

Alan Ritter

CONTACT	<i>E-mail:</i> alan.ritter@cc.gatech.edu <i>Webpage:</i> http://aritter.github.io/ <i>Google Scholar:</i> https://scholar.google.com/citations?user=unXtH3IAAAAJ Natural Language Processing, Information Extraction, Dialogue
EDUCATION	University of Washington , Seattle, WA USA Ph.D. in Computer Science & Engineering, 2013 Western Washington University , Bellingham, WA USA B.S./M.S., Computer Science, 2006
PROFESSIONAL APPOINTMENTS	Georgia Institute of Technology , Atlanta GA USA <i>Associate Professor - School of Interactive Computing, College of Computing</i> 2020 - Present The Ohio State University , Columbus OH USA <i>Associate Professor - Computer Science and Engineering</i> 2020 <i>Assistant Professor - Computer Science and Engineering</i> 2014 - 2020 Carnegie Mellon University , Pittsburgh PA USA <i>Visiting Faculty - Language Technologies Institute</i> 2019 <i>Postdoctoral Fellow - Machine Learning Department</i> 2013 - 2014 Microsoft Research , Redmond WA USA <i>Consultant - Natural Language Processing Group</i> 2014 - 2016 <i>Intern - Natural Language Processing Group</i> 2009 <i>Intern - Knowledge Tools Group</i> 2008 Naval Research Laboratory, Marine Meteorology Division , Monterey, CA USA <i>Intern - Data Assimilation Group</i> 2006
GRANTS AS PI	NSF , (\$500k), CAREER: Large-Scale Learning for Information Extraction, 2019-2024 DARPA , (\$800k), Logically Adaptive Molecular Design Automation (LAMDA), 2019-2023 IARPA , (\$850k), Task and User-Aware Representation Learning for Fine-Grained Cross-Lingual Information Retrieval, 2019-2023 NSF , (\$151k), CRII: Learning to Extract Events from Knowledge Base Revisions, 2015-2018 Amazon Research Award , (\$50k) Integrating Data-Driven Conversation in Open-Domain Question Answering, 2018 DARPA (\$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
GRANTS AS CO-PI	NIH (PI:Po-Yin Yen) (\$100k) Supporting systematic review production with article similarity network visualization, 2016-2018 Criteo Faculty Research Award (PI:Wei Xu) (\$20k) 2018 Battelle (PI:Marie 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/>

- This article covers the work described in our NAACL 2019 paper, entitled “*Analyzing the Perceived Severity of Cybersecurity Threats Reported on Social Media*”

GPT-3 mimics human love for ‘offensive’ Reddit comments, study finds, TNW (August 2021)

<https://thenextweb.com/news/gpt-3-and-humans-twice-as-likely-agree-with-offensive-reddit-comments-chatbots>

- This article covers the work described in our EMNLP 2021 paper, entitled “*Just Say No: Analyzing the Stance of Neural Dialogue Generation in Offensive Contexts*”

AWARDS

NSF CAREER Award, 2019

Amazon Research Award, 2018

Lumley Research Award, College of Engineering, Ohio State University (2019)

Outstanding Student Organization Advisor, 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 COMMITTEES

Alex Memory PhD, Oct 2019

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

Twitter, September 2021

University of Notre Dame, September 2021

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	<p>Ashutosh Baheti Fan Bai Yang Chen Ruohao Guo Nghia Max Le Shuheng Liu</p>
ALUMNI	<p>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 Konovalov. 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)</p>
TEACHING	<p>GT CS 4641: Machine Learning (Fall 2021) GT CS 7650: Natural Language Processing (Spring 2021) OSU CSE 5539: Social Media and Text Analytics (Spring 2020) 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)</p>
SERVICE	<p>Organizer ACL/EMNLP Workshop on Noisy User-Generated Text (WNUT 2015, 2016, 2017, 2018, 2019, 2020, 2021), Sentiment Analysis in Twitter Shared Task (SemEval 2013,2014,2015,2016), Named Entity Recognition in Twitter Shared Task (at WNUT 2015, 2016)</p> <p>Senior Area Chair EMNLP 2020 (Information Extraction), NAACL 2021 (Machine Learning), EMNLP 2021 (Computational Social Science), AAAI 2022, ACL 2022 (Information Extraction),</p> <p>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)</p> <p>Steering Committee SemEval 2016,2018,2019,2020</p> <p>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)</p>

Departmental/College Service GT College of Computing Undergraduate Curriculum Committee, 2020-2021, GT Computational Media Undergraduate Curriculum Committee, 2020-2021, GT School of Interactive Computing Faculty Hiring Committee, 2020-2021, OSU CSE Graduate Studies Committee (2016-2019), OSU CSE Curriculum Committee (2019-2020), OSU CSE Graduate Admissions Committee - Artificial Intelligence Group Representative (2014-2020), OSU CSE Prospective Ph.D. Student Visit Day Organizer, (2014-2016)

PATENTS

US Patent US20110010669

“Items Selection Via Automatic Generalization”

- This covers the work from my 2008 internship at Microsoft Research, which also resulted in a best student paper award at the ACM Conference on Intelligent User Interfaces.

PUBLICATIONS

Fan Bai, **Alan Ritter** and Wei Xu

“Pre-train or Annotate? Domain Adaptation with a Constrained Budget”

To appear in Proceedings of EMNLP 2021

Ashutosh Baheti, Maarten Sap, **Alan Ritter**, Mark Riedl

“Just Say No: Analyzing the Stance of Neural Dialogue Generation in Offensive Contexts”

To appear in Proceedings of EMNLP 2021 [\[Covered by TNW\]](#)

Yang Chen and **Alan Ritter**

“Model Selection for Cross-Lingual Transfer”

To appear in Proceedings of EMNLP 2021

Ronen Tamari, Fan Bai, **Alan Ritter** and Gabriel Stanovsky

“Process-Level Representation of Scientific Protocols with Interactive Annotation”

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