## Wei Xu

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Last updated: May 24, 2016 (up-to-date version on my homepage)

RESEARCH Machine Learning, Natural Language Processing, Social Medi	$\mathbf{a}$
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Current Assistant Professor, Ohio State University, Columbus, OH Aug 2016 (expected) – Present Position Department of Computer Science and Engineering

**EDUCATION** 

Ph.D. in Computer Science, New York University, New York, NY Jan 2014

Thesis: Data-driven Approaches for Paraphrasing Across Language Variations

B.S. and M.S. in Computer Science, Tsinghua University, Beijing, CHINA 2004/2007

Thesis: Event-relevance Based Summarization

Postdoctoral Fellow, University of Pennsylvania, Philadelphia, PA Feb 2014 - Aug 2016 EXPERIENCE

Computer Information and Science Department

Visiting Researcher, University of Washington, Seattle, WA Jan 2012 – Dec 2013

Computer Science and Engineering Department

Research Intern, Microsoft Research, Seattle, WA Jun - Sep 2011

Internet Services Research Center

Research Consultant, Educational Testing Service, Princeton, NJ Mar - Dec 2010

Natural Language and Speech Group

Software Engineer Intern, Amazon.com, Seattle, WA Jun - Aug 2010

Catalog Quality Group

Visiting Research Assistant, Hong Kong Polytechnic University Sep 2005 – Feb 2006

Department of Computing

SERVICES Area Chair: EMNLP (2016)

Publicity Chair: NAACL (2016)

Session Chair: EMNLP (2015), NAACL (2015), AAAI (2015), ACL (2014)

### Organizer:

- The 1st International Workshop on Noisy User-generatedText at ACL (2015)

- The 2nd International Workshop on Noisy User-generated Text at COLING (2016)

http://noisy-text.github.io/

- SemEval shared-task: Paraphrase and Semantic in Twitter (2015)

(19 research teams worldwide participated)

http://alt.qcri.org/semeval2015/task1/

- Mid-Atlantic Student Colloquium on Speech, Language and Learning (2016)

http://www.mascsll.org/

## Program Committee:

ACL (2015, 2014 – Outstanding Reviewer Award, 2013), NAACL (2015), EMNLP (2015, 2014)

WWW (2016, 2015), AAAI (2016, 2015, 2012), KDD (2015), COLING (2014)

WWW Workshop on #Microposts (2016)

ACL Workshop on Social Factors in Natural Language Processing (2016)

EACL Workshop on Language Analysis in Social Media (2014)

Steering Committee: SemEval (2017)

#### Thesis Committee:

Maria Pershina, Ph.D. in Computer Science, New York University (2016)

### Journal Reviewer:

Transactions of the Association for Computational (TACL)

