

RISE

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December 14, 2023

1 Introduction

I selected DistillBERT for my model and trained it on the training data with the Full tagset and the Reduced tagset. I tested both models on the full tagset. I evaluated the model with Precision, Recall, F1, and Accuracy, the results can be seen in Table 1. The Full model performs better in F1, Recall, and Accuracy while the Reduced model performs better in Precision. The results align with expectations as the reduced model will fall down on recall given that it cannot produce 10 of the 15 labels. However, the Reduced model is using the most common labels and so, with a simpler task is more precise. The lower F1 of the Reduced model comes from the lower recall. Accuracy is a somewhat flawed metric in a task with sparse labels. Simply predicting all 0s will create a very high accuracy (while giving 0 precision, recall, and F1). There are several shortcomings. I use a simple model, to save computation time. A more thorough exploration of this experiment would include statistics of the data, e.g. number of instances of each class label. Finally, a comparison where the test data has had its tagset reduced would be interesting.

| | F1 | Precision | Recall | Accuracy |
|---------|--------|-----------|--------|----------|
| Full | 0.9260 | 0.9213 | 0.9307 | 0.9879 |
| Reduced | 0.8936 | 0.9456 | 0.8471 | 0.9779 |

Table 1: Results for the model trained on the Full tagset and the Reduced tagset.