



Stock Price Prediction

Idea:

In this project, we will explore stock price prediction using computational finance techniques and machine learning models. This hands-on approach will allow you to apply theoretical concepts to real-world financial data, enhancing your practical skills.

Why?:

Accurate stock price prediction can provide valuable insights for making informed investment decisions and risk management. By mastering these techniques, you will gain a competitive edge in the finance industry, where data-driven strategies are increasingly crucial.

Tech-stack:

Python, Y-Finance, NumPy, Pandas, Seaborn, Predictive Model.

Similar Idea:

1. Cryptocurrency Price Prediction :

Develop a machine learning model to predict the prices of popular cryptocurrencies like Bitcoin, Ethereum, etc. The project involves gathering historical price data, performing feature engineering, building regression models, and visualizing future price predictions.

2. House Price Prediction :

Develop a regression model to predict house prices based on features such as location, number of bedrooms, bathrooms, square footage, and other relevant

factors. The project includes collecting data from real estate websites or datasets , performing EDA, and visualizing the results.

3. Traffic Flow Prediction :

Predict traffic flow and congestion levels on roads based on historical traffic data, weather conditions, and events. This project can help in optimizing traffic management and reducing congestion.

4. Sales Forecasting for Retail :

Build a model to forecast sales for a retail store. This involves analyzing historical sales data, identifying trends and seasonality, and using time series forecasting methods to predict future sales.

5. Energy Consumption Prediction :

Predict the energy consumption of a household or building based on historical energy usage data and other factors like weather conditions, occupancy, and appliances used. This can help in optimizing energy usage and reducing costs.

6. Weather Forecasting :

Develop a model to predict weather conditions such as temperature, humidity, and precipitation. This involves collecting historical weather data, performing EDA, and using time series analysis or regression models to make predictions.