Invited	Multiple-instance Learning from Unlimited Text	
TALKS	-	May 2016
	Ohio State University, Columbus, OH	Apr 2016
	University of North Carolina, Chapel Hill, NC	Apr 2016
	Arizona State University, Tempe, AZ	Mar 2016
	Vanderbilt University, Nashville, TN	Mar 2016
	Imperial College London, London, United Kingdom	Mar 2016
	University of Waterloo, Waterloo, ON, Canada (CS Seminar)	Mar 2016
	Indiana University, Bloomington, IN (Computer Science Colloquium Series)	Feb 2016
	Washington University, St Louis, MI (Computer Science & Engineering Colloquia Series)	
	Simon Fraser University, Vancouver, BC, Canada	Feb 2016
	University of Alberta, Edmonton, AB, Canada (Special Lecture)	Feb 2016
	Yale University, New Haven, CT (CS Talk)	Feb 2016
	University of Maryland, College Park, MD (CLIP Colloquium)	Oct 2015
	Ohio State University, Columbus, OH (Clippers Seminar)	Oct 2015
	Large-scale Paraphrase Acquisition from Twitter	
		May 2015
	Learning and Generating Paraphrases from Twitter and Beyond	
	Carnegie Mellon University, Pittsburgh, PA	Apr 2015
	Columbia University, New York, NY (NLP Talk)	Apr 2015
	Johns Hopkins University, Baltimore, MD (CLSP Colloquium)	Feb 2015
	Johns Hopkins University, Daitimore, MD (CEST Conoquium)	reb 2015
	Paraphrases in Twitter	
	Twitter.com, San Francisco, CA	Feb 2015
	Twitter.com, ban francisco, orr	100 2010
	Modeling Lexically Divergent Paraphrases in Twitter (and Shakespeare!)	
	The City University of New York, New York, NY (NLP Seminar)	Mar 2015
	IBM Research - Almaden, San Jose, CA	Feb 2015
	University of California, Berkeley, CA	Feb 2015
	The University of Texas, Austin, TX (Forum for Artificial Intelligence)	Feb 2015
	Yahoo!, New York, NY	Dec 2014
	Carnegie Mellon University, Pittsburgh, PA (CL+NLP Lunch Seminar)	Nov 2014
	Microsoft Research, Seattle, WA (Visiting Speaker Series)	Aug 2014
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	Incremental Information Extraction	
	Stanford Research Institute, Palo Alto, CA	Apr 2012
	IARPA's KDD Project PI Meeting, San Diego, CA	May 2011

#### Information Extraction Research

University of Washington, Seattle, WA

Jan 2011

#### **Event-based Summarization**

Thomson Reuters, Eagan, Minnesota, MN
France Telecom, Beijing, CHINA

Nov 2009
Mar 2007

## Publications Referred Journal and Conference Papers (all have acceptance rates $\approx 25\%$ )

(\* TACL is the new journal since 2013 that allows presentation at any ACL conferences of author's choice and has quickly become the most selective venue for natural language processing publications. It only accepts about 40 papers per year and does not accept submissions previously published or rejected from conferences.)

Optimizing Statistical Machine Translation for Simplification Wei Xu, Courtney Napoles, Ellie Pavlick, Quanze Chen, Chris Callison-Burch Transactions of the Association for Computational (TACL)\*, 2016 presentation at ACL 2016 (expected)

Problems in Current Text Simplification Research: New Data Can Help Wei Xu, Chris Callison-Burch, Courtney Napoles Transactions of the Association for Computational (TACL)\*, 2015 oral presentation at EMNLP 2015

Extracting Lexically Divergent Paraphrases from Twitter

Wei Xu, Alan Ritter, Chris Callison-Burch, William B. Dolan, Yangfeng Ji

Transactions of the Association for Computational (TACL)\*, 2014

oral presentation at NAACL 2015

Discovering User Attribute Stylistic Differences via Paraphrasing Daniel Preotiuc, **Wei Xu**, Lyle Ungar Proceedings of AAAI 2016

Cost Optimization for Crowdsourcing Translation Mingkun Gao, **Wei Xu**, Chris Callison-Burch Proceedings of NAACL 2015

Infusion of Labeled Data into Distant Supervision for Relation Extraction Maria Pershina, Bonan Min, **Wei Xu**, Ralph Grishman Proceedings of ACL 2014

Filling Knowledge Base Gaps for Distant Supervision of Relation Extraction Wei  $\mathbf{Xu}$ , Raphael Hoffmann, Le Zhao, Ralph Grishman Proceedings of ACL 2013

Paraphrasing for Style
Wei Xu, Alan Ritter, Bill Dolan, Ralph Grishman, Colin Cherry
Proceedings of COLING 2012

 $\label{lem:condition} Exploiting\ Syntactic\ and\ Distributional\ Information\ for\ Spelling\ Correction\ with\ Web-Scale\ N-grams\ Models$ 

 $\bf Wei~\bf Xu,$  Joel Tetreault, Martin Chodorow, Ralph Grishman, Le Zhao Proceedings of EMNLP 2011

Passage Retrieval for Information Extraction using Distant Supervision  ${f Wei}$   ${f Xu}$ , Ralph Grishman, Le Zhao

