

# Jordan Boyd-Graber

[Jordan.Boyd.Graber@colorado.edu](mailto:Jordan.Boyd.Graber@colorado.edu) • +1 (920) 524-9464 • <http://cs.colorado.edu/~jbg>

111B ECCS • Computer Science • College of Engineering and Applied Science • Boulder, CO 80309

---

## University Appointments

University of Colorado Boulder	BOULDER, CO
Assistant Professor, Computer Science	2014–Present
University of Maryland	COLLEGE PARK, MD
Assistant Professor, College of Information Studies	2010–2014
Assistant Professor, Institute for Advanced Computer Studies	2011–2014
Affiliate Assistant Professor, Computer Science	2011–2015
Postdoc (Advisor: Philip Resnik)	2009–2010

## Education

Princeton University	PRINCETON, NJ
Ph.D., Computer Science	2010
Thesis: Linguistic Extensions of Topic Models (Advisor: David Blei)	
M.A., Computer Science	2007
California Institute of Technology	PASADENA, CA
B.S., Computer Science	2004
B.S., History	2004

## Other Employment

Princeton University	PRINCETON, NJ
Writing Fellow, Princeton Writing Center	2007–2008
Google	NEW YORK, NY
Intern	2007
University of California Los Angeles	LOS ANGELES, CA
Digital Humanities Programmer	2004
California Institute of Technology	PASADENA, CA
Newsprint Researcher / Programmer, Einstein Papers Project	2003–2004
Peer Tutor, Hixon Writing Center	2001–2004
Lab Technician, Caltech Digital Media Center	2001–2003

Immigration status: U.S. citizen

## Fellowships, Prizes, and Awards

- American Association for Artificial Intelligence student award, International Science and Engineering Fair 2000
- Caltech Jorgensen Scholarship 2001–2004
- Richter Undergraduate Research Fellowship, 2001 and 2002
- Computing Innovation Postdoctoral Fellowship 2009 (declined)
- Honorable Mention, Best Student Paper, NIPS 2009

## Publications

Students directly advised or co-advised in underline.

### Chapter

1. **Jordan Boyd-Graber**, David Mimno, and David Newman. **Care and Feeding of Topic Models: Problems, Diagnostics, and Improvements**. *Handbook of Mixed Membership Models and Their Applications*, 2014.
2. Sonya S. Nikolova, **Jordan Boyd-Graber**, and Christiane Fellbaum. **Collecting Semantic Similarity Ratings to Connect Concepts in Assistive Communication Tools**. *Modeling, Learning and Processing of Text Technological Data Structures*, 2011.

### Journal

1. Ke Zhai, **Jordan Boyd-Graber**, and Shay B. Cohen. **Online Adaptor Grammars with Hybrid Inference**. *Transactions of the Association for Computational Linguistics*, To Appear.
2. Viet-An Nguyen, **Jordan Boyd-Graber**, and Stephen Altschul. **Dirichlet Mixtures, the Dirichlet Process, and the Structure of Protein Space**. *Journal of Computational Biology*, 2013.
3. Yuening Hu, **Jordan Boyd-Graber**, Brianna Satinoff, and Alison Smith. **Interactive Topic Modeling**. *Machine Learning*, 2013.
4. Viet-An Nguyen, **Jordan Boyd-Graber**, Philip Resnik, Deborah Cai, Jennifer Midberry, and Yuanxin Wang. **Modeling Topic Control to Detect Influence in Conversations using Nonparametric Topic Models**. *Machine Learning*, 2013.
5. Alexander Geyken and **Jordan Boyd-Graber**. **Automatic classification of multi-word expressions in print dictionaries**. *Linguisticae Investigationes*, 2003.

