## 哈工大社会计算与信息检索研究中心,语言分析组 email: oneplus.lau@gmail.com

#### 研究兴趣

自然语言处理,中文分词,句法分析,以及机器学习。导师:车万翔

教育经历

博士研究生,哈尔滨工业大学 专业: 计算机科学与技术

2014.9 - 现在

专业, 11 异机科子与权小

访问学生,华盛顿大学

2016.10 - 2017.9

导师: Noah A. Smith

工学硕士,哈尔滨工业大学

2012.9 - 2014.7

专业: 计算机科学与技术, 综合成绩: 79.14 (年级前 10%)

工学学士,哈尔滨工业大学

2008.7 - 2012.7

专业: 计算机科学与技术,平均成绩: 88.7 (年级前 8%)

#### 发表论文

**Yijia Liu**, Wanxiang Che, Huaipeng Zhao, Bing Qin, and Ting Liu. 2018. Knowledge Distilling for Search-based Structured Prediction. (to appear) In *Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics* (ACL).

Yijia Liu, Yi Zhu, Wanxiang Che, Bing Qin, Nathan Schneder, and Noah A. Smith. 2018. Parsing Tweets into Universal Dependency. (to appear) In *Proceedings of the 2018 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies* (NAACL).

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

Yutai Hou, **Yijia Liu**, Wanxiang Che, and Ting Liu. 2018. Sequence-to-Sequence Data Augmentation for Dialogue Language Understanding. (to appear) In *Proceedings of the 27th International Conference on Computational Linguistics* (COLING).

Haoyang Wen, **Yijia Liu**, Wanxiang Che, Libo Qin, and Ting Liu, 2018. Sequence-to-Sequence Learning for Task-oriented Dialogue with Dialogue State Representation. (to appear) In *Proceedings of the 27th International Conference on Computational Linguistics* (COLING).

**Yijia Liu**, Wanxiang Che, Jiang Guo, Bing Qin, and Ting Liu. 2016. Exploring Segment Representations for Neural Segmentation Models. In *Proceedings of the 25th International Joint Conference on Artificial Intelligence* (IJCAI).

**Yijia Liu**, Wanxiang Che, Bing Qin, and Ting Liu. 2016. HC-search for Incremental Parsing. In *Proceedings of the 25th International Joint Conference on Artificial Intelligence* (IJCAI).

Yijia Liu, Yue Zhang, Wanxiang Che, and Ting Liu. 2015. Transition-Based Syntactic Linearization. In Proceedings of the 2015 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL).

**Yijia Liu**, Yue Zhang, Wanxiang Che, and Ting Liu. 2014. Domain Adaptation for CRF-based Chinese Word Segmentation using Free Annotations, In *Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing* (EMNLP).

Yijia Liu, Wanxiang Che, and Ting Liu. 2013. Enhancing chinese word segmentation with character clustering. In *Chinese Computational Linguistics and Natural Language Processing Based on Naturally Annotated Big Data* (CCL).

**Yijia Liu**, Meishan Zhang, Wanxiang Che, Ting Liu, and Yihe Deng. 2012. Micro blogs Oriented Word Segmentation System. In *Proceedings of the Second CIPS-SIGHAN Joint Conference on Chinese Language Processing*.

Meishan Zhang, Wanxiang Che, **Yijia Liu**, Zhenghua Li, Ting Liu. 2012. HIT dependency parsing: Bootstrap aggregating heterogeneous parsers. In *Notes of the First Workshop on Syntactic Analysis of Non-Canonical Language* (SANCL).

专利

车万翔; 刘一佳; 刘挺; 赵妍妍。一种中文分词增量学习方法, 201510604035.0

## 参与项目

CoNLL 2018 Shared Task: Multilingual Parsing from Raw Text to Universal Dependencies 2018.4 - 2018.6

我们的系统 (HIT-SCIR) 在 26 支参赛队伍中以高出第二名 2.56% 的成绩名列第一。

- 贡献了使用上下文相关的词向量模型、模型集成的方法,并取得了显著性能提升。
- 开发树库融合策略。

语言技术平台 (LTP: Language Technology Platform) 2013.6 - 现在 LTP 提供一系列中文自然语言处理模块和基于云端的 API 服务。

• 参与开发并维护语言技术平台。

研究助理 新加坡科学与设计大学

- 参与了网站 (http://ltp-cloud.com) 前端开发与 Restful API 的开发。
- 使用 Perceptron 算法重构了分词、词性标注、命名实体识别和依存句法分析模块。

### 学术服务

会议审稿人: ACL 2014, 2018, CCL 2015-2017, NLPCC 2015-2017, NAACL 2016, IJCAI 2016, SemEval 2016.

# 工作经历

130A1 2010, SelliEval 2010.

导师:张岳,从事机器翻译、中文序列标注以及基于转移的依存句法分析相关研究

实习研发工程师 百度公司, 自然语言处理部

2011.7 - 2011.11

2013.10 - 2014.10

实习研友工程则 自度公司,自然语言处理部 query 模版挖掘,libwordseg 的 python 封装

#### 技术经验

编程语言: C, C++, Python, R, Shell, PHP, Java

操作系统: Linux (有两年系统管理员经验)

软件经验: SVN, Git, Valgrind, Apache, Nginx, django (Python)

## 所获奖励

黑龙江省科学进步一等奖:语言技术平台及其应用	2016.9
华为企业奖学金 (博士阶段)	2016.9
国家奖学金 (硕士阶段)	2013.9
2010 ACM/ICPC 亚洲区赛杭州现场赛银奖	2010.10
华为企业奖学金 (本科阶段)	2010.9