**Deep-Learning ass3 – bilstm**

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**POS**

a - an embedding vector: repr(wi) = E[wi] :

Our model was able to distinguish between the two languages (positive/negative) with a ###100%### precision

Total time for our model to learn the languages was: ####54s####

b - a character-level LSTM: repr(wi) = repr(c1, c2, ..., cmi ) = LSTMC (E[c1] , ..., E[cmi ]):

Our model was able to distinguish between the two languages (positive/negative) with a ###100%### precision

Total time for our model to learn the languages was: ####54s####

c - the embeddings+subword representation used in assignment 2:

Our model was able to distinguish between the two languages (positive/negative) with a ###100%### precision

Total time for our model to learn the languages was: ####54s####

d - a concatenation of (a) and (b) followed by a linear layer:

Our model was able to distinguish between the two languages (positive/negative) with a ###100%### precision

Total time for our model to learn the languages was: ####54s####

The parameters that we used in our experiment:

* trainer : ADAMtrainer
* number of LSTM layers: 1
* LSTM layer size: 32
* embedded dim size: 64
* MLP input dim: 64
* output dim: number of POS tags
* EPOCH’s: 5
* train set size: 939969
* test set size: 41815

Number of sentences seen / accuracy POS graph:

###### graph here ####

**NER**

a - an embedding vector: repr(wi) = E[wi] :

Our model was able to distinguish between the two languages (positive/negative) with a ###100%### precision

Total time for our model to learn the languages was: ####54s####

b - a character-level LSTM: repr(wi) = repr(c1, c2, ..., cmi ) = LSTMC (E[c1] , ..., E[cmi ]):

Our model was able to distinguish between the two languages (positive/negative) with a ###100%### precision

Total time for our model to learn the languages was: ####54s####

c - the embeddings+subword representation used in assignment 2:

Our model was able to distinguish between the two languages (positive/negative) with a ###100%### precision

Total time for our model to learn the languages was: ####54s####

d - a concatenation of (a) and (b) followed by a linear layer:

Our model was able to distinguish between the two languages (positive/negative) with a ###100%### precision

Total time for our model to learn the languages was: ####54s####

The parameters that we used in our experiment:

* trainer : ADAMtrainer
* number of LSTM layers: 1
* LSTM layer size: 32
* embedded dim size: 64
* MLP input dim: 64
* output dim: number of NER tags
* EPOCH’s: 5
* train set size: 219553
* test set size: 50348

Number of sentences seen / accuracy NER graph:

###### graph here ####