from Development Project documents funded by the bank
- Reliable handling of complex, unstructured data, using R and Python
- Clearly summarised and communicated the text data analysis strategy through dashboards, blog posts and other media supporting the business case for using text analytics as a knowledge management tool in the organization

**Statistical analyst / Education Quality** 08 2014 — 06 2017  
*Medellin City Education Secretary* Medellin, Colombia

- Improved decision making at the city level by transforming data into actionable insights on where to invest the money according to quality needs
- Supported schools in their efforts to increase education quality, by designing and maintaining a statistical model that measured education quality in real time
- Implemented better targeting strategies for schools in need of support, using unsupervised learning techniques such as clustering and PCA
- Transformed an Excel based tool to monitor education quality, into a web-based application with reliable insights and continuous support
- Reliably handled data on hundreds of thousands of students and hundreds of schools, using veteran skills in data extraction, cleaning, analysis and presentation

## EDUCATION

**PhD in Supervised Machine Learning**, Copenhagen Business School, Denmark June 2022  
**M.Sc. in Economics**, University of Jena, Germany September 2013  
**B.Sc. in Economics**, Universidad de Antioquia, Colombia September — 2009

## ACTIVITIES

Steering board member: Network for European Data Scientists NeEDs project 2019 — 2022  
Invited to organize a session: EURO Operations Research Conference, Session organizer Summer 2022  
Invited talk: INFORMS Annual Meeting, United States (Online) November 2020  
Invited talk: CLAI02020, Madrid (Online) August 31-September 2, 2021