Proceedings of IJCNLP 2011

Who, What, When, Where, Why? Comparing Multiple Approaches to the Cross-Lingual 5W Task Kristen Parton, Kathleen R. McKeown, Bob Coyne, Mona T. Diab, Ralph Grishman, Dilek Hakkani-Tür, Mary Harper, Heng Ji, Wei Yun Ma, Adam Meyers, Sara Stolbach, Ang Sun, Gokhan Tur, Wei Xu, Sibel Yaman

Proceedings of ACL-IJCNLP 2009

Extractive Summarization using Inter- and Intra- Event Relevance Wenjie Li, **Wei Xu**, Mingli Wu, Chunfa Yuan, Qin Lu Proceedings of COLING-ACL 2006

## Refereed Workshop Papers (all peer-reviewed)

Shared Tasks of the 2015 Workshop on Noisy User-generated Text: Twitter Lexical Normalization and Named Entity Recognition

Timothy Baldwin, Marie-Catherine de Marneffe, Bo Han, Young-Bum Kim, Alan Ritter, **Wei Xu** Proceedings of ACL 2015 Workshop on Noisy User-generated Text (WNUT)

SemEval-2015 Task 1: Paraphrase and Semantic Similarity in Twitter (PIT) Wei Xu, Chris Callison-Burch, William B. Dolan

Proceedings of SemEval 2015

Poetry of the Crowd: A Human Computation Algorithm to Convert Prose into Rhyming Verse Quanze Chen, Chenyang Lei, **Wei Xu**, Ellie Pavlick, Chris Callison-Burch Proceedings of HCOMP 2014

Gathering and Generating Paraphrases from Twitter with Application to Normalization  $\mathbf{Wei}\ \mathbf{Xu}$ , Alan Ritter, Ralph Grishman

Proceedings of ACL 2013 Workshop on Building and Using Comparable Corpora (BUCC)

A Preliminary Study of Tweet Summarization using Information Extraction Wei Xu, Ralph Grishman, Adam Meyers, Alan Ritter Proceedings of NAACL 2013 Workshop on Language Analysis in Social Media (LASM)

New York University 2011 System for KBP (Knowledge Base Population) Slot Filing Ang Sun, Ralph Grishman, **Wei Xu**, Bonan Min Proceedings of TAC 2011 (best performance system in NIST KBP-2011 Evaluation slot filling track)

A Parse-and-Trim Approach with Information Significance for Chinese Sentence Compression  $\mathbf{Wei}\ \mathbf{Xu}$ , Ralph Grishman

Proceedings of the 2009 Workshop on Language Generation and Summarisation (UCNLG)

Transducing Logical Relations from Automatic and Manual Annotation

Adam Meyers, Michiko Kosaka, Heng Ji, Nianwen Xue, Mary Harper, Ang Sun, **Wei Xu**, Shasha Liao

Proceedings of ACL-IJNLP Workshop on Linguistic Annotation 2009

 $Automatic\ Recognition\ of\ Logical\ Relations\ for\ English,\ Chinese\ and\ Japanese\ in\ the\ GLARF\ Framework$ 

Adam Meyers, Michiko Kosaka, Nianwen Xue, Heng Ji, Ang Sun, Shasha Liao, **Wei Xu** Proceedings of NAACL-HLT Workshop on Semantic Evaluations 2009

Using Non-Local Features to Improve Named Entity Recognition Recall Xinnian Mao, **Wei Xu**, Yuan Dong, Haila Wang Proceedings of PACLIC 2007

Domain Extension of Chinese Named Entity Recognition Wei Xu, Bin Fu, Liu Liu, Chunfa Yuan, Wenjie Li Frontiers of Content Computing (FCC) 2007

Deriving Event Relevance from the Ontology Constructed with Formal Concept Analysis Wei Xu, Wenjie Li, Mingli Wu, Wei Li, Chunfa Yuan

