

# Alan Ritter

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Postdoctoral Fellow  
Machine Learning Department  
Carnegie Mellon University

## CONTACT INFORMATION

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*WWW:*        http://aritter.github.io/  
*Supervisor:* Tom Mitchell

## RESEARCH INTERESTS

Natural Language Processing in Informal Text, Latent Variable Models of Lexical Semantics, Machine Reading, Text Mining, Intelligent User Interfaces.

## EDUCATION

**University of Washington**, Seattle, WA USA

Ph.D. in Computer Science & Engineering

- Thesis Topic: Information Extraction in Social Media
- Fall 2007 - Summer 2013

**Western Washington University**, Bellingham, WA USA

B.S./M.S., Computer Science, December 2006

- Overall GPA: 4.00

## AWARDS

Facebook Fellowship Finalist (2012)

EMNLP-CoNLL Best Reviewer Awards (2012)

Best Student Paper Award for *Learning to Generalize for Complex Selection Tasks* at IUI (2009)

NDSEG Fellowship (2008)

WWU Outstanding Graduating Senior in Computer Science (2006)

## INDUSTRY EXPERIENCE

**Microsoft Research**, Redmond WA USA

*Intern - Natural Language Processing Group*

**June 2009 - September 2009**

Crawled Twitter to gather a corpus of conversations. Designed a generative model of dialogue, and conducted experiments to demonstrate the feasibility of unsupervised modeling of dialogue acts in new media. Investigated data-driven response generation in Social media. This work resulted in publication at [NAACL 2010] and [EMNLP 2011a].

Supervisors: Colin Cherry, Bill Dolan

**Microsoft Research**, Redmond WA USA

*Intern - Knowledge Tools Group (Machine Learning Department)*

**June 2008 - August 2008**

Investigated new methods for Smart Selection in the file browser domain. Proposed the idea of *Learning to Generalize* in Interactive Machine Learning. Implemented a prototype *Smart File Browser*, and conducted User Studies. This work resulted in an award paper at [IUI 2009].

Supervisor: Sumit Basu

**University of Washington, Seattle WA USA**

*Software Engineer*

**April 2007 - September 2007**

Implemented updates and maintained TEXTRUNNER, an Open IE based search engine. Developed a web-scale hypernym extractor.

Supervisors: Stephen Soderland, Oren Etzioni

**Microsoft, Redmond WA USA**

*Software Design Engineer*

**January 2007 - March 2007**

Windows Media DRM group.

**Naval Research Laboratory, Marine Meteorology Division, Monterey, CA USA**

*Intern - Data Assimilation Group*

**June 2006 - August 2006**

Used TAU (Tuning and Analysis Utilities) to instrument, profile, analyze, and improve scalability of research and operational NRL Data Assimilation Fortran/MPI code. Taught a class on automatic instrumentation of parallel programs for NRL scientists. Presented a Seminar on scalability enhancements to NAVDAS.

Supervisor: William F. Campbell

**The NetBSD Project**

*Google "Summer of Code" Grant*

**June 2005 - August 2005**

Ported FreeBSD's NDIS Compatibility Layer to NetBSD.

Mentor: Philip A. Nelson

TEACHING  
EXPERIENCE

**University of Washington, Seattle WA USA**

*Teaching Assistant - Machine Learning*

**Jan 2009 - March 2009, Jan 2011 - March 2011**

<http://www.cs.washington.edu/education/courses/cse446/>

Helped to design and grade homework assignments, answered student questions one-on-one, prepared and presented an hour long lecture on Neural Networks.

Supervisor: Oren Etzioni

MENTORING

*Sam Clark*

**March 2010 - June 2011**

Supervised Sam's work annotating a corpus of Tweets with Part of Speech (POS) and Chunk tags, and building a POS tagger and Chunker for Tweets. Sam is now working at a Seattle startup, *Decide.com*

PATENTS

US Patent Application US20110010669

"Items Selection Via Automatic Generalization"

INVITED TALKS

"Extracting Knowledge from Informal Text"

Toyota Technological Institute at Chicago, April 2013

Microsoft Research, April 2013

University of Texas at Dallas, March 2013

Ohio State University, March 2013

University of Massachusetts Amherst, March 2013

Human Language Technology Center of Excellence, March 2013

"Modeling Conversations in Social Media"

Microsoft Research, September 2011

“Extracting a Calendar from Twitter”  
Pacific Northwest National Laboratory, January 2013  
Proteus Group, New York University, September 2012  
Wavii, April 2012  
Facebook, March 2012  
Google Research, September 2011  
Yahoo! Labs, September 2011  
Twitter, May 2011  
Information Sciences Institute, University of Southern California, February 2011

“What Can Machines Learn by Reading Tweets?”  
ICT workshop on Reasoning with Text - <http://projects.ict.usc.edu/rwt2011/>  
February 2011

“Finding Contradictions in Text Using Functions”  
Boeing Research  
February 2008

PRESS “Forget today’s news: Zapaday will break future news”  
<http://thenextweb.com/media/2012/05/01/forget-todays-news-zapaday-will-break-future-news/>  
The Next Web  
May 2012

“Hello, computer!” UW prof and students search outside the box”  
<http://www.geekwire.com/2011/computer-uw-prof-students-search-box/>  
GeekWire  
November 2011

TUTORIALS “Latent Variable Models of Lexical Semantics”  
Yahoo! Machine Learning Seminar (@ UW)  
January 2012

SERVICE Co-Organizer  
*SemEval-2013 Task 2: Sentiment Analysis in Twitter*

Session Chair  
*EMNLP 2012 (Social Media), NAACL 2013 (Social Media)*

Journal Reviewing  
*JAIR (2012), ACM Transactions on Information Systems (2012), JMLR MLOSS (2013)*

Program Committee  
*EMNLP (2010,2011,2012,2013), ACL (2012,2013), NAACL-HLT (2012,2013), CoNLL (2013), AAAI (2012), EACL (2012), ICWSM (2012), LREC (2012), IJCAI (2011), \*SEM (2013), WWW (2014)*

Workshop Reviewing  
*AAAI Spring Symposium on Analyzing Microtext (2013), “@NLP can u tag #user\_generated\_content ?!” (LREC 2012), Workshop on Language in Social Media (2011, 2012, 2013), Workshop on Analyzing Microtext (2011), Workshop on Relational Models of Semantics (2011), Workshop on Information Extraction and Knowledge Acquisition (2011), ACL Student Research Workshop (2012), AKBC-WEKEX (2012,2013), CIKM workshop on Politics, Elections and Data (2012,2013), TextGraphs 2013*

External Reviewer

*IUI (2013), ACL (2011), AAAI (2010), UIST (2009)*

PUBLICATIONS

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, Stephen Soderland and Oren Etzioni  
“What is this Anyway? Automatic Hypernym Discovery”  
Proceedings of the AAAI 2009 Spring Symposium on Learning by Reading and Learning to Read

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

Alan Ritter, James W. Hearne, Philip A. Nelson  
“Distributional Word Clustering in Parallel”  
ISCA PDCS 2006

J. Michael Meehan, Alan L. Ritter  
“Machine Learning Approach to Tuning Distributed Operating System Load Balancing Algorithms”  
ISCA PDCS 2006

Alan Ritter  
“NDIS Network Driver”  
Dr. Dobb’s Journal  
January 2006