Assignment 2 - Q1

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Considerations

What do you do with a word that appears in the train set and not in the dev set? which word embeddings will you assign to it?

I created a special $\langle \mathbf{unk} \rangle$ token for words that dont appear in the train set. $\langle \mathbf{unk} \rangle$ will be a learnable embedding like all the other embeddings.

What vectors will you use for the words surrounding the first word in the sequence? And for the last word?

I will use a special <pad> token, which will not be learned, but will be a vector of 0's. A vector of 0's is acting as a neutral "do nothing" input.

Parameters

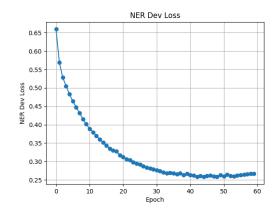
Learning rate: 0.0001 Batch size: 128

Batch size: 128 Hidden laver siz

Hidden layer size: 100 Dropout rate: 0.3 Optimizer: Adam

Early stopping patience: 5

NER Problem



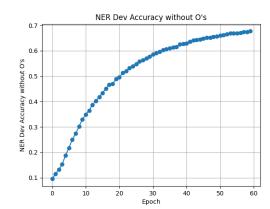
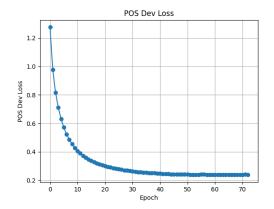


Figure 1: NER

POS Problem



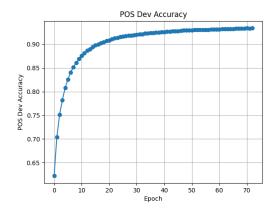


Figure 2: NER