Dependency Parsing

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1 Report

The Universal dependency dataset used for this practical is the English GUM corpus with 162,321 tokens Zeldes (2017). The udpipe parser works really well with this corpus and is giving a LAS F1 score of 84.59. I evaluated the first 11 sentences of the output file for this practical. Most of the sentences have been parsed correctly but in some cases the Part of Speech tagger is incorrect, which can result in an error in the dependency parsing output. For example in the sentence: 'Mandatory diversity trainings in professional settings, for example, are intended to reduce bias in the workplace by increasing the awareness of employees regarding the challenges facing minority group members. [12]', 'diversity' is marked as a NOUN instead of ADJ thus creating two different Noun Phrases for 'Mandatory diversity' and 'trainings', but 'Mandatory diversity trainings' should be part of one Noun Phrase. The evaluation metrics for the udpipe parser for this corpus 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	100.00	100.00	100.00	100.00
XPOS	100.00	100.00	100.00	100.00
Feats	100.00	100.00	100.00	100.00
AllTags	100.00	100.00	100.00	100.00
Lemmas	100.00	100.00	100.00	100.00
UAS	86.65	86.65	86.65	86.65
LAS	84.59	84.59	84.59	84.59

References

Amir Zeldes. The GUM corpus: Creating multilayer resources in the classroom. *Language Resources and Evaluation*, 51(3):581–612, 2017. doi: http://dx.doi.org/10.1007/s10579-016-9343-x.