Machine Learning Term Project Group 4



Responsibilities:

1.DEEKSHA AKKATI: Data Engineering and Feature Design

- Collecting and preprocessing historical stock data for NVDA and NVDQ.
- Integrating additional datasets like S&P500 trends or US Consumer Confidence while ensuring data quality and alignment.

2. DEV MEWADA: Machine Learning Model Development

- Building and optimizing predictive models for stock prices (highest, lowest, and average closing prices).
- Implementing and evaluating time series models (e.g., Arima, Transformer and LSTM).
- Training and validating the trading strategy classification model.

3. HEMANTH: Web Interface

- Develop a responsive web app for Smart Trader using STREAMLIT.
- Integrating the ML models with the app, enabling real-time predictions.

4. JAI PRATHIK: Testing and Documentation

- Performing back testing of predictions and trading strategies to evaluate performance metrics for different scenarios and analyze model accuracy.
- Documenting the entire process, including model design, quality analysis, successes, failures, following the instructions for the report and README file.