Sentiment-Analysis-of-movie-reviews

Sentiment analysis of movie reviews using Recurrent neural network and LSTM.

Sentiment analysis has become an important tool that can analyse review on any product or service that can be reviewed. Same goes to movie, all the audient are freely to make their own reviews on the movie that they watch and the reviews can be positive or negative based on audient satisfactions. Automated sentiment analysis is very important to make sure the analysis produce an accurate result and in faster time. By using the deep learning as the based to create the automated sentiment analysis it will be the great decision because of the deep learning structure that have multilevel of layer that can have sensitive process to classify the data. Upgrading the sentiment analysis using Recurrent Neural Networks (RNNs) and addition of Long Short-term Memory (LSTM) and also some modification on the number of layer with the mathematical calculation can improve the analysis accuracy. The dataset of the movie reviews will be collected on IMDB movie reviews database. Numpy, Pandas are used. Tensorfloww 2.2.0 is used in google colab

NOTE: There is a set of 25,000 highly polar movie reviews for training and 25,000 for testing. This project helps in analyzing the reviews that the review is positive or negative. Here we get an accuracy of 84.24% in the test set. Also, another point to be noticed is that the results on the training set are a bit better than the results on the test set, which indicates that the model might be over-fitting a bit.