



Agustín Rico

MATHEMATICAL ENGINEER

Profile

I'm a Mathematical Engineer (or Applied Mathematician) from Universidad EAFIT (Medellín, Colombia). My field of expertise is Data Science (Analytics and Machine Learning) and Operations Research (Mathematical Optimization and Heuristics). I have extensive experience using MATLAB, Python, and Gurobi, and some experience using SQL.

Employment History

Portfolio Optimization Engineer, Arnie, Remote

MARCH 2023 — PRESENT

I've designed and implemented optimization techniques and algorithms to solve a highly constrained portfolio optimization problem.

Freelancer, UpWork, Remote

JULY 2021 — PRESENT

I've been working as a freelancer at UpWork. My jobs have included coding development, designing and implementing optimization and ML models, and heuristics algorithms. I've earned 'Rising Talent' and 'Top Rated' badges, representing the top 10% of talent on Upwork.

Machine Learning Intern, Intercolombia (ISA), Medellín, Colombia

JULY 2021 — JANUARY 2022

I worked as an intern in the Analytics and Machine Learning Department of the largest Colombian energy company. I designed a Machine Learning model to predict electric failures based on heterogeneous maintenance report data..

MATLAB Engineer, Parala, Remote

NOVEMBER 2022 — JUNE 2023

I was responsible for ensuring the reliability, accuracy, and efficiency of Parala's portfolio optimization pipeline by scrutinizing its code for robustness, correctness, and overall well-being.

Education

Mathematical Engineering (Applied Mathematics), Universidad EAFIT, Medellín, Colombia

JULY 2017 — NOVEMBER 2023

B.Eng. in Mathematical Engineering or Applied Mathematics. My area of interest has been Operations Research and Data Science. I've taken special courses in these areas, such as Advanced Heuristics and Time Series. Also, I was part, as principal author, of some related investigation projects, such as:

- Mathematical Optimization Model and Heuristic Algorithm to minimize traveled distances by teams in the NBA (coauthored with Ph.D. Juan C. Rivera:
<https://scholar.google.com.co/citations?user=PE435RkAAAAJ&hl=es>).
- Mathematical Formulation for the Multi-Sport Event Scheduling Problem (coauthored with Ph.D. Juan C. Rivera).

Details

Medellín, Colombia

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Links

[LinkedIn](#)

[UpWork](#)

Skills

Operations Research

Machine Learning

Python

Data Science

MATLAB

SQL

Languages

English

Spanish

Extra-curricular activities

Ultimate Frisbee Player

I'm a high-performance Ultimate Frisbee player, playing for two clubs in Medellín and EAFIT's ultimate frisbee team. I have participated in multiple international tournaments representing the Colombian national team.

Courses

Advanced Analytics/Machine Learning in Cloud Solutions, Universidad EAFIT

JULY 2021 — JANUARY 2022

English for Adults, Universidad EAFIT

JULY 2016 — APRIL 2017