

## Alan Ritter

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CONTACT	<i>E-mail:</i> alan.ritter@cc.gatech.edu <i>WWW:</i> <a href="http://aritter.github.io/">http://aritter.github.io/</a> <i>Google Scholar Profile:</i> <a href="https://scholar.google.com/citations?user=unXtH3IAAAAJ">https://scholar.google.com/citations?user=unXtH3IAAAAJ</a>
RESEARCH	Natural Language Processing, Information Extraction, Machine Learning, Social Media Analysis
EDUCATION	<b>University of Washington</b> , Seattle, WA USA Ph.D. in Computer Science & Engineering <ul style="list-style-type: none"><li>• Thesis: Extracting Knowledge from Twitter and the Web</li><li>• Committee: Oren Etzioni, Mausam, Luke Zettlemoyer</li><li>• 2007 - 2013</li></ul> <b>Western Washington University</b> , Bellingham, WA USA B.S./M.S., Computer Science, December 2006
PROFESSIONAL EXPERIENCE	<b>Georgia Institute of Technology</b> , Atlanta GA USA <i>Associate Professor - School of Interactive Computing</i> <b>2020 - Present</b>  <b>The Ohio State University</b> , Columbus OH USA <i>Associate Professor - Computer Science and Engineering</i> <b>2020</b> <i>Assistant Professor - Computer Science and Engineering</i> <b>2014 - 2020</b>  <b>Carnegie Mellon University</b> , Pittsburgh PA USA <i>Visiting Faculty - Language Technologies Institute</i> <b>2019</b> <ul style="list-style-type: none"><li>• Host: Eduard Hovy</li></ul> <i>Postdoctoral Fellow - Machine Learning Department</i> <b>2013 - 2014</b> <ul style="list-style-type: none"><li>• Advisor: Tom Mitchell</li></ul> <b>Microsoft Research</b> , Redmond WA USA <i>Consultant - Natural Language Processing Group</i> <b>2014 - 2016</b> <ul style="list-style-type: none"><li>• Host: Bill Dolan</li></ul> <i>Intern - Natural Language Processing Group</i> <b>2009</b> <ul style="list-style-type: none"><li>• Mentor: Colin Cherry</li></ul> <i>Intern - Knowledge Tools Group (Machine Learning Department)</i> <b>2008</b> <ul style="list-style-type: none"><li>• Mentor: Sumit Basu</li></ul> <b>Naval Research Laboratory, Marine Meteorology Division</b> , Monterey, CA USA <i>Intern - Data Assimilation Group</i> <b>2006</b> <ul style="list-style-type: none"><li>• Mentor: William Campbell</li></ul>
GRANTS	<b>NSF CAREER</b> , (\$500k), Large-Scale Learning for Information Extraction, 2019-2024 <b>DARPA</b> , (\$800k), Logically Adaptive Molecular Design Automation (LAMDA), 2019-2023 <b>IARPA</b> , (\$850k), Task and User-Aware Representation Learning for Fine-Grained Cross-Lingual Information Retrieval, 2019-2023 <b>NSF CRII</b> , (\$151k) III: Learning to Extract Events from Knowledge Base Revisions, 2015-2018 <b>Amazon Research Award</b> , (\$50k) Integrating Data-Driven Conversation in Open-Domain Question Answering, 2018 <b>DARPA</b> (\$600k) Modeling the Spread of Information through Social and Knowledge Graphs, 2017-2021

**IARPA** (\$507k) Extracting a Realtime Cybersecurity Knowledge Graph from Text, 2016-2019  
**CMU Software Engineering Institute** (\$40k) Events, relationships, and script learning for situational awareness, 1/2017-9/2017  
**NIH (co-PI with Po-Yin Yen)** (\$100k) Supporting systematic review production with article similarity network visualization, 2016-2018  
**Criteo Faculty Research Award (co-PI with Wei Xu)** (\$20k) 2018  
**Battelle BETHA Award (co-PI with Marie-Catherine de Marneffe)** (\$23k) Trustworthiness in Social Media, 2017-2019

**PRESS** **Machine Learning Can Use Tweets to Spot Critical Security Flaws**, WIRED (March 2019), <https://www.wired.com/story/machine-learning-tweets-critical-security-flaws/>

**AWARDS** **Lumley Research Award**, College of Engineering, Ohio State University (2019)  
**Outstanding Student Organization Advisor Award**, College of Engineering, Ohio State University (2018)  
**Best Student Paper Award** for *Learning to Generalize for Complex Selection Tasks* at the ACM Conference on Intelligent User Interfaces (2009)  
**NDSEG Fellowship** (2008)

**EXTERNAL THESIS** *Alex Memory* PhD, Oct 2019  
**COMMITTEES** Collective Relational Data Integration with Diverse and Noisy Evidence (Advisor: Lise Getoor)  
University of Maryland

*Young-Bum Kim* PhD, Feb 2015  
Natural Language Technologies for Low-Resource Languages (Advisor: Benjamin Snyder)  
University of Wisconsin

