

NAAN MUTHALVAN

ARTIFICIAL INTELLIGENCE

PROJECT TITLE

MEASURE ENERGY
CONSUMPTION

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DEPT : COMPUTER SCIENCE AND ENGINEERING

YEAR & SEM : III & 05

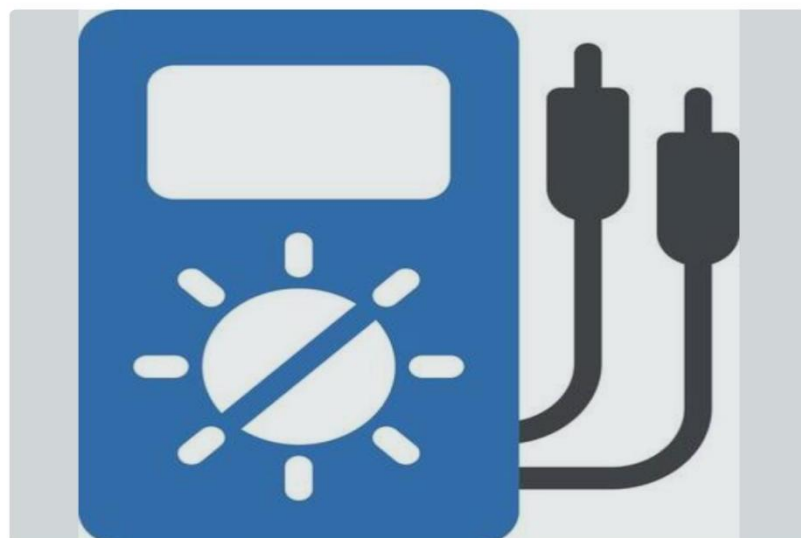
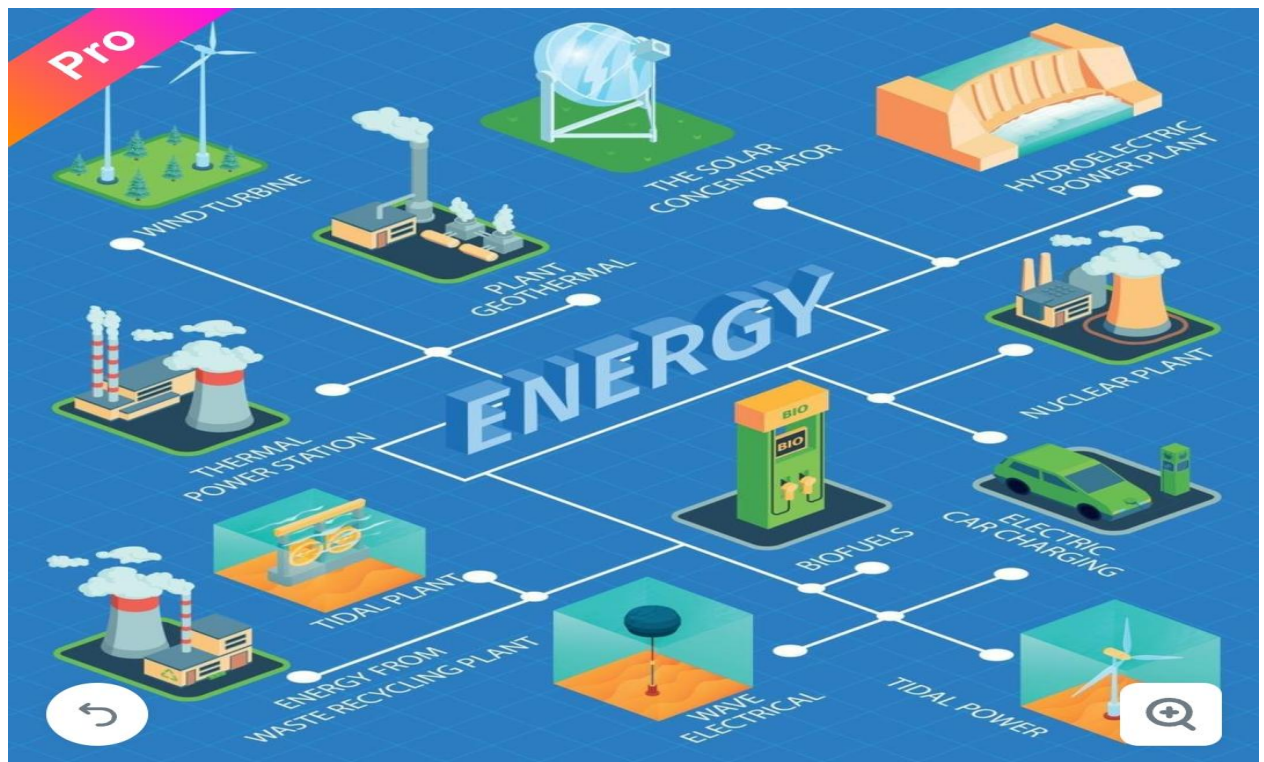
COLLEGE : PARK COLLEGE OF ENGINEERING AND
TECHNOLOGY