### Refereed Conference

1. Mohit Iyyer, **Jordan Boyd-Graber**, Leonardo Claudino, Richard Socher, and Hal Daumé III. **A Neural Network for Factoid Question Answering over Paragraphs**. *Empirical Methods in Natural Language Processing*, 2014.
2. Thang Nguyen, Yuening Hu, and **Jordan Boyd-Graber**. **Anchors Regularized: Adding Robustness and Extensibility to Scalable Topic-Modeling Algorithms**. *Association for Computational Linguistics*, 2014 (26% Acceptance Rate).
3. Alvin Grissom II, **Jordan Boyd-Graber**, He He, John Morgan, and Hal Daumé III. **Don't Until the Final Verb Wait: Reinforcement Learning for Simultaneous Machine Translation**. *Empirical Methods in Natural Language Processing*, 2014.
4. Viet-An Nguyen, **Jordan Boyd-Graber**, Philip Resnik, and Jonathan Chang. **Learning a Concept Hierarchy from Multi-labeled Documents**. *Neural Information Processing Systems*, 2014 (25% Acceptance Rate).
5. Kimberly Glasgow, Clay Fink, and **Jordan Boyd-Graber**. **Our grief is unspeakable: Measuring the community impact of a tragedy**. *The International AAAI Conference on Weblogs and Social Media*, 2014 (20% Acceptance Rate).
6. Mohit Iyyer, Peter Enns, **Jordan Boyd-Graber**, and Philip Resnik. **Political Ideology Detection Using Recursive Neural Networks**. *Association for Computational Linguistics*, 2014 (26% Acceptance Rate).
7. Yuening Hu, Ke Zhai, Vlad Eidelman, and **Jordan Boyd-Graber**. **Polylingual Tree-Based Topic Models for Translation Domain Adaptation**. *Association for Computational Linguistics*, 2014 (26% Acceptance Rate).
8. Viet-An Nguyen, **Jordan Boyd-Graber**, and Philip Resnik. **Sometimes Average is Best: The Importance of Averaging for Prediction using MCMC Inference in Topic Modeling**. *Empirical Methods in Natural Language Processing*, 2014.
9. Viet-An Nguyen, Yuening Hu, **Jordan Boyd-Graber**, and Philip Resnik. **Argviz: Interactive Visualization of Topic Dynamics in Multi-party Conversations**. *North American Association for Computational Linguistics*, 2013 (50% Acceptance Rate).
10. Yuening Hu, **Jordan Boyd-Graber**, Hal Daumé III, and Z. Irene Ying. **Binary to Bushy: Bayesian Hierarchical Clustering with the Beta Coalescent**. *Neural Information Processing Systems*, 2013 (25% Acceptance Rate).

