

# He He

---

CONTACT INFORMATION	Gates 254 Stanford University Stanford, CA 94305	Phone: (301) 312-5903 E-mail: <a href="mailto:hehe@cs.stanford.edu">hehe@cs.stanford.edu</a> Website: <a href="http://hhexiy.github.io">hhexiy.github.io</a>
RESEARCH INTERESTS	Dialogue, Simultaneous Machine Translation, Fast Inference, Imitation Learning	
EDUCATION	<b>University of Maryland, College Park</b> , U.S.A. Ph.D. in Computer Science (Advisors: Hal Daumé III, Jordan Boyd-Graber) M.Sc. in Computer Science	2011–2016 2011–2013
	<b>The Hong Kong Polytechnic University</b> , China B.Eng. (Hons) in Electronic and Information Engineering (Thesis advisor: Wan-Chi Siu)	2007–2011
	<b>University of Waterloo</b> , Canada Non-degree exchange, Department of Electrical and Computer Engineering	Fall 2009
EMPLOYMENT	<b>Stanford University</b> , Stanford, CA Post-doc researcher (Supervisor: Percy Liang)	2016–
	<b>Microsoft Cloud Information and Service Lab</b> , Redmond, WA <i>Research Intern</i> (Mentors: Paul Mineiro, Nikos Karampatziakis) Active information acquisition for sentiment analysis and object recognition	Summer 2015
	<b>Machine Learning Group, Microsoft Research</b> , Redmond, WA <i>Research Intern</i> (Mentors: Lihong Li, Jason Williams) Combining imitation learning and reinforcement learning for dialog management	Summer 2013
AWARDS AND HONORS	Board of Visitors Graduate Student Award (awards to 2 students in the CMNS college) Larry S. Davis Dissertation Award Best Demonstration Award, NIPS Tammy L. Blair Award 2nd runner-up, Fusion Dean's Fellowship, UMD Best Academic Performance Award (awards to the top 3 students), HKPolyU Dean's Honors List, HKPolyU HSBC Scholarship for Mainland Students CMA & Donors Scholarship Non-local Students Scholarship (academic), HKPolyU	2016 2016 2015 2015 2011–2012 2008–2010 2008–2010 2008–2010 2008–2010 2007–2010
PUBLICATIONS	<b><u>Refereed conference papers</u></b>  <b>He He</b> , Anusha Balakrishnan, Mihail Eric and Percy Liang. <b>Learning Symmetric Collaborative Dialogue Agents with Dynamic Knowledge Graph Embeddings.</b> Association for Computational Linguistics (ACL), 2017  <b>He He</b> , Jordan Boyd-Graber, Kevin Kwok and Hal Daumé III. <b>Opponent Modeling in Deep Reinforcement Learning.</b> International Conference on Machine Learning (ICML), 2016.  Kai-Wei Chang, <b>He He</b> , Hal Daumé III, John Langford and Stéphane Ross. <b>A Credit Assignment Compiler for Joint Prediction.</b> Neural Information Processing Systems (NIPS), 2016.  <b>He He</b> , Jordan Boyd-Graber and Hal Daumé III. <b>Interpretese vs. Translationese: The Uniqueness of Human Strategies in Simultaneous</b>	

**Interpretation.** (Short paper)  
North American Association for Computational Linguistics (NAACL), 2016.

Xi Chen, **He He**, Larry Davis.  
**Object Detection in 20 Questions.**  
IEEE Winter Conference on Applications of Computer Vision (WACV), 2016.

**He He**, Alvin Grissom II, Jordan Boyd-Graber and Hal Daumé III.  
**Syntax-based Rewriting for Simultaneous Machine Translation.**  
Empirical Methods in Natural Language Processing (EMNLP), 2015.