**RECENT INVITED TALKS** University of Maryland, April 2020  
UMass Amherst, February 2020  
NeurIPS Workshop on Conversational AI, December 2019  
Georgia Institute of Technology, December 2019  
Twitter, June 2019  
University of Michigan, April 2019  
University of Maryland, April 2019  
Rice University, March 2019  
University of Wisconsin, January 2019  
Google Assistant and Dialogue Workshop, June 2018  
Stanford NLP Seminar, May 2018  
NeurIPS Workshop on Learning With Limited Labeled Data, December 2017  
Microsoft Research Faculty Summit, July 2017  
Google Natural Language Understanding Workshop, July 2017  
Midwest Machine Learning Symposium, June 2017  
University of Edinburgh, July 2016  
Machine Learning Seminar, Purdue University, December 2015  
School of Computer Science, Carnegie Mellon University, April 2015

**PH.D. STUDENTS** Ashutosh Baheti  
Yang Chen

Fan Bai

## ALUMNI

Jeniya Tabassum. Information Extraction From User Generated Noisy Texts. co-advised with Wei Xu (Ph.D., Ohio State University, 2020)  
Shi Zong. Extracting Events from Social Media and the Web. (Ph.D., Ohio State University, 2020)  
Alexander Kononov. Predicting Knowledge Base Revisions from Realtime Text Streams. (M.S., Ohio State University, 2018)  
Sandesh Swamy. Forecasting Event Outcomes from User Predictions on Twitter. (M.S., Ohio State University, 2017)

## TEACHING

OSU CSE 5525: Speech and Language Processing (Fall 2019)  
OSU CSE 5525: Speech and Language Processing (Spring 2019)  
OSU CSE 5523: Machine Learning and Statistical Pattern Recognition (Fall 2018)  
OSU CSE 5539: Social Media and Text Analytics (Spring 2018)  
OSU CSE 5522: Survey of Artificial Intelligence II: Advanced Techniques (Fall 2017)  
OSU CSE 5523: Machine Learning and Statistical Pattern Recognition (Spring 2017)  
OSU CSE 5525: Speech and Language Processing (Spring 2016)  
OSU CSE 5539: Web Information Extraction (Fall 2015)  
OSU CSE 5522: Survey of Artificial Intelligence II: Advanced Techniques (Spring 2015)  
OSU CSE 5539: NLP and IE for the Social Web (Fall 2014)

## SERVICE

**Organizer** ACL Workshop on Noisy User-Generated Text (WNUT 2015, 2016, 2017, 2018, 2019), Sentiment Analysis in Twitter Shared Task (SemEval 2013,2014,2015,2016), Named Entity Recognition in Twitter Shared Task (at WNUT 2015, 2016)

**Senior Area Chair** EMNLP 2020 (Information Extraction) NAACL 2021 (Machine Learning) EMNLP 2021 (Computational Social Science)

**Area Chair** ACL 2014 (NLP for the web and social media), NAACL 2015 (Information Extraction and Question Answering), EMNLP 2016 (Information Extraction, Information Retrieval and Question Answering), NAACL 2018 (Computational Social Science), EMNLP 2018 (Text Mining and Information Retrieval), CoNLL 2018, ACL 2019 (Information Extraction and Text Mining), EMNLP 2019 (Social Media and Computational Social Science), ACL 2020 (Information Extraction) ACL 2021 (Information Extraction)

**Steering Committee** SemEval 2016,2018,2019,2020

**Research Proposal Reviewing** Panelist for U.S. National Science Foundation, IIS, (Twice in 2017, Twice in 2018, Once in 2019), Reviewer for U.S. National Science Foundation, IIS, (Once in 2020), Independent Reviewer for Hong Kong Research Grants Council (2016), Independent Reviewer for Natural Sciences and Engineering Research Council of Canada (2016), Independent Reviewer U.S. Department of Energy (2015)

**Departmental Service** Graduate Studies Committee (2016-2019), Curriculum Committee (2019-Present), Graduate Admissions Committee - Artificial Intelligence Group Representative (2014-Present), Prospective Ph.D. Student Visit Day Organizer, (2014-2016)

## PUBLICATIONS

Ronen Tamari, Fan Bai, **Alan Ritter** and Gabriel Stanovsky  
“Process-Level Representation of Scientific Protocols with Interactive Annotation”  
To appear in Proceedings of EACL 2021

Wuwei Lan, Yang Chen, Wei Xu, **Alan Ritter**  
“An Empirical Study of Pre-trained Transformers for Arabic Information Extraction”  
Proceedings of EMNLP 2020 (short paper)

Shi Zong, **Alan Ritter** and Eduard Hovy  
“Measuring Forecasting Skill from Text”  
Proceedings of ACL 2020

Ashutosh Baheti, **Alan Ritter** and Kevin Small  
“Fluent Response Generation for Conversational Question Answering”  
Proceedings of ACL 2020

Jeniya Tabassum, Mounica Maddela, Wei Xu and **Alan Ritter**  
“Code and Named Entity Recognition in StackOverflow”  
Proceedings of ACL 2020

Fan Bai, **Alan Ritter**  
“Structured Minimally Supervised Learning for Neural Relation Extraction”  
Proceedings of NAACL 2019