11. Naho Orita, Rebecca McKeown, Naomi H. Feldman, Jeffrey Lidz, and **Jordan Boyd-Graber**. **Discovering Pronoun Categories using Discourse Information**. *Proceedings of the Cognitive Science Society*, 2013.
12. Viet-An Nguyen, **Jordan Boyd-Graber**, and Philip Resnik. **Lexical and Hierarchical Topic Regression**. *Neural Information Processing Systems*, 2013 (25% Acceptance Rate).
13. Ke Zhai and **Jordan Boyd-Graber**. **Online Topic Models with Infinite Vocabulary**. *International Conference on Machine Learning*, 2013 (20% Acceptance Rate).
14. **Jordan Boyd-Graber**, Kimberly Glasgow, and Jackie Sauter Zajac. **Spoiler Alert: Machine Learning Approaches to Detect Social Media Posts with Revelatory Information**. *ASIST 2013: The 76th Annual Meeting of the American Society for Information Science and Technology*, 2013.
15. **Jordan Boyd-Graber**, Brianna Satinoff, He He, and Hal Daumé III. **Besting the Quiz Master: Crowdsourcing Incremental Classification Games**. *Empirical Methods in Natural Language Processing*, 2012 (25% Acceptance Rate).
16. Yuening Hu and **Jordan Boyd-Graber**. **Efficient Tree-Based Topic Modeling**. *Association for Computational Linguistics*, 2012 (21% Acceptance Rate).
17. Asad B. Sayeed, **Jordan Boyd-Graber**, Bryan Rusk, and Amy Weinberg. **Grammatical structures for word-level sentiment detection**. *North American Association of Computational Linguistics*, 2012 (31% Acceptance Rate).
18. Yuening Hu, Ke Zhai, Sinead Williamson, and **Jordan Boyd-Graber**. **Modeling Images using Transformed Indian Buffet Processes**. *International Conference of Machine Learning*, 2012 (27% Acceptance Rate).
19. Vladimir Eidelman, **Jordan Boyd-Graber**, and Philip Resnik. **Topic Models for Dynamic Translation Model Adaptation**. *Association for Computational Linguistics*, 2012 (21% Acceptance Rate).
20. Ke Zhai, **Jordan Boyd-Graber**, Nima Asadi, and Mohamad Alkhrouja. **Mr. LDA: A Flexible Large Scale Topic Modeling Package using Variational Inference in MapReduce**. *ACM International Conference on World Wide Web*, 2012 (12% Acceptance Rate).
21. Viet-An Nguyen, **Jordan Boyd-Graber**, and Philip Resnik. **SITS: A Hierarchical Nonparametric Model using Speaker Identity for Topic Segmentation in Multiparty Conversations**. *Association for Computational Linguistics*, 2012 (19% Acceptance Rate).
22. Clay Templeton, Kenneth R. Fleischmann, and **Jordan Boyd-Graber**. **Comparing Values and Sentiment Using Mechanical Turk**. *iConference*, 2011.
23. Yuening Hu, **Jordan Boyd-Graber**, and Brianna Satinoff. **Interactive Topic Modeling**. *Association for Computational Linguistics*, 2011 (25% Acceptance Rate).
24. Kenneth R. Fleischmann, Clay Templeton, and **Jordan Boyd-Graber**. **Modeling Diverse Standpoints in Text Classification: Learning to Be Human by Modeling Human Values**. *iConference*, 2011.
25. Clay Templeton, Kenneth R. Fleischmann, and **Jordan Boyd-Graber**. **Simulating Audiences: Automating Analysis of Values, Attitudes, and Sentiment**. *IEEE International Conference on Social Computing*, 2011 (10% Acceptance Rate).
26. **Jordan Boyd-Graber** and Philip Resnik. **Holistic Sentiment Analysis Across Languages: Multilingual Supervised Latent Dirichlet Allocation**. *Empirical Methods in Natural Language Processing*, 2010 (25% Acceptance Rate).
27. Eric Hardisty, **Jordan Boyd-Graber**, and Philip Resnik. **Modeling Perspective using Adaptor Grammars**. *Empirical Methods in Natural Language Processing*, 2010 (25% Acceptance Rate).
28. Sonya S. Nikolova, **Jordan Boyd-Graber**, Christiane Fellbaum, and Perry Cook. **Better Vocabularies for Assistive Communication Aids: Connecting Terms using Semantic Networks and Untrained Annotators**. *ACM Conference on Computers and Accessibility*, 2009 (31% Acceptance Rate).
29. Jonathan Chang, **Jordan Boyd-Graber**, and David M. Blei. **Connections between the Lines: Augmenting Social Networks with Text**. *Refereed Conference on Knowledge Discovery and Data Mining*, 2009 (9% Acceptance Rate).
30. **Jordan Boyd-Graber** and David M. Blei. **Multilingual Topic Models for Unaligned Text**. *Uncertainty in Artificial Intelligence*, 2009 (31% Acceptance Rate).
31. Jonathan Chang, **Jordan Boyd-Graber**, Chong Wang, Sean Gerrish, and David M. Blei. **Reading Tea Leaves: How Humans Interpret Topic Models**. *Neural Information Processing Systems*, 2009 (24% Acceptance Rate).
32. Xiaojuan Ma, **Jordan Boyd-Graber**, Sonya S. Nikolova, and Perry Cook. **Speaking Through Pictures: Images vs. Icons**. *ACM Conference on Computers and Accessibility*, 2009 (31% Acceptance Rate).

