

Skills

- SQL (MySQL)
- Python (Pandas, NumPy, SciPy, scikit-learn, Matplotlib)
- Tableau
- Machine Learning (Model Development, Hyperparameter Tuning, Feature Selection)
- Excel (VLookup, Conditional Formatting, Pivot Tables)
- PySpark
- Microsoft Power BI

Projects

FLIGHT FARE PRICE ANALYSIS AND PREDICTION

July 2024

- Developed a **machine learning** model to predict flight prices using a diverse range of features, including airline, source, destination, and duration.
- Collected and pre-processed data using **PySpark** on **Azure Databricks**, ensuring data quality by handling missing values, duplicates, and outliers.
- Implemented data visualization using **Matplotlib** and **seaborn** to explore relationships between features and prices, identifying key factors influencing flight costs.
- Trained multiple machine learning algorithms including **K-Nearest Neighbors**, **Decision Tree**, and **Random Forest Regressor** with Random Forest achieving the highest accuracy with an R^2 score of 96.08% after hyperparameter tuning.

VEHICLE ADVERTISEMENTS ANALYSIS

June 2024

Vehicle Price Prediction

- Developed a machine learning model to estimate vehicle prices based on features such as brand, condition, and mileage.
- Pre-processed data using **Python**, including handling missing values, encoding categorical variables, and feature engineering.
- Applied **Recursive Feature Elimination** (RFE) for feature selection, and trained various regression models including **Linear Regression** and **Random Forest**.

User Segmentation Analysis

- Performed user segmentation based on advertisement behaviours using **K-Means clustering**.
- Cleaned and encoded data, reduced feature with correlation, and identified user segments to enhance marketing strategies.
- Visualized clustering results and provided descriptive statistics for each user segment.

Geographical Demand and Supply Analysis

- Analysed geographical distribution of vehicle advertisements to understand supply and demand trends from September 2022 to April 2023.
- Identified trends in advertisement supply and demand, noting a shift from surplus to potential undersupply, with implications for pricing strategies and market dynamics.

ONLINE BOOK MANAGEMENT SYSTEM

May 2024

- Developed an online book order system with **Streamlit**, featuring both a user-side application and an admin panel.
- The user-side application includes registration, login, book browsing, cart management, and order history functionalities.
- The admin panel supports user management and allows adding new books to the catalogue through a form.
- Utilized **MySQL** with MySQL.Connector to manage user information, book details, and order data.

Education

DIPLOMA IN BIG DATA ANALYTICS –CDAC Kharghar –Mumbai, Maharashtra

August 2024

BACHELOR'S OF ENGINEERING –Mumbai University –Mumbai, Maharashtra

April 2022

HIGHER SECONDARY CERTIFICATE(HSC) –Wilson College –Mumbai, Maharashtra

March 2024

SECONDARY SCHOOL CERTIFICATE(SSC) –Bal Mohan Vidya Mandir –Mumbai, Maharashtra

March 2024