

Yijia Liu

Ph.D. candidate, *Language analysis* group in HIT-SCIR
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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 2014.9 - present
Major: Computer Science

Visiting Student, University of Washington 2016.10 - 2017.9
Supervisor: Noah A. Smith

M.S., Harbin Institute of Technology 2012.9 - 2014.7
Major: Computer Science, Score: 79.14 (rank top 10%)

B.E., Harbin Institute of Technology 2008.9 - 2012.7
Major: Computer Science, Score: 88.7 (rank top 8%)

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)*.

PATTERNS

Wanxiang Che, **Yijia Liu**, Ting Liu, and Yanyan Zhao. An Incremental Training Method for Domain Adaptation in Chinese Word Segmentation, CN201510604035.0.

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. <ul style="list-style-type: none"> • 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 - 2014.10 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. <ul style="list-style-type: none"> • developed transition based non-projective dependency parser. • developed bug fixes.
SERVICES	<i>Conference Reviewer/Secondary Reviewer: ACL 2014, 2018, CCL 2015-2017, NLPCC 2015-2017, NAACL 2016, IJCAI 2016, SemEval 2016.</i>
EMPLOYMENT	<i>Research Assistance, SUTD.</i> 2013.10 - 2014.10 worked with Professor Yue Zhang, on statistical machine translation, Chinese tagging and transition based dependency parsing.
	<i>Intern Researcher and Developer, Baidu Inc., NLP Department.</i> 2011.7 - 2011.11 implemented query template extraction toolkit and built a python extension for baidu wordseg library.
TEACHING EXPERIENCE	TA, High level Programming Language, 2009 Fall, 2010 Fall TA, The Practice of Programming, 2011 Spring, 2012 Spring
TECHNIQUE SUMMARY	<i>Programming Languages:</i> C/C++, Java, Python, R, Shell <i>Operating Systems:</i> Linux (two-years experience as part-time IT administrator) <i>Experience:</i> Git, SVN, Valgrind, Apache, Nginx, django (Python)
AWARDS	<i>First Class Award</i> in HeiLongJiang Provincial Science and Technology Prizes: The Language Technology Platform and its Applications 2016.10 Hua Wei Scholarship (for graduate student) 2016.9 The National Scholarship for graduate students 2013.9 2010 ACM/ICPC Asia Regional Contest Hangzhou Onsite, Silver Medal 2010.10 Hua Wei Scholarship (for undergraduate student) 2010.9