PHASE 1

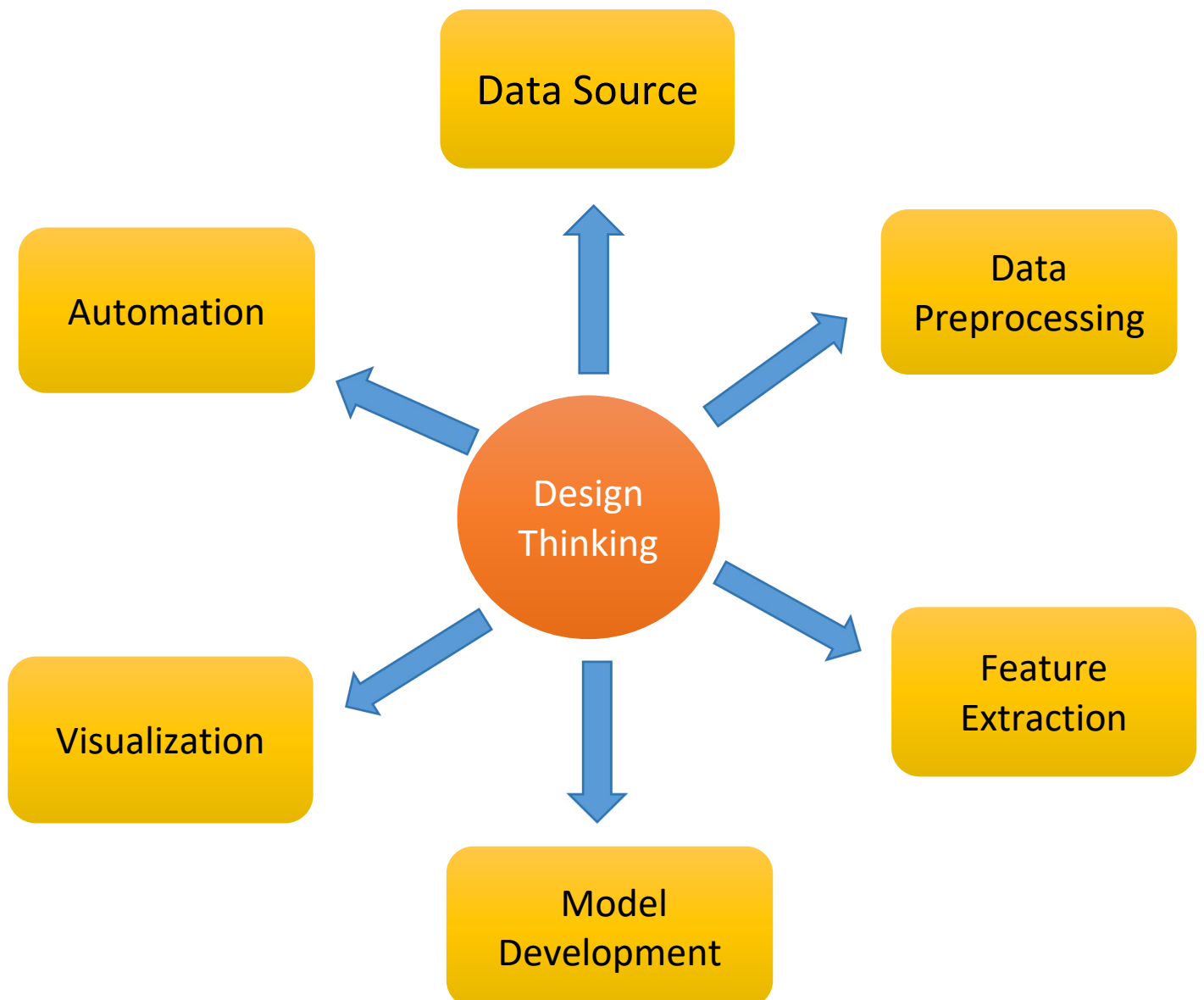
PROBLEM DEFINITION AND DESIGN THINKING

PROBLEM DEFINITION

The problem at hand is to create an automated system that measures energy consumption, analysis the data, and provides visualizations for informed decision making. This solution aims to enhance efficiency, accuracy, and ease of understanding in managing energy consumption across various sectors.