33. **Jordan Boyd-Graber** and David M. Blei. **Syntactic Topic Models**. *Neural Information Processing Systems*, 2008 (25% Acceptance Rate).
34. **Jordan Boyd-Graber**, David M. Blei, and Xiaojin Zhu. **A Topic Model for Word Sense Disambiguation**. *Empirical Methods in Natural Language Processing*, 2007 (27% Acceptance Rate).
35. **Jordan Boyd-Graber**, Christiane Fellbaum, Daniel Osherson, and Robert Schapire. **Adding Dense, Weighted, Connections to WordNet**. *Proceedings of the Global WordNet Conference*, 2006.
36. **Jordan Boyd-Graber**, Sonya S. Nikolova, Karyn A. Moffatt, Kenrick C. Kin, Joshua Y. Lee, Lester W. Mackey, Marilyn M. Tremaine, and Maria M. Klawe. **Participatory design with proxies: Developing a desktop-PDA system to support people with aphasia**. *Computer-Human Interaction*, 2006 (23% Acceptance Rate).

## Workshop

1. Alison Smith, Jason Chuang, [Yuening Hu](#), **Jordan Boyd-Graber**, and Leah Findlater. **Concurrent Visualization of Relationships between Words and Topics in Topic Models**. *ACL Workshop on Workshop on Interactive Language Learning, Visualization, and Interfaces*, 2014.
2. Naho Orita, Naomi Feldman, and **Jordan Boyd-Graber**. **Quantifying the role of discourse topicality in speakers' choices of referring expressions**. *ACL Workshop on Cognitive Modeling and Computational Linguistics*, 2014.
3. Thang Nguyen, [Yuening Hu](#), and **Jordan Boyd-Graber**. **Evaluating Regularized Anchor Words**. *NIPS Workshop on Topic Models: Computation, Application, and Evaluation*, 2013.
4. [Yuening Hu](#), [Ke Zhai](#), Vlad Edelman, and **Jordan Boyd-Graber**. **Topic Models for Translation Domain Adaptation**. *NIPS Workshop on Topic Models: Computation, Application, and Evaluation*, 2013.
5. [Viet-An Nguyen](#), **Jordan Boyd-Graber**, Jonathan Chang, and Philip Resnik. **Tree-Based Label Dependency Topic Models**. *NIPS Workshop on Topic Models: Computation, Application, and Evaluation*, 2013.
6. [Yuening Hu](#) and **Jordan Boyd-Graber**. **Bayesian Hierarchical Clustering with Beta Coalescents**. *Mid-Atlantic Student Colloquium on Speech, Language, and Learning*, 2012.
7. [Ke Zhai](#) and **Jordan Boyd-Graber**. **Online Topic Model with Infinite Vocabulary**. *Mid-Atlantic Student Colloquium on Speech, Language, and Learning*, 2012.
8. [Yuening Hu](#) and **Jordan Boyd-Graber**. **Suggesting Constraints for Interactive Topic Modeling**. *ICML Workshop on Machine Learning in Human Computation and Crowdsourcing*, 2012.
9. [Viet-An Nguyen](#), **Jordan Boyd-Graber**, and Philip Resnik. **"I Want to Talk About, Again, My Record On Energy ...": Modeling Topic Control in Conversations using Speaker-centric Nonparametric Topic Models**. *Mid-Atlantic Student Colloquium on Speech, Language, and Learning*, 2012.
10. Pranav Anand, Joseph King, **Jordan Boyd-Graber**, Earl Wagner, Craig Martell, Douglas W. Oard, and Philip Resnik. **Believe Me: We Can Do This!**. *The AAAI 2011 workshop on Computational Models of Natural Argument*, 2011.
11. **Jordan Boyd-Graber**. **Linguistic Resource Creation in a Web 2.0 World**. *NSF Workshop on Collaborative Annotation*, 2011.
12. Clay Templeton, Travis Brown, Sayan Battacharyya, and **Jordan Boyd-Graber**. **Mining the Dispatch under Supervision: Using Casualty Counts to Guide Topics from the Richmond Daily Dispatch Corpus**. *Chicago Colloquium on Digital Humanities and Computer Science*, 2011.
13. [Brianna Satinoff](#) and **Jordan Boyd-Graber**. **Trivial Classification: What features do humans use for classification?**. *Workshop on Crowdsourcing Technologies for Language and Cognition Studies*, 2011.
14. Nitin Madnani, **Jordan Boyd-Graber**, and Philip Resnik. **Measuring Transitivity Using Untrained Annotators**. *Creating Speech and Language Data With Amazon's Mechanical Turk*, 2010.
15. Sonya S. Nikolova, **Jordan Boyd-Graber**, and Perry Cook. **The Design of ViVA: A Mixed-initiative Visual Vocabulary for Aphasia**. *Proceedings of the 27th international conference extended abstracts on Human factors in computing systems*, 2009.
16. Jonathan Chang, **Jordan Boyd-Graber**, and David M. Blei. **Discovering social networks from free text**. *3rd Annual Machine Learning Symposium*, 2008.
17. **Jordan Boyd-Graber** and David M. Blei. **Multilingual Topic Models**. *NIPS Workshop on Unsupervised Latent Variable Models*, 2008.
18. **Jordan Boyd-Graber** and David M. Blei. **PUTOP: Turning Predominant Senses into a Topic Model for WSD**. *4th International Workshop on Semantic Evaluations*, 2007.