Proceedings of CICLing 2006

Building Document Graph for Text Summarization: An Event-based Approach Wei Xu, Wenjie Li, Mingli Wu, Wei Li, Chunfa Yuan

Proceedings of ICCPOL 2006

The THU/PolyU System at MSE 2006: An Event-relevance based Approach Wei Xu, Chunfa Yuan, Mingling Wu, Wenjie Li Proceedings of MSE 2006

#### Theses

Data-driven Approaches for Paraphrasing Across Language Variations

Ph.D. Thesis, Department of Computer Science, New York University

## TEACHING Instructor, New Brunswick, NJ

Summer 2016 (expected)

North American Summer School on Logic, Language, and Information (NASSLLI)

Course: Social Media and Text Analytics (interdisciplinary)

http://ruccs.rutgers.edu/nasslli2016/

### Instructor, University of Pennsylvania, Philadelphia, PA

Summer 2015

Course: Social Media and Text Analytics (graduate-level)

http://socialmedia-class.org/

Designed and taught a new course, covering from basic to state-of-the-art machine learning algorithms for text processing and social media analysis. 20 students attended.

### Guest Lecturer, Rutgers University, New Brunswick, NJ

Spring 2015

Course: Natural Language Processing

### Guest Lecturer, The Ohio State University, Columbus, OH

Fall 2014

Course: Natural Language Processing and Information Extraction for the Social Web

## Guest Lecturer, University of Pennsylvania, Philadelphia, PA

Spring 2014

Course: Advanced Topics in Natural Language Processing

## AWARDS AND

# Co-author, NSF EAGER: Simplification as Machine Translation

2014

Grants MacCracken Fellowship (Award Value: \$230,000)

2007 - 2012

Travel Grants: Google, Grace Hopper, CRA-Women

## STUDENT RESEARCH ADVISING

Quanze Chen (undergraduate student at UPenn) [HCOMP 2014]

Bin Fu (undergraduate student at Tsinghua, then Ph.D. at CMU, now Google NYC) [FCC 2007]

Chenyang Lei (undergraduate student at UPenn) [HCOMP 2014]

Mingkun Gao (masters student at UPenn, now a PhD student at UIUC) [NAACL 2015]

Maria Pershina (Ph.D. student at NYU) [ACL 2014] Siyu Qiu (masters student at UPenn) [paper in submission] OPEN SOURCE Multiple-instance Learning Paraphrase Model

 ${\bf Code} \ / \ {\bf Data} \ \ {\tt https://www.cis.upenn.edu/~xwe/multip/}$ 

Twitter Paraphrase Corpus (shared-task at SemEval-2015) Oct 2014

http://alt.qcri.org/semeval2015/task1/

Event-based Twitter Summarization System Nov 2013

https://github.com/cocoxu/twittersummarization

Twitter Translation Phrase Table Oct 2014

https://github.com/cocoxu/twitterparaphrase

Parallel Shakespeare Corpus and Model Jul 2012

https://github.com/cocoxu/Shakespeare

Press One Per Cent Oct 29, 2014

New Scientist

Government Aims to Build a "Data Eye in the Sky" Oct 11, 2011

New York Times

REFERENCES Chris Callison-Burch

Assistant Professor, Computer and Information Science Department

University of Pennsylvania, Philadelphia, PA

Sloan Research Fellow (2014), Chair of the NAACL Executive Board (2012-2013)

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Bill Dolan

Research Manager/Principal Researcher, Microsoft Research, Redmond, WA

Manager of the Natural Language Processing Group

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http://research.microsoft.com/en-us/people/billdol/

Raymond J. Mooney

Professor, Computer Science Department, University of Texas, Austin, TX

AAAI fellow (2005), ACM fellow (2010), ACL fellow (2014)

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Ralph Grishman

Professor, Computer Science Department, New York University, New York, NY

Department Chair (1986-1988), President of ACL (1991)

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Joel Tetreault

Senior Research Scientist, Yahoo! Labs, New York, NY

Treasurer of NAACL (2013-2015)

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Dec 2014