

# Parts of Speech Tagging

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After using the Viterbi function to predict the parts of speech associated, we run our function on a few test sentences.

For the first sentence with the index 10150, we were able to predict correct tags for 92.3% of the words in the sentence. Below provided is a list of the predicted and the actual tags.

**Predicted:** ['DET', 'VERB', 'ADP', 'ADJ', 'NOUN', 'VERB', 'VERB', 'DET', 'NOUN', 'ADP', 'VERB', 'VERB', '.']

**Truth:** ['DET', 'VERB', 'ADP', 'ADJ', 'NOUN', 'VERB', 'VERB', 'DET', 'NOUN', 'PRT', 'VERB', 'VERB', '.']

For the second sentence with the index 10151, we were able to predict correct tags for 83.34% of the words in the sentence. Below provided is a list of the predicted and the actual tags.

**Predicted:** ['DET', 'NOUN', 'NOUN', 'VERB', 'DET', 'NOUN', '.', 'NOUN', 'ADP', 'DET', 'ADJ', 'NOUN', 'VERB', 'VERB', 'ADP', 'NUM', 'DET', '.']

**Truth:** ['DET', 'ADJ', 'NOUN', 'VERB', 'DET', 'ADJ', 'ADJ', 'NOUN', 'ADP', 'DET', 'ADJ', 'NOUN', 'VERB', 'VERB', 'ADP', 'NUM', 'DET', '.']

For the third sentence with the index 10152, we were able to predict correct tags for 100.0% of the words in the sentence. Below provided is a list of the predicted and the actual tags.

**Predicted:** ['PRON', 'VERB', 'DET', 'ADJ', 'NOUN', 'ADP', 'DET', 'NOUN', 'ADP', 'DET', 'ADJ', 'NOUN', 'CONJ', 'DET', 'NOUN', '.']

**Truth:** ['PRON', 'VERB', 'DET', 'ADJ', 'NOUN', 'ADP', 'DET', 'NOUN', 'ADP', 'DET', 'ADJ', 'NOUN', 'CONJ', 'DET', 'NOUN', '.']