## Contracts and Grants

### Active Funding

- Scaling Insight into Science: Assessing the value and effectiveness of machine assisted classification within a statistical system** 8/2014–7/2017 (NSF)  
**Investigators:** Jordan Boyd-Graber (PI)  
**Award:** \$195,000 (Share: \$195,000)
- Closing the User-Model Loop for Understanding Topics in Large Document Collections** 8/2014–7/2018 (NSF)  
**Investigators:** Jordan Boyd-Graber (PI) and Leah Findlater (CO-PI)  
**Award:** \$650,000 (Share: \$325,000)
- Bayesian Thinking on Your Feet—Embedding Generative Models in Reinforcement Learning for Sequentially Revealed Data** 8/2013–7/2016 (NSF)  
**Investigators:** Jordan Boyd-Graber (PI) and Hal Daumé III (CO-PI)  
**Award:** \$500,000 (Share: \$250,000)

### Completed Funding

- Sentiment Analysis in Social Media: Political Spin and Cultural Biases** 8/2013–8/2014 (CASL)  
**Investigators:** Philip Resnik PI and Jordan Boyd-Graber CO-PI  
**Award:** \$100,000 (Share: \$50,000)
- Cross-Language Bayesian Models for Web-Scale Text Analysis** 9/2009–8/2014 (NSF)  
**Investigators:** Jimmy Lin (PI), Philip Resnik (CO-PI), Jordan Boyd-Graber<sup>1</sup> (CO-PI)  
**Award:** \$350,000 (Share: \$175,000)
- Language Evidence for Social Goals** 8/2009–10/2012 (IARPA)  
**Investigators:** Philip Resnik (PI), Pranav Anand (CO-PI), Jordan Boyd-Graber (CO-PI), Deborah Cai (CO-PI), Craig Martell (CO-PI), Doug Oard (CO-PI), Marilyn Walker (CO-PI)  
**Award:** \$1,454,439 (Share: \$100,000)
- Center for Language and Cultural Analysis** 9/2009–8/2012 (ARL)  
**Investigators:** Amy Weinberg (PI), Jordan Boyd-Graber (CO-PI), Michele Gelfand (CO-PI), Philip Resnik (CO-PI, later PI)  
**Award:** \$ 735,050 (Share: \$100,000)
- Advanced Open Source Exploitation Models** 4/2011–12/2011 (Lockheed Martin)  
**Investigators:** Philip Resnik (PI), Jordan Boyd-Graber (CO-PI)  
**Award:** \$60,000 (Share: \$30,000)
- Social Media Scanning** 5/2011–12/2011 (Optimal Solutions Group)  
**Investigators:** Philip Resnik (PI), Jordan Boyd-Graber (CO-PI)  
**Award:** \$29,849 (Share: \$14,925)

