

1. Google Stock Prediction Using Recurrent Neural Network

This project aims to predict Google stock prices using Recurrent Neural Networks (RNNs), which are well-suited for time-series forecasting due to their ability to capture temporal dependencies. Historical stock data, including features like open, close, high, low prices, and trading volume, will be collected. Data preprocessing involves handling missing values, scaling features, and creating time-series sequences as input for the RNN. A Long Short-Term Memory (LSTM) network, a variant of RNN designed to address the vanishing gradient problem, will be employed for the prediction. The model is trained to minimize Mean Squared Error (MSE) by optimizing weights through techniques like gradient descent. Performance evaluation involves using metrics like Root Mean Squared Error (RMSE) and Mean Absolute Error (MAE). The project explores hyperparameter tuning, including the number of LSTM layers, units, and learning rate, to enhance prediction accuracy. By providing insights into future stock trends, this project can assist investors in making informed decisions, though it acknowledges the inherent unpredictability and risks associated with stock markets.

2. Fake Product Review Monitoring & Removal for Genuine Ratings

This project addresses the challenge of identifying and removing fake product reviews to ensure genuine ratings for online platforms. Using natural language processing (NLP) and machine learning techniques, the system analyzes reviews to detect fraudulent content. The project begins with a dataset containing labeled reviews (genuine or fake). Preprocessing steps include tokenization, stop-word removal, stemming, and vectorization using methods like TF-IDF or word embeddings. A classification algorithm, such as logistic regression, random forests, or deep learning-based models like BERT, is trained to identify patterns indicative of fake reviews. Features like review length, sentiment score, and linguistic inconsistencies are also analyzed. The system is evaluated using metrics such as accuracy, precision, recall, and F1-score. An additional layer of fraud detection involves analyzing user behavior patterns, such as review frequency and product diversity. This solution enhances trust in online marketplaces by providing genuine ratings and improving user satisfaction.

3. Covid 19 detection Using X Ray Images Using Deep Learning

The rapid and accurate diagnosis of COVID-19 is crucial for controlling its spread and ensuring timely medical intervention. Traditional diagnostic methods, such as RT-PCR, are timeconsuming and may lack widespread accessibility, particularly in resource-constrained settings. This study explores the application of deep learning techniques to detect COVID-19 from chest X-ray images, offering a faster and more accessible diagnostic alternative. By utilizing neural networks (CNNs), we developed a model capable of classifying X-ray images into COVID-19 positive, pneumonia, and normal cases. The proposed framework leverages pre-trained architectures such as ResNet, VGG, and DenseNet to enhance accuracy and efficiency. The dataset includes publicly available X-ray images, pre-processed and augmented to improve generalization. Our experimental results demonstrate that the model achieves high accuracy, precision, recall, and F1-score, showcasing its potential as a reliable tool for early COVID-19 detection. This approach could complement existing diagnostic methods, reducing the burden on healthcare systems and enabling rapid screening in clinical and remote settings.