E0 334 - Deep Learning for NLP

Assignment 2

(due by 20th Sept, 09:59 PM)

Note: Use the following link for submitting your results of Assignment 2.

https://forms.office.com/r/jCBdVXi2Fj

Problems:

In this assignment, we will study the use of attention mechanism ([1], [2]) to translate human readable dates to machine readable dates. The training dataset consisting of 36,000 examples is provided ('Assignment2_train.txt'). Report your results on the validation set ('Assignment2_validation.txt') using the form mentioned above.

Consider the tasks of translating "Saturday 29 February 2021" to "2021-02-29" and "29 February 2020" to "2020-02-29". For these examples, visualize the parts of the input to which every output pays attention to, while doing the translation using the trained model.

References

1. Bahadanau et al, Neural Machine Translation by Jointly Learning to Align and Translate.

(https://arxiv.org/pdf/1409.0473.pdf)

2. Luong et al, Effective Approaches to Attention-based Neural Machine Translation. (https:

//arxiv.org/pdf/1508.04025)