## Teaching, Mentoring and Advising

### Courses Taught

- CSCI 5622: Machine Learning** Colorado, Spring 2015  
58 students
- CSCI/LING 5832: Natural Language Processing** Colorado, Fall 2014  
32 students
- INST 737: Digging into Data** UMD, Spring 2014  
29 students
- CMSC/LING 723 / INST 735: Computational Linguistics I** UMD, Fall 2013  
45 students
- LING 848B / CMSC 828B: Bayesian Nonparametrics** UMD, Spring 2013  
15 students
- INST 737: Digging into Data** UMD, Spring 2013  
30 students

---

<sup>1</sup>I wrote this grant while a postdoc working with Philip Resnik; the vast majority of the text and the entirety of the scientific ideas were my own. However, I could not serve as PI while still a postdoc. I was added to the grant as PI after it was awarded and served as sole research advisor to the students funded by the grant while the other PIs were both on sabbatical.

<b>LBSC 690: Introduction to Information Technology</b> 30 students	UMD, Fall 2012
<b>INST728C / CMSC 773 / LING 773: Computational Linguistics II</b> 11 Students	UMD, Spring 2012
<b>LBSC 690: Introduction to Information Technology</b> 30 students	UMD, Fall 2011
<b>INFM 718G: Web Scale Information Processing Applications</b> 12 students	UMD, Spring 2011
<b>LBSC 690: Introduction to Information Technology</b> 30 students	UMD, Fall 2010
<b>COS/LIN 280: Computational Linguistics</b> 40 students	Princeton, Fall 2008

#### Course or Curriculum Development

- Significant revisions to *LBSC 690: Information Technology* (Fall 2012)
- Chair of committee developing new undergraduate Information Science program at Universities at Shady Grove (2011-2013)
- Developed new course *INST 737: Digging into Data* (Spring 2013), and recorded lectures for “flipped” classroom in 2014.
- Redesigned both elements of Computational Linguistics I-II sequence (2012 and 2013), and created a “flipped” classroom in 2013 for Computational Linguistics I.

#### Guest lectures

- 2010, CMSC 726: Topic Models
- 2011, LING 773: Topic Models
- 2012, CMSC 421: Topic Models
- 2012, CMSC 726: Topic Models
- 2015, CSCI 5832: Topic Models

#### Advising: Research Direction (Undergraduate)

1. Stephanie Hwa: Vector word representations for named entities in question answering
2. Danny Bouwman: Crowdsourced coreference annotation

#### Advising: Research Direction (Masters)

##### Chair or Co-Chair

1. Brianna Satinoff (CMSC): Incremental Models for Text Classification [First position: Wellpoint]
2. Alison Smith (CMSC): Evaluating Interfaces for Interactive Topic Modeling [First position: Decisive Analytics]

##### On Committee

1. Bradley Skaggs (CMSC) [First position: US Government]

#### Doctoral Students

##### Chair or Co-chair

1. Forough Poursabzi-Sangdeh (CSCI): Active Labeling with Topic Models
2. Alvin Grissom II (CSCI): Reinforcement Learning for Feature-wise Language Tasks
3. Kim Glasgow (iSchool): Social Action in Social Media
4. Thang Nguyen (iSchool): Evaluation of Topic Models
5. Mohit Iyyer (UMD: CMSC): Deep Learning for Question Answering
6. Viet-An Nguyen (UMD: CMSC, 2015): Detecting Influence in Text [First position: Facebook Data Science]
7. Ke Zhai (UMD: CMSC, 2014): Large Scale Bayesian Inference [First position: Yahoo! Research]
8. Yuening Hu (UMD: CMSC, 2014): Interactive Topic Modeling [First position: Yahoo! Research]

##### On committee

1. Ben London (UMD: CMSC)
2. Irene Eleta (UMD: INFO, 2014)
3. Kevin Dayaratna (UMD: STAT, 2014)
4. Jiarong Jiang (UMD: CMSC, 2014)
5. Jagadeesh Jagarlamudi (UMD: CMSC, 2013) [First position: IBM Research]

