# Wei Xu

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Last updated: April 4th, 2020

CURRENT Position	Assistant Professor, The Ohio State University, Columbus, OH Department of Computer Science and Engineering	Aug 2016 – present
EDUCATION	Ph.D. in Computer Science, New York University, New York, NY Thesis: Data-driven Approaches for Paraphrasing Across Language Variations Advisor: Ralph Grishman; Committee: Satoshi Sekine, Ernest Davis, Bill Dolan (Mi Luke Zettlemoyer (University of Washington/Facebook AI Research)	2014 icrosoft Research),
	<b>B.S. and M.S. in Computer Science, Tsinghua University</b> , Beijing, CHINA Thesis: <i>Event-relevance Based Summarization</i>	2004/2007
RESEARCH	Natural Language Processing, Machine Learning, Social Media	
CITIZENSHIP	United States	
EXPERIENCE	Visiting Faculty, Carnegie Mellon University, Pittsburgh, PA Language Technologies Institute (Host: Graham Neubig)	Summer 2019
	Postdoctoral Researcher, University of Pennsylvania, Philadelphia, PA Computer Information and Science Department (Advisor: Chris Callison-Burch)	Feb 2014 – Aug 2016
	Visiting PhD Student, University of Washington, Seattle, WA Computer Science and Engineering Department	Jan 2012 – Dec 2013
	Research Intern, Microsoft Research, Seattle, WA Internet Services Research Center	Summer 2011
	Research Intern, Educational Testing Service, Princeton, NJ Natural Language and Speech Group  Mar	– May, Sep – Dec 2010
	Engineer Intern, Amazon.com, Seattle, WA Catalog Quality Group	Summer 2010
	Research Intern, Hong Kong Polytechnic University  Department of Computing	Sep 2005 – Feb 2006
AWARDS	Best Paper Award, COLING, 2018	
	Criteo Faculty Research Award (\$20,000), 2018	
	CrowdFlower AI for Everyone Award (\$25,000), 2018	
	NSF CRII Award, 2018	
	NYU MacCracken PhD Fellowship, 2007 – 2012	
GRANTS	NSF Grant Collaborative Research: Automatic Text-Simplification and Reading-Ass Directed Learning by Deaf and Hard-of-Hearing Computing Workers PI (100%), total \$375,732 (including \$8,000 REU supplement)	$istance\ to\ Support\ Self-2018-2021$
	NSF CRII RI: Learning a Timely Semantic Resource from Social Media Data PI (100%), total \$183,000 (including \$8,000 REU supplement)	2018 - 2020
	IARPA Research Grant Better Extraction from Text Towards Enhanced Retrieva co-PI (50%), total \$850,000 (prime: Brown University)	2019 - 2023
	<b>DARPA Research Grant</b> Computational Simulation of Online Social Behavior co-PI (50%), total \$600,000 (prime: Leidos)	2017 - 2021
SERVICES	Best Paper Award Committee: EMNLP (2018) Area Chair/Senior Area Chair: ACL (2020, 2019), AAAI (2020), NAACL (20 EMNLP (2020, 2018, 2016)	019), COLING (2018),
	Program Committee: ACL (2018, 2017, 2015, 2014, 2013), EMNLP (2017, 2015, WWW (2017, 2016, 2015), AAAI (2016, 2015, 2012), KDD (2015), COLING (2014) Publicity Chair: EMNLP (2019), NAACL (2018, 2016) Workshop Chair: ACL (2017) Session Chair: ACL (2019, 2014), NAACL (2019, 2015), EMNLP (2018, 2017,	

(2018), AAAI (2015)

Steering Committee: SemEval (2017)

NSF Review Panelist: CISE (2017)

**Journal Reviewer:** Transactions of the Association for Computational (TACL), Journal of Artificial Intelligence Research (JAIR)

Organizer: Workshop on Noisy User-generated Text (http://noisy-text.github.io/) at EMNLP (2019, 2018, 2017), COLING (2016), ACL (2015)

SemEval Task 1: Paraphrase Identification and Semantic Similarity in Twitter (2015)

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

#### **Publications**

(<u>Underline</u> is used to indicate student advisees at the Ohio State University. TACL is one of the most selective venues for NLP publications, which allows authors to choose any of the ACL/NAACL/EMNLP conferences to present the paper.)

