

Skills

- SQL (Window and aggregation functions, joins, subqueries, CTE's)
- Python (Pandas, NumPy, Matplotlib, scikit-learn, BeautifulSoup)
- Excel (VLookup, Conditional Formatting, Pivot Tables)
- Microsoft Power BI (DAX, Power Query, bookmarks)

Projects

STUDY OF THE COMPOSITION OF THE WORLDWIDE ENERGY MATRIX – Personal Project Novembre 2022

- Utilized **Python** to analyze data from power plants around the world and got insights about how is the worldwide energy matrix composed
- Analyzed the overall percentage of plants with clean energy sources in the world and also for top countries
- It was identified countries with the largest power generation capacity and also countries with highest and lowest percentage of clean energy generation

ANALYZING POWER PLANTS DATA WITH SQL – Personal Project January 2023

- Utilized **SQL Server** and I proved that it was possible to perform the same queries from the Python project but in SQL
- Utilized aggregation functions, JOIN clauses and subqueries
- Utilized data manipulation and data query commands

BAD CAR PURCHASE PREDICTION – Personal Project April 2023

- Created a **machine learning model** to make predictions about if a car purchase is bad or not
- Performed EDA, feature engineering and hyperparameters tuning for the training dataset
- Utilized different ML techniques like **logistic regression, decision tree, random forest** and **gradient boosting**

COFFEE STORES SALES DASHBOARD – Personal Project June 2023

- Utilized **Power Bi** to create a totally interactive dashboard for the sales of a coffee shop company
- Utilized DAX, Power Query and bookmarks for the dashboard creation
- Created sales forecast charts, “what if” scenarios related to profit, custom slicers with bookmarks, etc

KNOWING THE VEHICULAR MARKET WITH WEB SCRAPING – Personal Project August 2023

- Utilized **BeautifulSoup** and **Requests** Python libraries to extract the HTML file from the mercadolibre website
- Performed EDA, created visualizations and got insights using pandas, matplotlib and other tools
- It was identified the average prices for vehicles in the Colombian market

Education

BACHELOR OF MECHANICAL ENGINEERING – Universidad del Norte – Barranquilla, Colombia December 2021

DATA ANALYSIS WITH PYTHON: ZERO TO PANDAS – Online Course November 2022

Introduction to data analysis covering the basics of Python, Numpy, Pandas, Data Visualization, and Exploratory Data Analysis. This course is offered on <https://jovian.com> and has more than 90000 registered users. This is my course certificate: [Certificate of Accomplishment - LUIS FELIPE CORTÉS PACHECO - Data Analysis with Python: Zero to Pandas - Jovian](#) .

MACHINE LEARNING WITH PYTHON: ZERO TO GBMS – Online Course April 2023

Introduction to supervised machine learning, decision trees, and gradient boosting using Python. This course is offered on <https://jovian.com> and has more than 29000 registered users. This is my course certificate: [Certificate of Accomplishment - LUIS FELIPE CORTÉS PACHECO - Machine Learning with Python: Zero to GBMs - Jovian](#)