

BSc (Hons) in Information Technology Year 4

Lab 6 - Sentiment Analysis

SE4050 – Deep Learning

Semester 2, 2022

Deadline - (18-10-2022)

In this week's Lab assignment, you will be working on a real-world Natural Language Processing scenario. Specifically, your task will be to build, train and test a Recurrent Neural Network based model to analyze movie revies and predict the sentiment of the reviewer.

- First, accept the assignment from GitHub classroom using the below link. It contains a copy of the dataset as a text file.
 - o https://classroom.github.com/a/VYY4z-d2
 - o It contains sentences labelled with positive and negative sentiment extracted from reviews of movies.
 - o There are 1000 reviews, each provided on a single line in the format of sentence score. The score is either 1 (for positive) or 0 (for negative).
 - o A sample review and score from this dataset is provided here below.

I would give this television series a 10 plus if i could. 1

- Use a Jupyter notebook to compile your solution. (Make sure the name of the notebook is your IT number. Eg ITxxxxxxxx.ipynb)
- You can split the dataset into training, testing and validation sets and use the test set accuracy as the metric to evaluate the performance of the model.
- You can also try some optimizations afterwards to improve the accuracy of the Model.
 - Please make a note of the accuracies and the changes done within the Jupiter notebook itself.

Submission

 Update the GitHub repository before the deadline. And submit only the ipynb to the courseweb submission link.