6. Amit Goyal (UMD: CMSC, 2013) [First position: Yahoo!]
7. Piyush Rai (Utah: CMSC, 2012) [First position: University of Texas]
8. Arvind Agarwal (UMD: CMSC, 2012) [First position: Xerox Research]
9. Elena Zheleva (UMD: CMSC, 2011) [First position: Living Social]
10. Asad Sayeed (UMD: CMSC, 2011) [First position: Universität des Saarlandes]

## Invited Talks

1. **Thinking on your Feet: Reinforcement Learning for Incremental Language Tasks:** Colorado School of Mines, 2014 (Golden, CO); Harvey Mudd College, 2014 (Claremont, CA); California Institute of Technology, 2014 (Pasadena, CA); Front Range NLP (Boulder, CO); EECS Colloquium, Colorado School of Mines, 2014 (Golden, CO); Brigham Young University, 2014 (Provo, UT); Peking University, 2014 (Beijing, PRC); Darmstadt University (Darmstadt, Germany); Hong Kong University of Science and Technology (Hong Kong)
2. **Big Data Analysis with Topic Models: Human Interaction, Streaming Computation, and Social Science Applications:** University of Colorado Boulder Computer Science Colloquium, 2013 (Boulder, CO); Yandex Machine Learning Conference, 2013 (**Invited Keynote**, Moscow, Russia); DC NLP Meetup, 2014 (Washington, DC); Yahoo! Labs, 2014 (New York, NY); Northwestern University (Evanston, IL); Renmin University, 2014 (Beijing, PRC); Tsinghua University, 2014 (Beijing, PRC)
3. **Incorporating Human Knowledge and Insights into Probabilistic Models of Text:** Brigham Young University Department of Computer Science Colloquium, 2012 (Provo, UT)
4. **Besting the Quiz Master: Crowdsourcing Incremental Classification Games:** Rutgers University, 2012 (New Brunswick, NJ); Brigham Young University, 2012 (Provo, UT)
5. **Making Topic Models More Human(e):** Colorado University, 2012 (Boulder, CO); University of Maryland Institute for Technology and Humanities, 2012 (College Park, MD)
6. **When Topic Models Go Bad: Diagnosing and Improving Models for Exploring Large Corpora:** Johns Hopkins University, 2011 (Baltimore, MD); Rutgers University, 2011 (New Brunswick, NJ)
7. **Inference and Validation of Probabilistic Models of Language in the Cloud:** UMD Winter Storm, 2011 (College Park, MD)
8. **Interactive Topic Models:** Harvard University's New Directions in Text Analysis Symposium, 2011 (Cambridge, MA); Princeton University, 2011 (Princeton, NJ); Maryland Institute for Technology and the Humanities: Topic Modeling and the Humanities Workshop, 2012 (College Park, MD)
9. **Putting Words Together: Crowdsourcing Data Collection for Lexical Similarity and Topical Coherence:** University of Massachusetts, 2010 (Amherst, Massachusetts)
10. **Topic Models, Mechanical Turk, and WordNet:** Harvard University, 2010 (Cambridge, MA)
11. **Topic Models and Hierarchical Models:** Johns Hopkins Summer Workshop for SMT, 2010 (Baltimore, MD)
12. **Linguistic Extensions to Topic Models:** University of Massachusetts, 2009 (Amherst, Massachusetts); Center for Communications Research, 2009 (Princeton, NJ); Center of Excellence, 2009 (Baltimore, MD); Columbia University, 2009 (New York, NY)

