Andres Felipe Beltran Rodriguez

Bogotá - Colombia • afbeltranr@unal.edu.co • 3057104726

Profile

I am a Chemist and Data Analyst from the Universidad Nacional de Colombia who leverages statistics and programming to drive advancements in industry and academia. With expertise in data science, R and Python programming, and version control using Git and GitHub, I apply analytical rigor to both scientific and personal projects.

I bring an objective, data-driven mindset to problem-solving while fostering a collaborative work environment. I thrive in teams, using data as a transformative tool to generate insights and drive impact. Through my experiences, I have strengthened my resilience and equanimity—qualities that enable me to navigate challenges and deliver results under pressure.

Work Experience

The princeton review - Tutor.com   Remote
Chemistry tutor   February 2021 – Present
- Development and application of personalized communication techniques to introduce students to scientific topics, offering new perspectives and tools to excel with their academic challenges.
- Reviews avaliable here.

Sistema General de Regalías - Universidad Nacional de Colombia   Bogotá
Research and development chemist   February 2022 - April 2022
- Use of data visualization in R to effectively communicate results of phenolic compounds extraction.
- Data-driven decision making to minimize resource use. Reproducible report available here.

Agrilab SAS   Bogotá
Research and development chemist   January 2021 - March 2021
- Optimization of an irrigation water cleaning methodology using Desing of Experiments and Response Surface Methodology.
- Application and statistic validation in R of a new alternative silicon quantification method in fertilizers and organic matter. Reproducible report available here.

Belcorp   Tocancipá
Chemical Laboratory Analyst   Septiembre 2021 - Diciembre 2021
- Insight generation about emulsion composition and their stability to inform data-driven decision making using design of experiments and response surface optimization.

Københavns Universitet   Remote
Chemical Data Analyst   Abril 2020 - Agosto 2020
- Chemical data cleaning, structuring, validating, visualization and modeling to optimize rice husk separation process.

Belcorp   Tocancipá
Chemical trainee   July 2019 - February 2020
- Waxes' thermal behavior exploration by experimentation and multivariate statistics (PCA).
- Partial least squares multivariate regression modeling.

Education

Google Data Analytics Professional certificate   September 2024
Coursera - Google
relevant topics: SQL, R, Data cleaning, Data visualization, Tableau, Spreadsheets, Bussiness analysis.

Python and Pandas for Data Engineering   February 2023
Coursera - Duke university
Relevant topics: Python, problem solving, computational logic,Big data, data structures.

Data science: foundations using R   Julio 2022
Coursera - Johns Hopkins University
Relevant topics: data cleaning, analysis, and visualization using R, data gathering, reproducible research, using github to manage data science projects.

Chemistry   April 2021
Universidad Nacional de Colombia
Thesis: development of a new waxes quantification method using multivariate partial least squares regression.

Chemometrics   december 2020
Universidad Nacional de Colombia
Relevant topics: R programming, support vector machines, Random forest, Principal component analyisis.

portfolio

The result of my constant learning and skills developing can be evidenced at my portfolio: afbeltranr.github.io

Skills

Statistics: distributions evaluation, ordinary and multiple least square regression models, logistic regression, Design of experiments, response surface and desirability function optimization, hierarchical clustering methods, Principal components analysis, genetic algorithms variable selection.
programming: R, Python, SQL, Git, LaTeX, Spreadsheets, GCP.
Soft: active listening, stress management, conflict resolution, adaptability, critical thinking, empathy, efficient collaboration.
Instrumental analysis: Chromatography, spectroscopy, differential scanning calorimetry.