

Shallow Discourse Parser Comparison and Combination

Paul Opuchlich, 794745
Malte Klingenberg, 794394

Introduction

lot of development in discourse parsing (short overview?)
parsers have gotten better, but are still far from perfect
many parsers available, maybe some better at some things than others
goal: compare parsers, find a way to combine them to give better results

Dataset

CoNLL challenge [Xue et al., 2016]
incomplete data (sense-only), generate dummy data (see below)
used parsers (differences, some only guess a limited number of senses)

Approach

Preprocessing and Randomising
Mapping the Relations (using CoNLL methods)
Calculate Parameters for each Parser + Relation, some evaluation
Create combined model by different voting approaches (best-wins, weighted...)

Evaluation

general overview
agreement between three parsers
compare performances of all parsers
relationship between architecture and results?
combination (different approaches)

Conclusion

parsers are(n't) good at different things
combination (does not) improve results

References

- [Xue et al., 2016] Xue, N., Ng, H. T., Pradhan, S., Rutherford, A., Webber, B., Wang, C., and Wang, H. (2016). Conll 2016 shared task on multilingual shallow discourse parsing. *Proceedings of the CoNLL-16 shared task*, pages 1–19.