## Morphological Disambiguation: Tagger Comparison

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December 2, 2022

## 1 Report

The Universal Dependency dataset I have used for this practical is the English Atis (Airline Travel Information Systems) Corpus. The two taggers that are being compared are udpipe tagger and conllu perceptron tagger.

The evaluation result for udpipe tagger for Atis database is:

Metrics	Precision	Recall	F1 Score	AligndAcc
Tokens	100.00	100.00	100.00	
Sentences	100.00	100.00	100.00	
Words	100.00	100.00	100.00	
UPOS	98.80	98.80	98.80	98.80
XPOS	100.00	100.00	100.00	100.00
Feats	98.47	98.47	98.47	98.47
AllTags	97.96	97.96	97.96	97.96
Lemmas	99.41	99.41	99.41	99.41
UAS	100.00	100.00	100.00	100.00
LAS	100.00	100.00	100.00	100.00

The evaluation result for conllu perceptron tagger for Atis database is:

Metrics	Precision	Kecall	F1 Score	Alignaacc
Tokens	100.00	+   100.00	100.00	 
Sentences	100.00	100.00	100.00	
Words	100.00	100.00	100.00	
UPOS	98.59	98.59	98.59	98.59
XPOS	100.00	100.00	100.00	100.00
Feats	100.00	100.00	100.00	100.00
AllTags	98.59	98.59	98.59	98.59
Lemmas	100.00	100.00	100.00	100.00
UAS	100.00	100.00	100.00	100.00
LAS	100.00	100.00	100.00	100.00

Comparing the UPOS (Universal Part of Speech) score for both, it can

be seen that both taggers perform really well and have a precision, recall and F1 score of more than 98. The part of speech tags assigned by both taggers is the same for almost all sentences.