MONISHA M

Scanned with OKEN Scanner

PROJECT TITLE

Recurrent Neural Networks (RNNs) model for sentiment analysis on the IMDB movie review dataset

Scanned with OKEN Scanner

AGENDA

Objective: To perform sentiment analysis on movie reviews using Recurrent Neural Networks.
Approach: Train an RNN model on the IMDB dataset to classify movie reviews as positive or negative

Scanned with OKEN Scanner

PROBLEM STATEMENT

Sentiment analysis, also known as opinion mining, involves analyzing the sentiment expressed in text data. In this project, the problem is to classify movie reviews as positive or negative based on their sentiment

Scanned with OKEN Scanner

PROJECT OVERVIEW

The project aims to develop a machine learning model capable of automatically categorizing movie reviews into positive or negative sentiments. This can be useful for movie studios, critics, and consumers to understand audience reactions and sentiments towards movies.

Scanned with OKEN Scanner

WHO ARE THE END USERS?

Movie Studios: To gauge audience reactions to their movies and make informed decisions for future productions.
Movie Critics: To analyze and summarize public sentiment towards movies in their reviews.
Audience: To access aggregated sentiment analysis for informed movie-watching decisions.

Scanned with OKEN Scanner

YOUR SOLUTION AND ITS VALUE PROPOSITION

Our solution involves training an RNN model on a dataset of movie reviews with associated sentiment labels. The model learns to classify reviews as positive or negative based on the text content. The value proposition lies in providing an automated and efficient sentiment analysis tool that can process large volumes of reviews quickly and accurately

Scanned with OKEN Scanner

THE WOW IN YOUR SOLUTION

The wow factor of our solution lies in its ability to understand and analyze the nuanced sentiment expressed in movie reviews. By leveraging deep learning techniques, the model can capture subtle cues and contextual information to make accurate sentiment predictions.

Scanned with OKEN Scanner

MODELLING

We use a Recurrent Neural Network (RNN) architecture for sentiment analysis. The RNN model processes sequential input data, such as text, and learns to capture temporal dependencies in the data. We use an embedding layer to convert words into dense vectors, followed by one or more LSTM layers to process the sequential data. Finally, a dense layer with a sigmoid activation function is used for binary classification.

Scanned with OKEN Scanner

RESULTS

After training the RNN model on the IMDB dataset, we achieved an accuracy of XX% on the test set. The model demonstrates robust performance in classifying movie reviews into positive or negative sentiments, showcasing its effectiveness in sentiment analysis tasks.

Scanned with OKEN Scanner