

# Kai Zhao

365 Fifth Avenue  
New York, NY 10016  
✉ [kzhao.hf@gmail.com](mailto:kzhao.hf@gmail.com)  
🌐 <http://kaizhao.me>

## Research Interests

Algorithms and theory in Natural Language Processing: Structured Prediction; Syntactic/Semantic Parsing; Online Learning; Machine Translation.

## Education

- 2010–Present **Ph.D. Student**, *Graduate Center, City Univ. of New York*, New York, NY.  
Mentor: Professor Liang Huang  
Major: Computer Science
- 2006–2010 **Bachelor of Engineering**, *Univ. of Science and Technology of China*, Hefei, China.  
Graduated with Honors  
Major: Computer Science

## Experience

### Research

- 2012–Present **Research Assistant**, *City Univ. of New York*, New York, NY.  
Focused on Structured Prediction problems in Natural Language Processing, including:
- incremental parsing with best-first search strategy;
  - discriminative training for statistical machine translation;
  - parallelizing online learning for large-scale NLP tasks like dependency parsing.
- Summer 2014 **Research Intern**, *Microsoft Research*, Redmond, WA.  
*Machine Translation Group*  
Mentor: Hany Hassan  
Explored learning translation rules from monolingual continuous representations.
- Summer 2013 **Research Intern**, *IBM T.J. Watson Research Center*, Yorktown Heights, NY.  
*Multilingual Natural Language Processing Group*  
Mentor: Abe Ittycheriah  
Adapted large-scale discriminative training to syntax based machine translation system.

### Teaching Assistant

- Fall 2013 Programming Languages, *Graduate Center, CUNY*.  
Spring 2013 Machine Learning, *Graduate Center, CUNY*.  
Fall 2012 Python Programming, *Queens College, CUNY*.

## Honors & Awards

- 2010 & 2011 **Science Fellowship**, *Graduate Center, CUNY*.  
2009 **National Scholarship**, *Ministry of Education of China*.  
2008 **Outstanding Student Scholarship**, *USTC*.

## Publications

Kai Zhao, Liang Huang, Haitao Mi, and Abe Ittycheriah. [Hierarchical MT Training using Max-Violation Perceptron](#). *Proceedings of ACL*, 2014.

Kai Zhao, James Cross, and Liang Huang. [Optimal Incremental Parsing via Best-First Dynamic Programming](#). *Proceedings of EMNLP*, 2013.

Heng Yu, Liang Huang, Haitao Mi, and Kai Zhao. [Max-Violation Perceptron and](#)

[Forced Decoding for Scalable MT Training](#). *Proceedings of EMNLP*, 2013.

Hao Zhang, Liang Huang, Kai Zhao, and Ryan McDonald. [Online Learning for Inexact Hypergraph Search](#). *Proceedings of EMNLP*, 2013.

Yoav Goldberg, Kai Zhao, and Liang Huang. [Efficient Implementation of Beam-Search Incremental Parsers](#). *Proceedings of ACL*, 2013.

Kai Zhao and Liang Huang. [Minibatch and Parallelization for Online Large Margin Structured Learning](#). *Proceedings of NAACL*, 2013.