DESIGN THINKING



Data Source

Identify an available dataset containing energy consumption measurements.

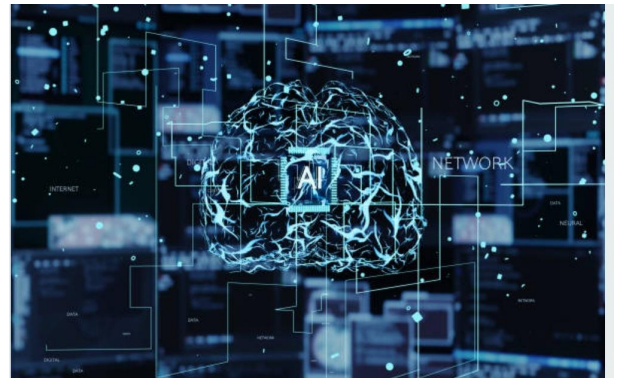


Data Preprocessing

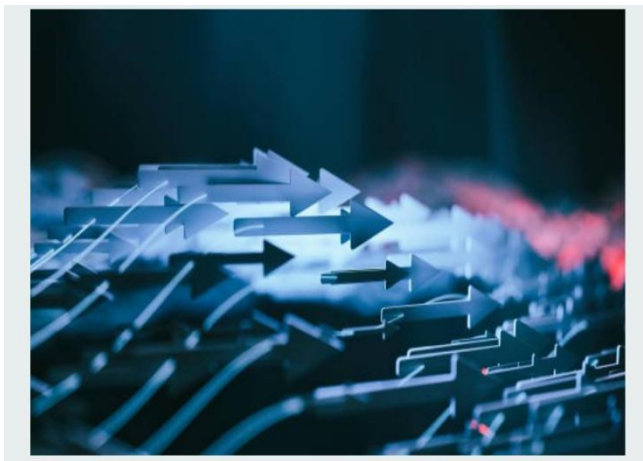
Clean,transform and prepare the dataset for analysis.