Jordan Boyd-Graber, Mohit Iyyer, **He He**, and Hal Daumé III.  
**Interactive Incremental Question Answering.** (Demonstration track)  
Neural Information Processing Systems (NIPS), 2015. *Best demonstration award.*

Xiangyang Liu, **He He** and John Baras.  
**Crowdsourcing with Multi-Dimensional Trust.**  
International Conference on Information Fusion (Fusion), 2015. *Tammy L. Blair Award 2nd runner-up.*

Xiangyang Liu, **He He** and John Baras.  
**Trust-Aware Optimal Crowdsourcing With Budget Constraint.**  
IEEE International Conference on Communications (ICC), 2015.

**He He**, Hal Daumé III and Jason Eisner.  
**Learning to Search in Branch and Bound Algorithms.**  
Neural Information Processing Systems (NIPS), 2014.

Alvin Grissom II, **He He**, Jordan Boyd-Graber, John Morgan, and Hal Daumé III.  
**Don't Until the Final Verb Wait: Reinforcement Learning for Simultaneous Machine Translation.**  
Empirical Methods in Natural Language Processing (EMNLP), 2014.

Lihong Li, **He He** and Jason D. Williams.  
**Temporal Supervised Learning for Inferring a Dialog Policy from Example Conversations.**  
IEEE Workshop on Spoken Language Technology (SLT), 2014.

**He He**, Hal Daumé III and Jason Eisner.  
**Dynamic Feature Selection for Dependency Parsing.**  
Empirical Methods in Natural Language Processing (EMNLP), 2013.

**He He**, Hal Daumé III and Jason Eisner.  
**Imitation Learning by Coaching.**  
Neural Information Processing Systems (NIPS), 2012.

Jordan Boyd-Graber, Brianna Satinoff, **He He** and Hal Daumé III.  
**Besting the Quiz Master: Crowdsourcing Incremental Classification Games.**  
Empirical Methods in Natural Language Processing (EMNLP), 2012.

**He He** and Wan Chi Siu.  
**Image Super-resolution using Gaussian Process Regression.**  
Computer Vision and Pattern Recognition Conference (CVPR), 2011.

**He He** and Ali Ghodsi.  
**Rare Class Classification by Support Vector Machines.**  
International Conference on Pattern Recognition (ICPR), 2010.

Workshop papers and manuscripts

**He He**, Paul Mineiro and Nikos Karampatziakis.

**Active Information Acquisition.**

Machine Learning From and For Adaptive User Technologies: From Active Learning & Experimentation to Optimization & Personalization, NIPS, 2015.

Kai-Wei Chang, **He He**, Hal Daumé III and John Langford.

**Learning to Search for Dependencies.**

Arxiv 1503.05615, 2015.

**He He**, Hal Daumé III and Jason Eisner.

**Cost-sensitive Dynamic Feature Selection.**

Workshop on Inferning, ICML, 2012.

TEACHING EXPERIENCE	Department of Computer Science, University of Maryland, College Park <i>Teaching Assistant</i> , Object-oriented Programming (CMSC 132)	Fall 2011
INVITED TALKS	Learning Agents that Interact with Humans USC ISI, Allen Institute for AI, Salesforce, SJTU, Amazon	2017
	Understanding Natural Language: Chat Bots and Beyond WECode (women in computer science conference)	2017
	Decision-making in Incremental Question Answering Stanford Data Science Initiative Retreat	2016
	Sequential Decision-making for Natural Language Processing UPenn, UC Boulder, Microsoft Research	2015
PROFESSIONAL SERVICE	<i>Reviewer</i> , ACL, NAACL, EMNLP, NIPS, ICML, AAAI, AISTATS <i>Co-chair</i> , First Workshop for Women and Underrepresented Minorities in NLP <i>Co-chair</i> , ACL Student Research Workshop <i>Organizing Committee</i> , NAACL Workshop on Human-computer Question Answering <i>Organizing Committee</i> , NAACL Tutorial on Learning to Search for Structured Prediction <i>Organizing Committee</i> , Mid-Atlantic Student Colloquium on Speech, Language and Learning <i>Contributor</i> , Challenge Problem on NLP for DARPA Program Probabilistic Programming for Advancing Machine Learning	2017 2016 2016 2015 2015 2015