Neural CRF Model for Sentence Alignment Model in Text Simplification

Chao Jiang, Mounica Maddela, Wuwei Lan, Yang Zhong, Wei Xu

ACL 2020, long paper

An Empirical Study of Named Entity Recognition in StackOverflow

Jeniya Tabassum, Mounica Maddela, Wei Xu, Alan Ritter

ACL 2020, long paper

Generalizing Natural Language Analysis through Span-relation Representations

Zhengbao Jiang, Wei Xu, Jun Araki, Graham Neubig

ACL 2020, long paper

Discourse Level Factors for Sentence Deletion in Text Simplification

Yang Zhong, Chao Jiang, Wei Xu, Junyi Jessy Li

AAAI 2020, long paper (acceptance rate 20.6%; oral presentation)

Multi-task Pairwise Neural Ranking for Hashtag Segmentation

Mounica Maddela, Wei Xu, Daniel Preotiuc-Pietro

ACL 2019, long paper (acceptance rate 25.7%)

A Word-Complexity Lexicon and A Neural Readability Ranking Model for Lexical Simplification

Mounica Maddela, Wei Xu

EMNLP 2018, long paper (acceptance rate 25.8%; oral presentation)

Neural Network Models for Paraphrase Identification, Semantic Textual Similarity, Natural Language Inference, and Question Answering

Wuwei Lan, Wei Xu

COLING 2018, long paper (Best Paper Award; selection rate 8/888 = 0.90%)

An Annotated Corpus for Machine Reading of Instructions in Wet Lab Protocols

Chaitanya Kulkarni, Wei Xu, Alan Ritter, Raghu Machiraju

NAACL 2018, short paper (acceptance rate 29%)

Character-based Neural Networks for Sentence Pair Modeling

Wuwei Lan, Wei Xu

NAACL 2018, short paper (acceptance rate 29%)

A Continuously Growing Dataset of Sentential Paraphrases

Wuwei Lan, Siyu Qiu, Hua He, Wei Xu

EMNLP 2017, long paper (acceptance rate 25.8%)

From Shakespeare to Twitter: What are Language Styles all about?

Wei Xu

EMNLP 2017 Workshop on Stylistic Variation

A Minimally Supervised Method for Recognizing and Normalizing Time Expressions in Twitter

Jeniya Tabassum, Alan Ritter, Wei Xu

EMNLP 2016, long paper (acceptance rate 26%; oral presentation)

 $Optimizing \ Statistical \ Machine \ Translation \ for \ Simplification$ 

Wei Xu, Courtney Napoles, Ellie Pavlick, Quanze Chen, Chris Callison-Burch

TACL 2016, long paper (oral presentation at ACL 2016)

Discovering User Attribute Stylistic Differences via Paraphrasing

Daniel Preotiuc-Pietro, Wei Xu, Lyle Ungar

AAAI 2016, long paper (acceptance rate 26%; oral presentation)

Results of the WNUT16 Named Entity Recognition Shared Task

Benjamin Strauss, Bethany Toma, Alan Ritter, Marie-Catherine de Marneffe, Wei Xu

COLING 2016 Workshop on Noisy User-generated Text (shared-task overview)

Problems in Current Text Simplification Research: New Data Can Help

Wei Xu, Chris Callison-Burch, Courtney Napoles

TACL 2015, long paper (oral presentation at EMNLP 2015)

Cost Optimization for Crowdsourcing Translation

Mingkun Gao, Wei Xu, Chris Callison-Burch

NAACL 2015, long paper (acceptance rate 29%)