Clean



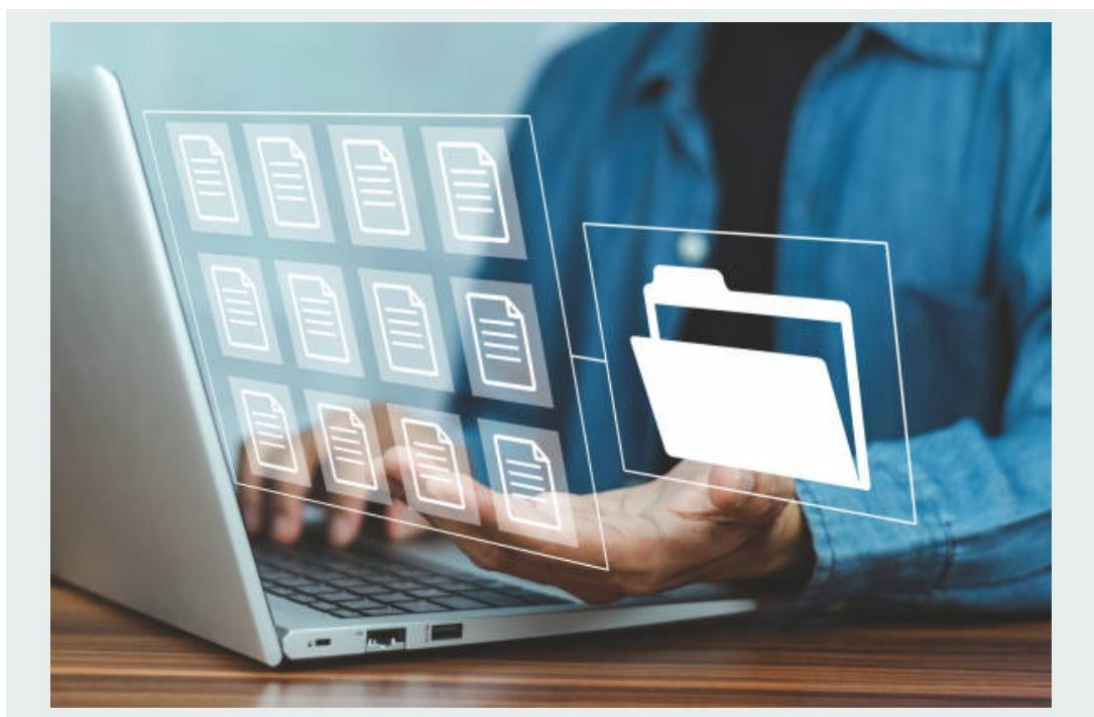
Analysis



Transform

Feature Extraction

Extract relevant features and metrics from the energy consumption data.



Model Development

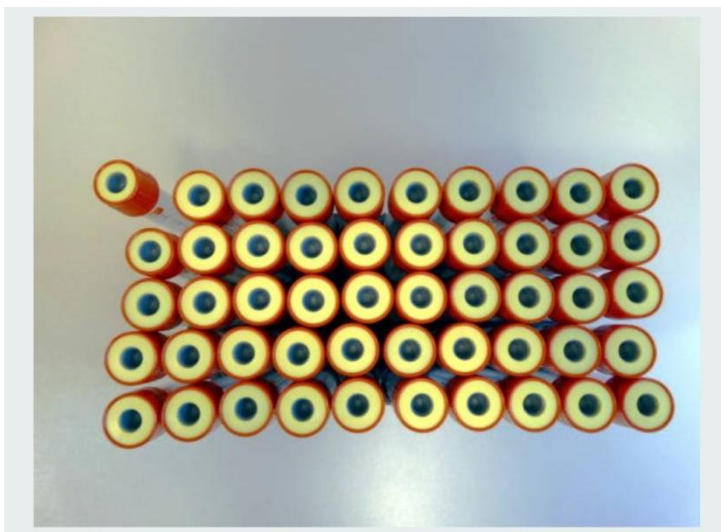
Utilize statistical analysis to uncover trends, patterns and anomalies in the data.



Statistical Analysis



Patterns



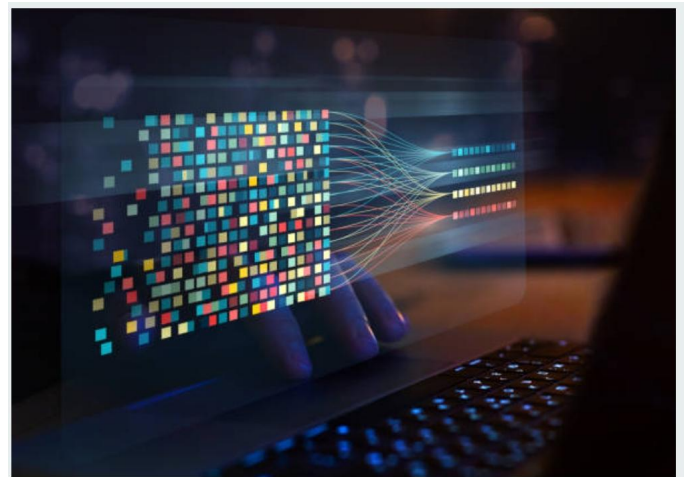
Anomalies

Visualization

Develop visualization (graphs,charts) to present the energy consumption trends and insights.



Graphs



Visual Insights



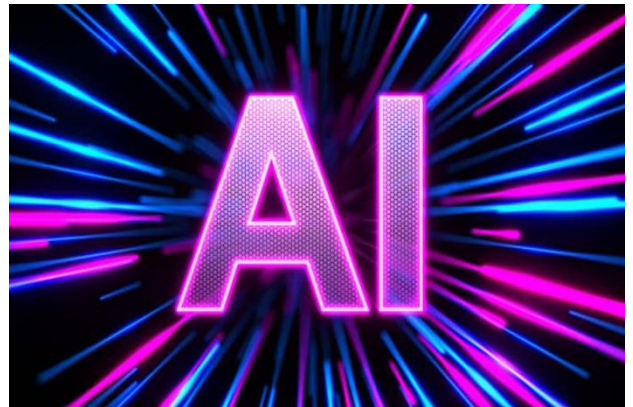
Charts

Automation

Build a script that automates data collection, analysis and visualization processes.



Analysis Process



Visualization Process