

Alan Ritter

Postdoctoral Fellow
Machine Learning Department
Carnegie Mellon University

CONTACT INFORMATION

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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

Area Chair
ACL 2014 (NLP for the web and social media)

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 Informa-

tion 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

PUBLICATIONS

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, 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