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# KAI ZHAO

- research interests** Algorithms and theory in Natural Language Processing: Structured Prediction; Syntactic/Semantic Parsing; Online Learning; Machine Translation.
- education**
- Ph.D Student**, *Graduate Center, City University of New York*, New York, NY. 2010 - present.  
Mentor: Professor Liang Huang  
Major: Computer Science
- B.Eng.**, *University of Science and Technology of China*, Hefei, China. 2006 - 2010.  
Graduated with Honors  
Major: Computer Science
- experience**
- Research Assistant**, *City University of New York*, New York, NY. 2012 - present.  
Focused on Structured Prediction problems in Natural Language Processing, including:
- incremental semantic parsing;
  - incremental parsing with best-first search strategy;
  - discriminative training for statistical machine translation;
  - parallelizing online learning for large-scale NLP tasks.
- Research Intern**, *Microsoft Research*, Redmond, WA. Summer 2014.  
Machine Translation Group  
Mentor: Hany Hassan  
Explored learning translation rules from monolingual continuous representations.
- Research Intern**, *IBM T.J. Watson Research Center*, Yorktown Heights, NY. Summer 2013.  
Multilingual Natural Language Processing Group  
Mentor: Abe Ittycheriah  
Adapted large-scale discriminative training to syntax based machine translation system.
- publications**
- Kai Zhao and Liang Huang. "Type-driven Incremental Semantic Parsing with Polymorphism." *Proceedings of NAACL*, 2015.
- Kai Zhao, Hany Hassan, and Michael Auli. "Learning Translation Models from Monolingual Continuous Representations." *Proceedings of NAACL*, 2015.
- 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.

honors &  
awards

**Science Fellowship**, Graduate Center, CUNY. 2010 & 2011.

**National Scholarship**, Ministry of Education of China. 2009.

**Outstanding Student Scholarship**, USTC. 2008.