Yijia Liu

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

RESEARCH INTEREST

Natural language processing, Chinese Word Segmentation, Machine Learning. My supervisor is Wanxiang Che.

EDUCATION

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. 2014. Domain Adaptation for CRF-based Chinese Word Segmentation using Free Annotations, (To appear) In Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing.

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*.

Yijia Liu, Wanxiang Che, Ting Liu, and Meishan Zhang. 2013. A Comparison Study of Sequence Labeling Based Chinese Word Segmentation, POS tagging Models, In *Journal of Chinese Information Processing*. 2013 (3)

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 various Chinese natural language processing modules along with web service API.

- refactored 4 modules including Chinese word segmentation, POSTagging, NER and Dependency parser in a perceptron algorithm framework.
- developed the Python and Ruby API client.
- contributed to the development of website (http://ltp-cloud.com).

Zpar Project

2013.10 - present

Project Homepage: http://sourceforge.net/projects/zpar/

- developed transition based parser
- developed bug fixes

CLP 2012 Bakeoff: Chinese Word Segmentation on MicroBlog 2012.11 Bakeoff Page: http://www.cipsc.org.cn/clp2012/task1.html

• implemented a semi-supervised segmentation system

• our system achieved an f1 score of 94.04% on the bakeoff test data and ranked 2nd unofficially (due to the official rank is not published).

EMPLOYMENT Research Assistance, SUTD.

2013.10 - present

working with Professor Zhang Yue, 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 tool and built a python extension for baidu wordseg library.

TEACHING EXPERIENCE TA, High level Programming Language, TA, The Practice of Programming,

 $2009 \ \mathrm{Fall}, \ 2010 \ \mathrm{Fall}$ $2011 \ \mathrm{Spring}, \ 2012 \ \mathrm{Spring}$

TECHNIQUE SUMMARY Programming Languages: C, C++, Python, R, Shell, PHP, Java Operating Systems: Linux(two year experience as system administrator)

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

AWARDS

The National Scholarship for graduate students
2013.9
2010 ACM/ICPC Asia Regional Contest Hangzhou Onsite, Silver Medal,
Hua Wei Scholarship
2010.9

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