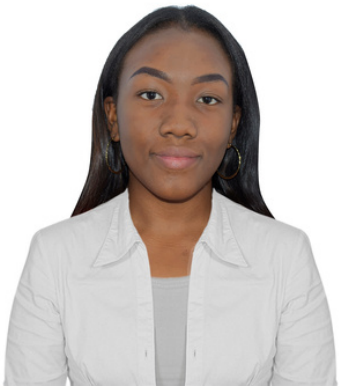
Myllee Sarleth Mosquera Rivas



PERSONAL PROFILE

I am a Mathematical Engineer with experience in modeling and simulation, stochastic processes, optimization, data analysis, statistics, and machine learning algorithms, applied to various fields. I am a responsible, perseverant individual with a strong willingness to learn. I am seeking challenging opportunities where I can continue to grow professionally and contribute significantly to the achievement of organizational goals.

CONTACT

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Medellín, Colombia

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WORK EXPERIENCE

ENERGY EFFICIENCY INTERN

ISAGEN

Medellín, Colombia | Jul. 2023 - Jan. 2024

- Understand the production variables that affect energy consumption.
- Design, build, and validate predictive energy consumption models.
- Develop machine learning algorithms in Python.

EDUCATION

MATHEMATICAL ENGINEERING

EAFIT UNIVERSITY

Medellín, Colombia | Jan. 2020 - Jun. 2024

ADMINISTRATIVE ASSISTANT TECHNICIAN

MICROEMPRESAS DE COLOMBIA

Medellín, Colombia | Jan. 2018 - Nov. 2019

SKILLS

- Data Analysis
- Optimization
- Mathematical and Statistical Modeling and Simulation
- Machine Learning Algorithms
- Programming Languages: Python, MATLAB, SQL, R, and Power BI
- Office Tools

APTITUDES

- Perseverance
- Resilience
- Proactivity
- Productivity
- Teamwork
- Assertive Communication
- Willingness to Learn
- Problem Solving

LANGUAGES

- Spanish | Native
- English | Intermediate (B1) - APTIS Certification

RESEARCH PROJECTS

Mathematical Modeling for Malaria under Resistance and Population Movement

EAFIT University | March 2022 - May 2022

- Analyze the existence of endemic equilibrium, and develop a solution algorithm in Python for the optimal control problem.

Modeling of a Periodically Forced Pendulum with a Cubic Restoring Force

EAFIT University | July 2022 - November 2022

- Analyze and implement in MATLAB a dynamic model for the physical study of the behavior of a forced pendulum.

Stochastic Volatility and Kullback-Leibler: A Strategy for Portfolio Optimization.

EAFIT University | July 2022 - November 2022

- Propose a method for comparing volatility distributions using Kullback-Leibler divergence to contribute to the improvement of investment portfolio diversification.

Beta Regression Model for Estimating School Dropout Rates

EAFIT University | January 2023 - May 2023

- Design and develop a Beta regression model to predict the proportion of students who may drop out of a particular educational institution, using variables that impact school dropout rates.

Walkability Indices: Integration of Environmental, Social, and Infrastructure Components.

EAFIT University | January 2024 - June 2024

- Build a fuzzy logic-based model to establish a walkability index in various areas of Medellín, addressing both objective measures of walkability and accessibility as well as pedestrians' subjective perceptions and experiences.

ACHIEVEMENTS

SCHOLARSHIP, EAFIT University

January 2020

Higher Education Scholarship for the Undergraduate Program in Mathematical Engineering

International Conference on Financial Risk

November 2022

- Participation in the conference as a Speaker, presenting the research titled "Stochastic Volatility and Kullback-Leibler: A Strategy for Portfolio Optimization".