Yijia Liu

Ph.D. candiate, *Language analysis* group in HIT-SCIR oneplus.lau@gmail.com

Major: Computer Science, Score: 88.7 (rank top 8%)

RESEARCH INTEREST

Natural language processing, Chinese word segmentation, parsing and machine learning. My supervisor is Wanxiang Che.

EDUCATION

Ph.D. candidate, Harbin Institute of Technology Major: Computer Science	2014.9 - present
M.S., Harbin Institute of Technology Major: Computer Science, Score: 79.14 (rank top 10%)	2012.9 - 2014.7
B.E., Harbin Institute of Technology	2008.9 - 2012.7

PUBLICATION

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* (IJCAI2016).

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* (IJCAI2016).

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* (NAACL2015).

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* (EMNLP2014).

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* (CCL2013).

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).

PROJECTS

Language Technology Platform (LTP)

2013.6 - present

Project Homepage: https://github.com/HIT-SCIR/ltp. LTP is a software package that provides Chinese natural language processing pipeline along with web service API.

- one of the developers and the major maintainer of LTP.
- developed 4 modules including Chinese word segmentation, part-of-speech tagging, NER and dependency parsing in a perceptron algorithm framework.

• developed the RESTful API and contributed to the development of website (http: //ltp-cloud.com).

ZPar Project 2013.10 - present

Project Homepage: http://sourceforge.net/projects/zpar/. ZPar is statistical multi-language parser. ZPar provides integrated systems that perform word segmentation, part-of-speech tagging, dependency parsing or phrase structure parsing.

- developed transition based non-projective dependency parser.
- developed bug fixes.

SERVICES Conference Reviewer/Secondary Reviewer: ACL 2014, CCL 2015, NLPCC 2015, NAACL 2016, IJCAI 2016, SemEval 2016.

2013.10 - 2014.10 **EMPLOYMENT** Research Assistance, SUTD. worked with Professor Yue Zhang, on statistical machine translation, Chinese tagging and transition based dependency parsing.

> Intern Researcher and Developer, Baidu Inc., NLP Department. 2011.7 - 2011.11 implemented query template extraction toolkit and built a python extension for baidu

wordseg library.

TEACHING TA, High level Programming Language, 2009 Fall, 2010 Fall TA, The Practice of Programming, 2011 Spring, 2012 Spring EXPERIENCE

TECHNIQUE Programming Languages: C/C++, Java, Python, R, Shell **SUMMARY**

Operating Systems: Linux (two-years experience as part-time IT administrator)

Experience: Git, SVN, Valgrind, Apache, Nginx, django (Python)

AWARDS The National Scholarship for graduate students 2013.9

> 2010 ACM/ICPC Asia Regional Contest Hangzhou Onsite, Silver Medal 2010.10 Hua Wei Scholarship 2010.9