Project Proposal: Global energy prediction

Description:

Energy production companies want to understand global energy trends. What are the resources which produce more energy and from which resources more energy is being consumed. We have consumption and production data from different resources: Coal, Natural Gas, Nuclear, and petroleum. Dataset contains countries from multiple regions over the time period 1980 to 2021.

Understanding of energy production and consumption trends over a time period will help energy companies to make decisions which resource is more energy producing and where to invest to produce more energy and what are the consumption trends, from which resource energy is getting consumed more.
For this analysis I will be using global energy statistics data from Kaggle.
https://www.kaggle.com/datasets/akhiljethwa/world-energy-statistics

This data set has production and consumption data from 230 countries, for 4 different energy resources Coal, Natural Gas, Nuclear, and petroleum. Analyzing trends for 40 years can help make production and demand predictions.

First I will be performing data wrangling and exploratory analysis on data and plot relations between different features and explain how these features are related and changing from 1980 to 2021.
For modeling, I will consider different time series forecasting algorithms, depending on the type of demand forecasting I decide to undertake, after having finished EDA. I will also consider including appropriate interpretability analysis—if applicable.

Project Deliverables:

Code - Jupyter notebooks that will developed
Project Report - PDF
Presentation - Powerpoint slides

All the project documentation will be uploaded in the Github repository.