CS287 HW2: Part of Speech Tagging

Kevin Rankine
rankine@college.harvard.edu

Alex Wang
alexwang@college.harvard.edu

February 21, 2016

1 Introduction

In this homework we tackle the problem of part of speech tagging. Given a set of sentences, we seek to assign to each word the part of speech that it fulfills in the sentence. For instance, given the sentence ”Kevin is a good boy.”, we would seek to classify ”Kevin” as a proper noun, ”is” as a type of verb, ”a” as an article, ”good” as an adjective, and ”boy” as a noun (and ”.” as a period).

2 Problem Description

3 Preprocessing

4 Simple Models

4.1 Modified Naive Bayes

4.2 Logistic Regression

5 Windowed Neural Network Model

6 Experiments

Finally we end with the experimental section. Each assignment will make clear the main experiments and baselines that you should run. For these experiments you should present a main results table. Here we give a sample Table 1. In addition to these results you should describe in words what the table shows and the relative performance of the models.

Besides the main results we will also ask you to present other results comparing particular aspects of the models. For instance, for word embedding experiments, we may ask you to show a chart of the projected word vectors. This experiment will lead to something like Figure 1. This should also be described within the body of the text itself.

Model	Acc.
BASELINE 1	0.45
BASELINE 2	2.59
MODEL 1	10.59
MODEL 2	13.42
MODEL 3	7.49

Table 1: Table with the main results.

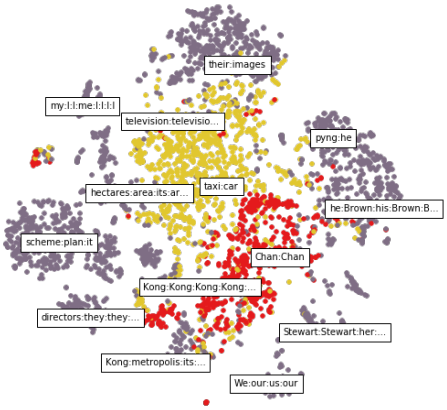

Figure 1: Sample qualitative chart.

7 Conclusion

End the write-up with a very short recap of the main experiments and the main results. Describe any challenges you may have faced, and what could have been improved in the model.

References