

**Juan Camilo Olaya Monsalve**  
**Economist and Data Enthusiast**

Medellin, Colombia • [juancamiloolaya83@gmail.com](mailto:juancamiloolaya83@gmail.com) • (+57) 305 3204958 • [Website](#)

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## **PROFILE**

Economist specialised in mathematical modelling and data science applied to business problems with experience in the implementation of advanced analytical solutions, process automation and design of predictive models using technological tools. I have led projects in multi-objective optimisation, risk analysis, and customer studies, and I stand out for my ability to solve complex problems efficiently. I possess a results-oriented approach and proven research and strategic analysis skills, complemented by a solid understanding of data-driven decision-making.

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## **EDUCATION**

<b>EAFIT University</b> M.S., Applied Mathematics Emphasis on Mathematical Optimisation	Medellin, Graduate January 2024 – Present
<b>EAFIT University</b> B.A., Economist Emphasis on Quantitative Economics.	Medellin, Undergraduate January 2017 – September 2021

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## **EMPLOYMENT HISTORY**

<b>GRUPO ÉXITO</b> Analyst of Planogramming and Assortment Models.	Envigado, Colombia April 2021 – September 2024
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- Business Process Automation (BPA) to increase team productivity, measured in time reduction.
- Development, implementation and maintenance of a mathematical model to optimise the use of display space in physical shops.
- Responsible for analysing extensive transactional data sets to extract meaningful patterns about customer behaviour and segmentation.
- Collaborate with cross-functional teams to understand business requirements, translate them into data-driven solutions, and effectively communicate findings to technical and non-technical stakeholders.
- Develop advanced algorithms to assess the substitutability or complementarity of products.
- Create and deploy numerous programmes to improve the organisation's assortment.

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## INTERNSHIP

### GRUPO ÉXITO

Data Scientist

Envigado, Colombia

June 2020 – January 2021

- Design an anomaly detection system using Natural Language Processing (NLP) to identify double promotions on the company's website, improving the virtual product offering.
- Participation in evaluating the impact of offers on sales in the small household appliances category.

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## INTEREST

Mathematical optimisation.

Dynamical systems.

Mathematical optimal control.

Process automation.

Economic analysis.

Business strategy.

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## SOFT SKILLS

Adaptability.

Analytical thinking.

Communication skills.

Problem-solving.

Detail oriented.

Leadership.

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## TECHNICAL SKILLS

**Software:** Version control system | Excel.

**Programming Languages:** Python | R | SQL.

**Frameworks:** Streamlit | Shiny | Machine Learning (TensorFlow, Scikit-Learn, R Torch).

**Libraries:** Pandas | NumPy | SciPy | Tidyverse.

**Visualisation:** Power BI | Tableau.

**Cloud computing:** Azure.

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## LANGUAGES

Spanish.....*Native speaker.*

English.....*Fluent*

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## PROJECTS

### QUANTITATIVE FINANCE LAB

[GitHub](#)

Owner

2023

The Quantitative Finance Laboratory is a research and analysis facility studying financial markets and instruments. The team serves as a hub for quantitative research, risk assessment, and economic modelling using computational tools leveraging mathematical techniques to develop innovative strategies for investment, portfolio management, and risk mitigation.