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Part 3

In this section, we used the same hyperparameter configuration to both our POS and NER tasks, since it delivered strong performance on each. Our model is a simple feed-forward neural network with a single hidden layer of 256 neurons. The training hyperparameters were:

<u>Learning rate</u>: 0.001

• Epochs: 5

• Batch size: 64

To utilize the pretrained word vectors, we first lowercased every token in our training vocabulary—ensuring it matched the lowercase vocabulary of the pretrained embeddings. We then extracted from the pretrained embedding matrix only rows corresponding to words in our (now lowercase) training set to initialize our embedding matrix. Any training set word that lacked a pretrained vector was assigned a random embedding.

Our accuracy did not improve because of the use of pre-trained embeddings, but our model converged faster.







