

COS 470/570 Natural Language Processing
Lab 08

Shea Durgin, Sean Fletcher

April 10, 2023

**code related to this lab can be found at:
(<https://github.com/sheadurgin/NLP23/tree/main/Lab8>)

1. Accuracy of on your validation set.

Our final accuracy is 0.8970.

2. Parameter Choice Justification

2.1 Epochs

We fine tune the model with 2 epochs. Fine tuning with 10, 5, and 3 caused a decrease in our accuracy scores.

2.2 Learning Rate:

The learning rate was the first parameter we started experimenting with. Please see the table below.

Attempt	Learning Rate	Accuracy
1	2e-5	0.8878
2	2e-6	0.8680
3	2e-4	0.3634
4	3e-5	0.8843
5	1e-5	0.8871
6	1.5e-5	0.8927
7	1.7e-5	0.8871
8	1.3e-5	0.8871
9	1.6e-5	0.8913
10	1.4e-5	0.8843
11	1.55e-5	0.8956
12	1.53e-5	0.8970
13	1.54e-5	0.8948
14	1.52e-5	0.8857
15	1.535e-5	0.8807

2.3 Batch Size:

We tried training batch sizes of 16, 32, 64, 100, 15, and 17; 16 gave us our best result.