# **Jiangming Liu**

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#### **EDUCATION**

#### Beijing Jiaotong University, Beijing, China

Master of Computer Science (M.S) in Computer Science and Technology Sep 2012 – Apr 2015

- Thesis: Japanese Case Grammar Constraints on Hierarchical Phrase-based Statistical Machine Translation
- · Adviser: Professor JinAn Xu
- Major GPA: 3.78/4

Bachelor of Computer Science (B.S) in Computer Science and Technology Sep 2008 – Jul 2012

- · Gradutaed with merit honors
- Cumulative GPA: 3.77/4

Verified Certificate of "Introduction to Finance" authorized by University of Michigan on Coursera.

# RESEARCH EXPERIENCE

# Singapore University of Technology Design, Singapore

Research Assistant , Natural Language Processing Group

May 2015 – present

Advisor: Prof. Yue Zhang

Project: China Capital Market and Unstructured Data

· Event detection and extraction.

Project: Cross-Functional Information Systems for Decision Making

· Target-dependent sentiment analysis.

Project: Statistical Machine Translation by Syntactic Transfer

Neural syntactic parsing

#### Northeastern University, China

Visiting student, Natural Language Processing Group

Jan 2015 - Feb 2015

Advisors: Prof. Tong Xiao and Prof. Jinbo Zhu

Research: Japanese-Chinese Statistical Machine Translation

• Japanese case grammar (linguistics) constrains on conventional hierarchical phrase-based model (statistics).

## Chinese Academy of Sciences, Institute of Computing Technology, China

Visiting student, Natural Language Processing Group

Nov 2013 - Dec 2014

• Advisors: Prof. Wenbin Jiang and Prof. Qun Liu

Project: Japanese Morphology Analysis and Dependency Analysis

• Japanese morphology analysis and Japanese dependency analysis

# Beijing JiaoTong University, the school of computer and information technology, China

Graduate student, Natural Language Processing Group

Jul 2012 – Apr 2015

• Advisor: Prof.JinAn Xu

Project: Case Dependency-String based Japanese-Chinese Machine Translation

• Analysis on the case grammar and the case dependency tree structure

Project: The Automatic Acquisition of Lexical Semantic Relationship

• Extraction of Chinese hyponymy relation between words from fruitful web resource, achieving best results in the task of extraction of semantic relationship in NLP&CC2012.

Research: The Chinese Word Similarity Computation

 $\bullet$  Analysis on the sememe similarity and the hierarchical structure similarity in Chinese.

Research: Text Summarization

• Designed rich sentence-level features and document-level features, which are fed to text summarization.

Undergraduate student, Natural Language Processing Group

May 2011 – Jun 2012

• Advisors: Prof. Wei Xu and Prof. JinAn Xu

Project: Public Opinion Analysis on the Web

- Team leader
- Designed web crawlers to obtain comments on news and products.
- Designed the system to automatically analyze sentential sentiments in coarse-level (positive, negative and neutral), or in fine-level (expect, joy, love, surprise, anxiety, sorrow, angry and hate).

### **PUBLICATIONS**

- 9) **Jiangming Liu** and Yue Zhang, In-Order Transition-based Constituent Parsing System. Accepted by *TACL* . 2017
- 8) **Jiangming Liu** and Yue Zhang, Encoder-Decoder Shift-Reduce Syntactic Parsing. In *arXiv:1706.07905*. Jun 2017.
- 7) **Jiangming Liu** and Yue Zhang, Attention Modeling for Targeted Sentiment. In *Proceedings* of the European Chapter of the Association for Computational Linguistics (EACL). Valencia, Spain, Apr 2017.

- 6) **Jiangming Liu** and Yue Zhang, Shift-Reduce Constituent Parsing with Neural Lookahead Features. In *Transactions of the Association of Computational Linguistics (TACL)*. Jan 2017.
- 5) **Jiangming Liu** and Yue Zhang, An Empirical Comparison Between N-gram and Syntactic Language Model for Word Ordering. In *Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing (EMNLP*). Lisboa, Portugal, Sep 2015.
- 4) JinAn Xu, **Jiangming Liu**, Yufeng Chen, Yujie Zhang, Fang Ming and Shaotong Li, Integrating Case Frame into Japanese to Chinese Hierarchical Phrase-based Translation Model. In *workshop of Semantics-Driven Statistical Machine Translation (S2MT) in ACL*. Beijing, China, Jul 2015.
- 3) **Jiangming Liu**, JinAn Xu, Jun Xie and Yujie Zhang, Case Frame Constraints For Hierarchical Phrase-based Translation: Japanese-Chinese as an Example. In *Proceedings of the conference on Natural Language Processing & Chinese Computing (NLP&CC)*. Shenzhen, China, Dec 2014. Published in Lecture Note in Computer Science, Springer.
- 2) **Jiangming Liu**, JinAn Xu and Yujie Zhang, An Approach of Hybrid Hierarchical Structure for Word Similarity Computing by HowNet. In *Proceedings of the International Joint Conference of Natural Language Processing (IJCNLP)*. Nagoya, Japan, Oct 2013.
- 1) **Jiangming Liu**, JinAn Xu and Yujie Zhang, Summarization Based on Hidden Topic Markov Model with Multi-Feature. In *Proceedings of the conference on Natural Language Processing & Chinese Computing (NLP&CC)*. Chongqing, China, Oct 2013. Publiced on the journal of Acta Scientiarum Naturalium Universitatis Pekinensis.

ACADEMIC Beijing Jiaotong University scholarship HONORS For outstanding students.

2008 - 2015

HONORS & AWARDS

National scholarship

Oct 2013

For outstanding scientific contributions.

PROFESSIONAL SERVICE

PC for conference: ACL (2017, 16 [second reviewer]), EMNLP (2017, 16 [second reviewer]), LICNLP (2017), NLPCC (2016), CLP (2016)

IJCNLP (2017), NLPCC (2016), CLP (2016)

INDUSTRIAL

TorangeTek, Chinese Academy of Science Beijing, China

WORK EXPERIENCE

Intern, machine translation projectInvestigation on translation memory system.

Feb 2012 - Aug 2012

**PROGRAMMING** C+

NG C++, Python

& CODES Code Sha

Code Share: https://github.com/LeonCrashCode Group Code Share: https://github.com/SUTDNLP

 $[CV\ compiled\ on\ 2017\text{-}07\text{-}11]$