SemEval-2015 Task 1: Paraphrase and Semantic Similarity in Twitter

Wei Xu, Chris Callison-Burch, William B. Dolan

SemEval 2015, long paper (shared-task overview)

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

ACL 2015 Workshop on Noisy User-generated Text (shared-task overview; author ordered alphabetically)

Extracting Lexically Divergent Paraphrases from Twitter

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

TACL 2014, long paper (oral presentation at NAACL 2015)

Infusion of Labeled Data into Distant Supervision for Relation Extraction

Maria Pershina, Bonan Min, Wei Xu, Ralph Grishman

ACL 2014, short paper (acceptance rate 25.2%; oral presentation)

Filling Knowledge Base Gaps for Distant Supervision of Relation Extraction

Wei Xu, Raphael Hoffmann, Le Zhao, Ralph Grishman

ACL 2013, short paper (acceptance rate 24%)

Gathering and Generating Paraphrases from Twitter with Application to Normalization

Wei Xu, Alan Ritter, Ralph Grishman

ACL Workshop on Building and Using Comparable Corpora 2013

A Preliminary Study of Tweet Summarization using Information Extraction

Wei Xu, Ralph Grishman, Adam Meyers, Alan Ritter

NAACL Workshop on Language Analysis in Social Media 2013

Paraphrasing for Style

Wei Xu, Alan Ritter, Bill Dolan, Ralph Grishman, Colin Cherry

COLING 2012, long paper (acceptance rate 25%)

Exploiting Syntactic and Distributional Information for Spelling Correction with Web-Scale N-grams Models Wei Xu, Joel Tetreault, Martin Chodorow, Ralph Grishman, Le Zhao

EMNLP 2011, long paper (acceptance rate 23.7%)

New York University 2011 System for KBP (Knowledge Base Population) Slot Filing

Ang Sun, Ralph Grishman, Wei Xu, Bonan Min

TAC 2011 (best performance system in NIST KBP-2011 evaluation)

Passage Retrieval for Information Extraction using Distant Supervision

Wei Xu, Ralph Grishman, Le Zhao

IJCNLP 2011, long paper (acceptance rate 36%)

Who, What, When, Where, Why? Comparing Multiple Approaches to the Cross-Lingual 5W Task

Kristen Parton, Kathleen McKeown, Bob Coyne, Mona Diab, Ralph Grishman, Dilek Hakkani-Tür, Mary Harper, Heng Ji, Weiyun Ma, Adam Meyers, Sara Stolbach, Ang Sun, Gokhan Tur, Wei Xu, Sibel Yaman ACL 2009, long paper (acceptance rate 21%; oral presentation)

 $A\ Parse-and-Trim\ Approach\ with\ Information\ Significance\ for\ Chinese\ Sentence\ Compression$ 

Wei Xu, Ralph Grishman

ACL Workshop on Language Generation and Summarisation 2009

Transducing Logical Relations from Automatic and Manual Annotation

Adam Meyers, Michiko Kosaka, Heng Ji, Nianwen Xue, Mary Harper, Ang Sun, Wei Xu, Shasha Liao ACL 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 SemEval 2009, long paper

Extractive Summarization using Inter- and Intra- Event Relevance

Wenjie Li, Wei Xu, Mingli Wu, Chunfa Yuan, Qin Lu

ACL 2006, long paper (acceptance rate 23%; oral presentation)

Using Non-Local Features to Improve Named Entity Recognition Recall

Xinnian Mao, Wei Xu, Yuan Dong, Haila Wang

PACLIC 2007, long paper

Deriving Event Relevance from the Ontology Constructed with Formal Concept Analysis

Wei Xu, Wenjie Li, Mingli Wu, Wei Li, Chunfa Yuan

CICLing 2006, long paper (acceptance rate 30.4%; oral presentation)