Shi Zong, **Alan Ritter**, Graham Mueller and Evan Wright  
“Analyzing the Perceived Severity of Cybersecurity Threats Reported on Social Media”  
Proceedings of NAACL 2019 [[Covered by WIRED](#)]

Ashutosh Baheti, **Alan Ritter**, Jiwei Li, Bill Dolan  
“Generating More Interesting Responses in Neural Conversation Models with Distributional Constraints”  
Proceedings of EMNLP 2018

Chaitanya Kulkarni, Wei Xu, **Alan Ritter**, Raghu Machiraju  
“An Annotated Corpus for Machine Reading of Instructions in Wet Lab Protocols”  
Proceedings of NAACL 2018 (short paper)

Jiwei Li, Will Monroe, Tianlin Shi, Sébastien Jean, **Alan Ritter**, Dan Jurafsky  
“Adversarial Learning for Neural Dialogue Generation”  
Proceedings of EMNLP 2017

Sandesh Swamy, **Alan Ritter** and Marie-Catherine de Marneffe  
“i have a feeling trump will win.....: Forecasting Winners and Losers from User Predictions on Twitter”  
Proceedings of EMNLP 2017

Alexander Konovalov, Benjamin Strauss, **Alan Ritter** and Brendan O'Connor  
“Learning to Extract Events from Knowledge Base Revisions”  
Proceedings of WWW 2017

Jiwei Li, Will Monroe, **Alan Ritter**, Michel Galley, Jianfeng Gao, Dan Jurafsky  
“Deep Reinforcement Learning for Dialogue Generation”  
Proceedings of EMNLP 2016

Jeniya Tabassum, **Alan Ritter**, Wei Xu  
“A Minimally Supervised Method for Recognizing and Normalizing Time Expressions in Twitter”  
Proceedings of EMNLP 2016

Xinlei Chen, **Alan Ritter**, Abhinav Gupta and Tom Mitchell  
“Sense Discovery via Co-Clustering on Images and Text”  
Proceedings of CVPR 2015

**Alan Ritter**, Evan Wright William Casey and Tom Mitchell  
“Weakly Supervised Extraction of Computer Security Events from Twitter”  
Proceedings of WWW 2015

Tom Mitchell, William Cohen, Estevam Hruschka, Partha Talukdar, Justin Betteridge, Andrew Carlson, Bhavana Dalvi, Matt Gardner, Bryan Kisiel, Jayant Krishnmurthy, Ni Lao, Kathryn Mazaitis, Tahir Mohammad, Ndapa Nakashole, Emmanouil Antonios Platanios, **Alan Ritter**, Mehdi Samadi, Burr Settles, Richard Wang, Derry Wijaya, Abhinav Gupta, Xinlei Chen, Abulhair Saparov, Malcolm Greaves and Joel Welling  
“Never Ending Learning”  
Proceedings of AAAI 2015

Jiwei Li, **Alan Ritter**, Claire Cardie and Eduard Hovy  
“Major Life Event Extraction from Twitter based on Congratulations/Condolences Speech Acts”  
Proceedings of EMNLP 2014

Jiwei Li, **Alan Ritter** and Eduard Hovy  
“Weakly Supervised User Profile Extraction from Twitter”  
Proceedings of ACL 2014

Wei Xu, **Alan Ritter**, Chris Callison-Burch, William B. Dolan and Yangfeng Ji  
“Extracting Lexically Divergent Paraphrases from Twitter”  
Proceedings of TACL 2014

**Alan Ritter**, Luke Zettlemoyer, Mausam and Oren Etzioni  
“Modeling Missing Data in Distant Supervision for Information Extraction”  
Proceedings of TACL 2013

**Alan Ritter**, Mausam, Oren Etzioni, Sam Clark  
“Open Domain Event Extraction from Twitter”  
Proceedings of KDD 2012

Wei Xu, **Alan Ritter**, Bill Dolan, Ralph Grishman, Colin Cherry  
“Paraphrasing for Style”  
Proceedings of Coling 2012

**Alan Ritter**, Sam Clark, Mausam, Oren Etzioni  
“Named Entity Recognition in Tweets: An Experimental Study”  
Proceedings of EMNLP 2011

**Alan Ritter**, Colin Cherry, Bill Dolan  
“Data-Driven Response Generation in Social Media”  
Proceedings of EMNLP 2011

**Alan Ritter**, Mausam and Oren Etzioni  
“A Latent Dirichlet Allocation Method for Selectional Preferences”  
Proceedings of ACL 2010

**Alan Ritter**, Colin Cherry and Bill Dolan  
“Unsupervised Modeling of Twitter Conversations”

Proceedings of HLT-NAACL 2010

**Alan Ritter** and Sumit Basu

“Learning to Generalize for Complex Selection Tasks”

**Best Student Paper Award**

Proceedings of IUI 2009

**Alan Ritter**, Doug Downey, Stephen Soderland, and Oren Etzioni

“It’s a Contradiction – No, It’s Not: A Case Study using Functional Relations”

Proceedings of EMNLP 2008