

# Report- Assignment 3 - NLU- Dinesh Kumar 14428

## Anonymous ACL submission

### 1 Model 1:-

NER corpus is used to build a NER system. features such as word identity, word suffix, word shape also, some information from nearby words is used for defining. used feature dicts by using sklearn-crfsuite. for this model after training the predicted accuracy for the test set is:-79.187

### 2 Model-2:-

#### 2.1 Model parameters:-

\*o/p layer:- softmax activation

\*bi-directional LSTM

hidden layer:-100

dropout:-0.1

\*LSTM model:-

i/p dimension of embedding layer:-11311

o/p dimension:-50

max i/p length is 100

#### 2.2 Results:-

\*splitted dataset

training set:- 0.80

test set:-0.20

\*result:-

training loss: 0.0638 - training acc: 0.9770

val loss: 0.0994 - val acc: 0.9683

Figure 1 shows a distribution to check how long sentences are:-

Figure 1 shows a plot for training acc and val acc

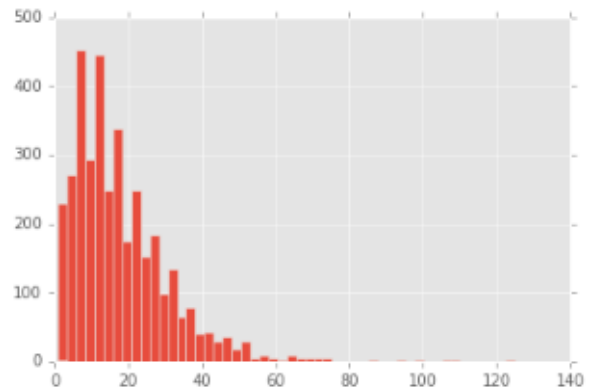


Figure 1: dist nlu

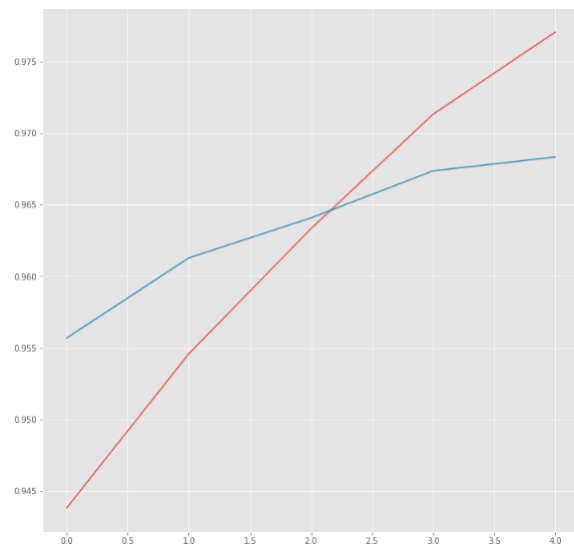


Figure 2: accu val plot nlu