Building Document Graph for Text Summarization: An Event-based Approach

Wei Xu, Wenjie Li, Mingli Wu, Wei Li, Chunfa Yuan

ICCPOL 2006

The THU/PolyU System at MSE 2006: An Event-relevance based Approach

Wei Xu, Chunfa Yuan, Mingling Wu, Wenjie Li

MSE 2006

#### STUDENTS

Wuwei Lan (PhD student at OSU)	2016 – present
Jeniya Tabassum (PhD student at OSU - co-advisor: Alan Ritter)	2016 – present
Mounica Maddela (PhD student at OSU)	2017 – present
Chao Jiang (PhD student at OSU)	2018 – present
Yang Zhong (PhD student at OSU)	2019 - present
Sydney Lee (undergraduate at OSU)	2018 – present
Sarah Flanagan (undergraduate at OSU)	2018 – present
Sam Stevens (undergraduate at OSU)	2019 – present
Daniel Szoke (undergraduate at OSU)	2019 - present
Ethan Lee (undergraduate at OSU)	2020 - present
Jaewook Lee (undergraduate at OSU)	2020
Nicholas Motlagh (undergraduate at OSU)	2019
Raleigh Potluri (undergraduate student at OSU)	2018 - 2019
Lillian Chow (undergraduate student at OSU)	2018 - 2019
Rita Tong (completed undergraduate student at OSU)	2018 - 2019
Pravar Mahajan (completed Masters student at OSU, now at IBM Research)	2016 - 2017
Piyush Ghai (completed Masters student at OSU, now at Amazon)	2017
Mingkun Gao (completed Masters student at UPenn, now a PhD student at UIUC)	2015
Siyu Qiu (completed Masters student at UPenn, now at Hulu)	2015
Jim Chen (completed undergraduate student at UPenn, now a PhD student at UW)	2014 - 2015
Ray Lei (completed undergraduate student at UPenn, now at Microsoft)	2014
Chaitanya Kulkarni (PhD student at OSU - advisor: Raghu Machiraju)	2017 - 2019
Sanqiang Zhao (PhD student at UPitt - phd thesis committee)	2019
Kai Cao (completed PhD student at NYU - phd thesis committee)	2017
${\it Maria\ Pershina\ (completed\ PhD\ student\ at\ NYU,\ now\ at\ Bloomberg\ -\ phd\ thesis\ committee}$	e) 2014

#### TEACHING

CSE 5539 Social Media and Text Analytics (http://socialmedia-class.org/)

A new course integrated with research, covering from basic to state-of-the-art machine learning algorithms (teaching evaluation: 4.13/5.00 Autumn 2019, 4.40/5.00 Autumn 2017, 4.60/5.00 Autumn 2016; 5.72/6.00 at NASSLLI 2015)

CSE 5522 Artificial Intelligence II: Advanced Techniques

Ohio State University, mixed undergraduate and graduate level

(teaching evaluation: Spring 2020, 4.85/5.00 Autumn 2018, 4.50/5.00 Spring 2018)

CSE 5525 Speech and Language Processing

Ohio State University, mixed undergraduate and graduate level (teaching evaluation 3.80/5.00 Spring 2017)

## INVITED TALKS

# Understanding and Generating Human Language

University of Maryland, College Park, MD
University of Massachusetts, Amherst, MA
Georgia Institute of Technology, Atlanta, GA
Dec 2019

# Learning for Unlimited Human Language

Peking University, Beijing, China Dec 2018

### Learning Large-scale Paraphrases for Natural Language Understanding and Generation

Midwest Machine Learning Symposium, Chicago, IL	Jun 2018
Facebook, Menlo Park, CA	May 2018
Stanford Research Institute, Menlo Park, CA	May 2018
Twitter, San Francisco, CA	May 2018

