Yuxuan Wang

Ph.D. Candidate in HIT-SCIR



Research Interest

Interest Computational linguistics, Dependency parsing, Transfer learning for NLP.

Supervisor Wanxiang Che

Education

2016-Present **Ph.D. Candidate**, Harbin Institute of Technology.

Major: Computer Science

2012–2016 **Bachelor of Engineering**, *Harbin Institute of Technology*, Hornor school.

Major: Computer Science

Publication

Yuxuan Wang, Yutai Hou, Wanxiang Che and Ting Liu. 2020. From Static to Dynamic Word Representations: A Survey. In *International Journal of Machine Learning and Cybernetics*.

Yuxuan Wang, Wanxiang Che, Jiang Guo, Yijia Liu and Ting Liu. 2019. Cross-Lingual BERT Transformation for Zero-Shot Dependency Parsing. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing* (EMNLP2019).

Wanxiang Che, Yijia Liu, **Yuxuan Wang**, Bo Zheng, and Ting Liu. 2018. Towards Better UD Parsing: Deep Contextualized Word Embeddings, Ensemble, and Treebank Concatenation. In *Proceedings of the CoNLL 2018 Shared Task: Multilingual Parsing from Raw Text to Universal Dependencies* (CoNLL2018).

Yuxuan Wang, Wanxiang Che, Jiang Guo, and Ting Liu. 2018. A Neural Transition-Based Approach for Semantic Dependency Graph Parsing. In *Proceedings of the 32nd AAAI Conference on Artificial Intelligence* (AAAI2018).

Wanxiang Che, Jiang Guo, **Yuxuan Wang**, Bo Zheng, Huaipeng Zhao, Yang Liu, Dechuan Teng and Ting Liu. 2017. The HIT-SCIR System for End-to-End Parsing of Universal Dependencies. In *Proceedings of the CoNLL 2017 Shared Task: Multilingual Parsing from Raw Text to Universal Dependencies* (CoNLL2017).

Yuxuan Wang, Jiang Guo, Wanxiang Che and Ting Liu. 2016. Transition-based Chinese Semantic Dependency Graph Parsing. In *Proceedings of the 15th China National Conference on Computational Linguistics and the 4th International Symposium on Natural Language Processing based on Naturally Annotated Big Data (CCL-NLP-NABD2016). Best Paper Award*

Projects

2016–2018 Semantic Dependency Graph Parsing Module of LTP.

Project Homepage: https://github.com/HIT-SCIR/ltp. Language Technology Platform (LTP) is a software package that provides Chinese natural language processing pipeline along with web service API. I developed the semantic dependency graph parsing module of LTP with the transition-based graph parsing approach proposed in our AAAI 2018 paper.

2017 CoNLL 2017 Shared Task.

Task Homepage: http://universaldependencies.org/conll17/. The goal of this task is to parse multilingual corpora from raw text to universal dependencies. (45 languages, 64 treebanks)

- o our system achieved 4th place among 33 teams around world who submitted their systems.
- o developed the major parsing module of our system.

2018 CoNLL 2018 Shared Task.

Task Homepage: http://universaldependencies.org/conll18/. The goal of this task is to parse multilingual corpora from raw text to universal dependencies. It is the same as CoNLL 2017 but with more languages and more treebanks. (57 languages, 82 treebanks)

- o our system achieved 1th place among 27 teams around world who submitted their systems, significantly outperforming the second system by more than 2% in LAS Ranking.
- o in charge of the major parsing module of our system.

Awards

- 2016 Best Paper Award of NLP-NABD 2016
- 2016 Best 100 graduation thesis in 2016 of Harbin Institute of Technology
- 2018 National Scholarship for Doctoral Students

Technique Summary

Programming C/C++, Python, Shell

Languages

Operating Windows, Linux

Systems

Experiences Git, Dynet, Tensorflow, Pytorch

Languages English (PETS5), Chinese (Native)