

Part of Speech Tagging

Submitted by:

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Output of Viterbi:

[('Those', 'DET'), ('coming', 'VERB'), ('from', 'ADP'), ('other', 'ADJ'), ('denominations', 'NOUN'), ('will', 'VERB'), ('welcome', 'VERB'), ('the', 'DET'), ('opportunity', 'NOUN'), ('to', 'ADP'), ('become', 'VERB'), ('informed', 'VERB'), ('.', '.'), ('The', 'DET'), ('preparatory', 'ADJ'), ('class', 'NOUN'), ('is', 'VERB'), ('an', 'DET'), ('introductory', 'ADJ'), ('face-to-face', 'NOUN'), ('group', 'NOUN'), ('in', 'ADP'), ('which', 'DET'), ('new', 'ADJ'), ('members', 'NOUN'), ('become', 'VERB'), ('acquainted', 'PRT'), ('with', 'ADP'), ('one', 'NUM'), ('another', 'DET'), ('.', '.'), ('It', 'PRON'), ('provides', 'VERB'), ('a', 'DET'), ('natural', 'ADJ'), ('transition', 'NOUN'), ('into', 'ADP'), ('the', 'DET'), ('life', 'NOUN'), ('of', 'ADP'), ('the', 'DET'), ('local', 'ADJ'), ('church', 'NOUN'), ('and', 'CONJ'), ('its', 'DET'), ('organizations', 'NOUN'), ('.', '.')]]

Accuracy without smoothing: 89.36%

Accuracy with smoothing: 93.61% (above output¹)

Truth:

[('Those', 'DET'), ('coming', 'VERB'), ('from', 'ADP'), ('other', 'ADJ'), ('denominations', 'NOUN'), ('will', 'VERB'), ('welcome', 'VERB'), ('the', 'DET'), ('opportunity', 'NOUN'), ('to', 'PRT'), ('become', 'VERB'), ('informed', 'VERB'), ('.', '.'), ('The', 'DET'), ('preparatory', 'ADJ'), ('class', 'NOUN'), ('is', 'VERB'), ('an', 'DET'), ('introductory', 'ADJ'), ('face-to-face', 'ADJ'), ('group', 'NOUN'), ('in', 'ADP'), ('which', 'DET'), ('new', 'ADJ'), ('members', 'NOUN'), ('become', 'VERB'), ('acquainted', 'VERB'), ('with', 'ADP'), ('one', 'NUM'), ('another', 'DET'), ('.', '.'), ('It', 'PRON'), ('provides', 'VERB'), ('a', 'DET'), ('natural', 'ADJ'), ('transition', 'NOUN'), ('into', 'ADP'), ('the', 'DET'), ('life', 'NOUN'), ('of', 'ADP'), ('the', 'DET'), ('local', 'ADJ'), ('church', 'NOUN'), ('and', 'CONJ'), ('its', 'DET'), ('organizations', 'NOUN'), ('.', '.')]]

¹ Code inspired from <https://www.mygreatlearning.com/blog/pos-tagging/>