Yufei Chen

Education

2017.09–present **Master of Science**, *Computer Science*, School of Electronics Engineering and Computer Science , Peking University.

2014–2017 **Bachelor of Science**, *Computer Science*, School of Electronics Engineering and Computer Science, Peking University.

2013–2017 **Bachelor of Science**, *Chemistry*, College of Chemistry and Molecular Engineering, Peking University.

Publications

[1] Yufei Chen, Weiwei Sun, and Xiaojun Wan. Accurate shrg-based semantic parsing. In *ACL2018*, pages 408–418.

[2] Yufei Chen, Yuanyuan Zhao, Weiwei Sun, and Xiaojun Wan. Pre- and in-parsing models for neural empty category detection. In *ACL2018*, pages 2687–2696.

[3] Yufei Chen, Sheng Huang, Fang Wang, Junjie Cao, Weiwei Sun, and Xiaojun Wan. Neural maximum subgraph parsing for cross-domain semantic dependency analysis. In *CoNLL 2018*, pages 562–572.

[4] Weiwei Sun, Yufei Chen, Xiaojun Wan, and Meichun Liu. Parsing Chinese sentences with grammatical relations. *Computational Linguistics*, in press.

Academic & Professional Experience

2016–present **Member of Language Computing and Web Mining Group**, *Institute of Computer Science & Technology*, Peking University.

2017–present **Neural Graph Rewriting Models for Semantic Parsing**, I combine Hyperedge Graph Grammar, a symbolic system, and Recursive Network, a neural network, to model the syntacto-semantic composition process. A version of this parser targeting at graph-structure semantic representation has been published on ACL2018 [1]. The model achieve start-of-the-art performance (89.51) on DeepBank dataset, 5.45 point improvement over previous best model.

2017–2018 **Neural Empty Category Detection**, Proved neural nework models can be used for pre- and in-parsing detection of empty categories in Chinese. Published on ACL2018 [2].

2016–2018 **Neural Semantic Dependency Parsing**, Explored different kinds of parsing methods including transition-based, graph-based and tree-approximation based parsing. Graph-based system is used for cross-domain analysis, published on CoNLL2018 [3]; tree-approximation based system is for chinese paring, accepted by Computational Lingustics[4].

2016–present **Chinese Processing Pipeline**, Entire system includes word segmentation, name entity recognition and dependency parsing. This sytem was provided for AITC (a start-up AI company created by Hans Uszkoreit) commercially in 2018. Try it online: `http://59.108.48.37:9014/lcwm/pkunlp/`.

2013–2017 **President of Linux Club, Peking University**, Official registered organization of Peking University. In charge of club management and regular activities, such as lectures and discussions about Linux and opensource culture.

Award

2017–2018 **Peking University**, *Huawei Scholarship (Top 3%), Merit Student.*

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