	IBM Thomas J. Watson Research Center, New York, NY	Nov 2017
	How does AI Understand Language? Women in Analytics Conference, Columbus, OH (Main Stage Panel)	Mar 2018
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	Can Paraphrase be a Ultimate Solution for NLU and NLG? Google Research, New York, NY	Jul 2017
	Paraphrase $\approx$ Monolingual Translation	
	Amazon, Berlin, Germany	Aug 2016
	Multiple Instance Learning from Unlimited Text	
	Microsoft Research Asia, Beijing, China	Dec 2016
	University of Delaware, Newark, DE	Sep 2016
	University of Edinburgh, Edinburgh, United Kingdom	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)	Feb 2016
	Simon Fraser University, Vancouver, BC, Canada	Feb 2016
	University of Alberta, Edmonton, AB, Canada	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 DARPA's DEFT Project Meeting, Boulder, CO	May 2015
	Learning and Generating Paraphrases from Twitter and Beyond	v
	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
	Paraphrases in Twitter Twitter, San Francisco, CA	Feb 2015
		100 2010
	Modeling Lexically Divergent Paraphrases in Twitter (and Shakespeare!)  The City University of New York, New York, NY (NLD Session)	Man 2015
	The City University of New York, New York, NY (NLP Seminar) IBM Research - Almaden, San Jose, CA	Mar 2015 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
	Incremental Information Extraction	· ·
	Stanford Research Institute, Palo Alto, CA	Apr 2012
	IARPA's KDD Project Meeting, San Diego, CA	May 2011
	Information Extraction Research	Ü
	University of Washington, Seattle, WA	Jan 2011
	Event-based Summarization	
	Thomson Reuters, Eagan, Minnesota, MN	Nov 2009
OUTREACH	Speaker/Judge, Ohio High School Hackathon	Mar 2019
ACTIVITIES	Speaker, Franklin Friday art and science festival in Columbus Ohio	Mar 2019
	Panelist, CogFest - Cognitive Science Festival	Apr 2018
	Mentor, Women and Underrepresented Minorities in NLP Workshop	Jun 2018
	Mentor, OSU's AI Hackathon	Apr 2018
	Speaker/Panelist, Women in Analytics Conference	Mar 2018
	Speaker, OSU's AI Club	Feb 2018
	Judge, HackOhio  Monton Women and Undergroupsgented Minerities in NLP Workshop	Oct 2017
	Mentor, Women and Underrepresented Minorities in NLP Workshop Judge, Ohio High School Hackathon	Jul 2017 Mar 2017
	Presenter, Philadelphia Science Festival	
	r resenter, r miaderpina science resulvar	Apr 2015

OPEN SOURCE	#HashtagMaster: A Semantic Analysis Tool for Hashtags	Jun 2019
Code / Data	https://mounicam.github.io/hashtag_master	
	$Pairwise\ Neural\ Ranking\ Model\ and\ Simple PPDB++$	Oct 2018
	https://github.com/lanwuwei/SPM_toolkit	
	SPM Toolkit for Sentence Pair Modeling	Aug 2018
	https://github.com/lanwuwei/SPM_toolkit	
	LanguageNet: Large-scale Paraphrase Corpus	Sep $2017$
	https://github.com/lanwuwei/paraphrase-dataset	
	Syntax MT-based Text Simplification System and SARI Evaluation Metric	May 2015
	https://github.com/cocoxu/simplification/ (contribution to the Joshua Machine Translation	Toolkit)
	NEWSELA Text Simplification Corpus	$\mathrm{Sep}\ 2015$
	https://newsela.com/data/ (widely adopted as the benchmark for text simplification research)	
	Multiple-instance Learning Paraphrase Model	$\mathrm{Dec}\ 2014$
	https://github.com/cocoxu/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 Normalization Phrase Table	Oct 2014
	https://github.com/cocoxu/twitterparaphrase/	
	Parallel Shakespeare Corpus and Model	Jul 2012
	https://github.com/cocoxu/Shakespeare/	