Juan Camilo Olaya Monsalve

Economist and Data Scientist

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PROFILE

Economist well versed in mathematical modelling and data science dedicated to leveraging data-driven insights to drive real-world business problems using solid analytical skills with +4 years of experience developing systems for data-based decision-making consisting of querying, analysis, description, modelling, and visualisation of data and skilled at improving efficiency through task automation, system design and data modelling.

EDUCATION

EAFIT University   Medellin, Graduate
M.S., Applied Mathematics   January 2024 – Present

EAFIT University   Medellin, Undergraduate
B.A., Economics   January 2017 – September 2021
Emphasis on Quantitative Economics.

EMPLOYMENT HISTORY

GRUPO ÉXITO   Envigado, Colombia
Analyst of Planogramming and Assortment Models.   April 2021 – Present

- Applying techniques to business process automation (BPA) to increase team productivity is quantified by reducing execution time.
- Develop, implement, and maintain a mathematical model for optimising the use of display spaces in physical stores.
- Responsible for analysing large transactional datasets to extract meaningful patterns about customer behaviour and segmentation.
- Collaborate with cross-functional teams to understand business requirements and translate them into data-driven solutions, developing KPIs to enrich analysis for decision-making.
- Develop advanced algorithms for assessing product substitutability or complementary.
- Communicate findings effectively to both technical and non-technical stakeholders.
- Create and deploy numerous programs to enhance the organisation's product assortment.

INTERNSHIP

GRUPO ÉXITO   Envigado, Colombia
Data Scientist   June 2020 – January 2021

- Designed an anomaly detection system using Natural Language Processing (NLP) to identify double promotions on the company website, improving the offer of products exhibited virtually.
- Participated in evaluating of the impact of offers on sales within the small appliance category.

INTERESTS

Mathematical optimisation.   Statistical inference.

Dynamical systems.   Statistical learning theory.

Mathematical optimal control.   Machine Learning.

SOFT SKILLS

Adaptability.   Critical thinking and problem solving.

Analytical thinking.   Detail oriented.

Communication skills.   Leadership.

TECHNICAL SKILLS

Software: Version Control System **|** Excel.

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

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

Visualization: Power BI.

LANGUAGES

Spanish..............***Native speaker.***   English.....................***Fluent.***

PROJECTS

PROJECT PORTFOLIO   [Web](Web)

A personal collection of completed and ongoing projects that showcase my skills, experience, and accomplishments.

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.