E0-334 Deep Learning for NLP

Assignment 5

(due by 27th Sept, 11:59 PM)

Note: Use the following link for submitting your results.

`https://forms.office.com/r/AagPRVHEs8`

Problem:

Consider the problem of Text Classification. In this assignment, we will compare the following two methods discussed in [1]:

- Transformer based text encoding model

- Deep Averaging Network (DAN).

In the case of transformers, you are expected to study the performance with respect to the number of encoder blocks, with/without the use of positional embeddings. Different word/bi-gram embeddings could be tried while using DAN.

The two models will be tested on the following two datasets:

i) The news dataset (with new test set labels) used in Assignment 4

ii) The dataset made available in the directory "Assignment 5". The last 25000 examples are used for Testing purpose.

Report the micro-average F1 scores of the designed classifiers on both the datasets.

Reference:

1. Cer *et al*, Universal Sentence Encoder, Online version available at `https://arxiv.org/pdf/1803.11175.pdf`