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## **Part 1 (tagger 1):**

### **Parameters:** (POS)

Learning rate	Epochs	Batch size	Batches per epoch	Middle dimension
0.1 divided by 2 every 7 epochs	15	256	4096	$\frac{(DIM * 5 + out\_dim)}{2} = 148$

### **Parameters:** (NER)

Learning rate	Epochs	Batch size	Batches per epoch	Middle dimension
0.1 divided by 2 every 7 epochs	35	256	4096	$\frac{(DIM * 5 + out\_dim)}{2} = 138$

The training process was with mini batches, every batch was taken randomly from the training data, we did not make a full pass for every epoch, we just took every epoch 4096 random batches of 256 samples.

### **Considerations:**

Q: What do you do with a word that appears in the train set and not in the dev set

A: We just called it UNK and we assigned the vector of the UNK special word.

Q: What vectors will you use for the words surrounding the first and last words in the sequence?

A: we had special words START and END that had their own vector in the embedding layer.

**Graphs: (x is epochs, y is value)**



