Yijia Liu

Ph.D. candiate, *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

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 2008.7 - 2012.7
Major: Computer Science, Score: 88.7 (rank top 8%)

PUBLICATION

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.

EMPLOYMENT

Research Assistance, SUTD. 2013.10 - 2014.10
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 EXPERIENCE

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

TECHNIQUE SUMMARY

Programming Languages: C/C++, Java, Python, R, Shell
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

MISCELLANEOUS

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Homepage: `http://yjliu.net`, Github `https://github.com/Oneplus`