## Professional Service

### Conference Reviewing

- Program Committee *2014 Workshop on Language Technologies and Computational Social Science*
- Program Committee *Neural Information Processing Systems*: 2014, 2013, 2012, 2011, 2010, 2009
- Program Committee *Association for Computational Linguistics*: 2014, 2012, 2011, 2010
- Program Committee *Empirical Methods in Natural Language Processing*: 2014, 2013, 2012, 2011, 2008
- Program Committee *International Conference of Machine Learning*: 2014, 2013, 2012, 2011, 2010, 2009
- Program Committee *International Conference on the Web and Social Media*: 2014
- Program Committee *World Wide Web Conference*: 2014
- Program Committee *AISTATS*: 2012, 2011
- Program Committee *North American Association for Computational Linguistics*: 2012
- Program Committee *NIPS 2010 Workshop on Computational Social Science and the Wisdom of Crowds*
- Program Committee *NAACL 2010 Workshop on Creating Speech and Text Language Data With Amazon's Mechanical Turk*
- Reviewer for *COLING 2010*
- Program Committee *Global WordNet Association Conference*: 2010, 2008, 2006
- Assistant Reviewer for *UAI 2007*
- Reviewer, *Works in Progress 2006 SIGCHI*

### Reviewing and Editing for Journals

- Reviewer for *Machine Learning Journal*: 2014
- Reviewer for *Transactions of the Association of Computational Linguistics*: 2011,2012,2012,2013,2013,2013,2014
- Reviewer for *IEEE Transactions on Pattern Analysis and Machine Intelligence*: 2013
- Reviewer for *Computational Linguistics*: 2013
- Reviewer for *Scientometrics*: 2012
- Reviewer for *Information Visualization*: 2012
- Reviewer for *Transactions on Knowledge Discovery from Data*: 2011
- Reviewer for *Annals of Applied Statistics*: 2011
- Reviewer for *Journal of Machine Learning Research*: 2011,2012
- Reviewer for *Elsivier Computer Speech and Language*: 2007

#### **Reviewing activities for agencies**

- NSF External Review (2014)
- NSF RI Review Panel (2012)
- NSF BIGDATA Review Panel (2012)

#### **Other unpaid services to local, state, and federal agencies**

- Consultant for *Interactive Topic Modeling*, National Institute of Food and Agriculture (2013)
- Consultant for *Interactive Topic Modeling*, National Institutes for Health (2010)
- Collaboration on *Dirichlet Process Protein Clustering*, National Institutes for Health (2012)
- Collaboration on *Nonparametric Beta Coalescent Clustering*, US Department of Agriculture (2013)

#### **Leadership in Professional Organizations**

- **Area Chair** for Topic Models, *ICML 2015*
- **Area Chair** for Document Classification and Topic Clustering, *NAACL 2015*
- **Co-organizer** for *ACL 2014 Student Research Workshop*
- **Co-organizer** for *NIPS 2013 Workshop on Topic Models*
- Computational Committee *North American Computational Linguistics Olympiad* 2012-2014
- **Area Chair** for Document Classification and Topic Clustering, *NAACL 2012*
- **Co-organizer** for *NIPS 2009 Workshop on Topic Model Applications: Text and Beyond*

#### **Paid consultancies**

- Consultant: Barquin International, 2013-2014
- Consultant: New Brand Analytics, 2012-2014

#### **Campus Service**

##### **Departmental Service**

*Computer Science, Colorado*

- Member: Graduate Committee (2014-)
- Member: Search Committee (Machine Learning, 2014-2015)

##### **Departmental Service**

*Institute for Advanced Computer Studies, UMD*

- Member: Appointments and Promotion (2012-2013)
- Coordinator: Computational Linguistics and Information Processing Lab Colloquium (2010-2012)
- Data Czar: Computational Linguistics and Information Processing Lab (2011-2014)

##### **College Service**

*College of information Studies, UMD*

- Chair: College of Information Studies Undergraduate Education Committee (2011-2013)
- Member: College of Information Studies Undergraduate Education Committee (2011-2014)
- Secretary: College of Information Studies Assembly (2011-2012)
- Member: College of Information Studies Programs, Courses, Curriculum Committee (2011-2013)
- Member: College of Information Studies Research Committee (2010-2013)

##### **University Service**

UMD

- Faculty Advisor: Maryland Academic Quiz Team (2010-2014)