

Shared Task – 4 Report

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Instruction to run the code

The paths for loading the saved model needs to be set. Takes a bit time to predict and write to a file. Predicted output and corresponding input is also uploaded.

Details

Train test split is 4:1

A window length of 5 is taken. Each sentence is padded with '....' in the start. To predict the character in the i th position, we need to give characters from $[i-4 : i]$. The model is trained in this way. All input data is set to lower case.

Number of epochs trained – 2

Formation of vectors

'a' is assigned 1, 'b' 3, 'c' 5 and so on. Similarly, 'A' is assigned 2, 'B' 4, 'C' 6 and so on. ' ' (space) is assigned 100, '.' is assigned 0.

Architecture of the Net

LSTM layer 1 : 10 units

LSTM layer 2 : 5 units

LSTM layer 3 : 1 units

Dense layer for output

Algorithm to predict on test sentences

Vectors are formed in the same manner. If test sentence length is n , then $n-4$ vectors are formed. We predict the output using the trained model. If the output of the corresponding letter is either itself or the capital case of itself, then that is reported as output, else the same input is reported as output.