DIANA ZULUAGA

@ dianitapzp96@gmail.com   📞 +57 3013295445   📍 Medellin, Colombia
in diana-zuluaga-pulgarin   🔗 dianapzp96

PROFILE

Environmental engineer with 3+ years of experience in data science applied to climate research and energy industry. Especially interested in automation, data processing and predictive modelling. Passionate about learning new things and collaborating with people. Cooking, hiking and mountain biking enthusiast.

SKILLS

Python: pandas, numpy, scipy, scikit-learn

Data visualization: plotly, matplotlib, seaborn, folium

Statistics   Data analysis   Geospatial analysis

Machine learning   Time series   SQL   Docker

EXPERIENCE

RESEARCHER
Ministry of Science

📅 Sep 2020 – Ago 2022   📍 Medellín, Colombia

- Delivered a diagnosis of the availability and variability of solar power resource in Colombia as part of Government initiative to promote renewable energy projects in the country.

MARKET EXCHANGES ANALYST
XM Compañía Expertos en Mercados S.A. E.S.P.

📅 Jun 2019 – Jul 2020   📍 Medellín, Colombia

- Automated settlement and billing of energy market transactions for Colombia's grid operator to optimize the process and meet regulatory deadlines.
- Implemented changes in the settlement and billing of energy market transactions based on regulatory changes.

JUNIOR RESEARCHER
EIA University

📅 Jan 2019 – Jun 2019   📍 Medellín, Colombia

- Characterized spatial and temporal variability of solar radiation in Colombia.

INTERN ENGINEER
ISAGEN S.A. E.S.P.

📅 Jan 2018 – Jul 2018   📍 Medellín, Colombia

- Automated long-term hydrological flow projections of rivers that serve as affluents of Colombia's water reservoirs, to optimize operation of hydraulic power plants.

LANGUAGES

English   C1
Spanish   Native

EDUCATION

M.Eng. in Water Resources Engineering
National University of Colombia

📅 2020 – 2022   📍 Medellin, Colombia

B.Eng. in Environmental Engineering
EIA University

📅 2014 – 2018   📍 Medellin, Colombia

CERTIFICATES

Data Scientist - Data Science For All (DS4A)
Correlation One – Ministry of IT

📅 Sep 2020 – Nov 2020

PROJECTS

- *Predicting high-tension transmission line failures due to atmospheric discharges* (Final Project, Data Science for All DS4A, Colombia).
- *Spatio-temporal variability of solar resource in Colombia* (Master's Thesis, National University of Colombia, Medellin, Colombia).
- *Assessment of interpolation techniques for solar radiation in Colombia* (Bachelor's Degree Final Project, EIA University, Medellin, Colombia).

REFERENCES

Héctor Gómez Marín
@ Market Exchanges Specialist in XM S.A. E.S.P.
✉ hgomez@XM.com.co

Santiago Ortega Arango
@ Director I+D+i in Emergente Energía Sostenible S.A.S.
✉ santiago.ortega@eia.edu.co