

Jordan Boyd-Graber

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3155 AVW • Computer Science • CMNS • College Park, MD

Academic Appointments

University of Maryland

	COLLEGE PARK, MD
Associate Professor with tenure, Computer Science (tenure home)	2018–present
Associate Professor without tenure, Computer Science (tenure home)	2017–2018
Associate Professor, Institute for Advanced Computer Studies	2017–present
Associate Professor, College of Information Studies	2017–present
Associate Professor, Language Science Center	2017–present
Affiliate Assistant Professor, Computer Science	2011–2017
Assistant Professor, Institute for Advanced Computer Studies	2011–2014
Assistant Professor, College of Information Studies	2010–2014
Postdoc (Advisor: Philip Resnik)	2009–2010

University of Colorado Boulder

	BOULDER, CO
Associate Professor, ¹ Computer Science	2017
Assistant Professor, Computer Science	2014–2017

Other Employment

Princeton University	PRINCETON, NJ
Writing Fellow, Princeton Writing Center	2007–2008
Google	NEW YORK, NY
Intern, Google Books	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
Berlin-Brandenburg Akademie der Wissenschaften	BERLIN, GERMANY
Praktikant, Digitale Wörterbuch der Deutschen Sprache	2002

Educational Background

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

Immigration status: U.S. citizen (born in Eagle County, Colorado)

¹Tenure granted 2017

Fellowships, Prizes, and Awards

- Best Student Paper Honorable Mention (Alison Smith): IUI, 2018
- NSF CAREER Award 2017
- Quora Top Writer: 2016, 2017, 2018
- Best Paper Award, NAACL 2016
- Best Demonstration Award: NIPS 2015
- Karen Spärk Jones Award: 2015
- Best Paper Award: CoNLL 2015
- Honorable Mention, Best Student Paper: NIPS 2009
- Computing Innovation Postdoctoral Fellowship 2009 (declined)
- Richter Undergraduate Research Fellowship: 2001 and 2002
- Caltech Jorgensen Scholarship: 2001-2004
- AAAI Research Award: International Science and Engineering Fair (ISEF) 2000

Publications

Students directly advised or co-advised in underline.

Books

1. **Jordan Boyd-Graber**, Yuening Hu, and David Mimno. **Applications of Topic Models**. 2017, 153 pages.

Chapters in Books

1. **Jordan Boyd-Graber**, Shi Feng, and Pedro Rodriguez. **Human-Computer Question Answering: The Case for Quizbowl**. *The NIPS '17 Competition: Building Intelligent Systems*, 2018, 10 pages.
2. Evgeny Klochikhin and **Jordan Boyd-Graber**. **Text Analysis**. *Big Data and Social Science Research: Theory and Practical Approaches*, 2016, 27 pages.
3. **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, 39 pages.
4. 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, 11 pages.

Refereed Journal Articles

1. Aaron Gerow, Yuening Hu, **Jordan Boyd-Graber**, David M. Blei, and James A. Evans. **Measuring Discursive Influence Across Scholarship**. *Proceedings of the National Academies of Science*, 2018.
2. Tak Yeon Lee, Alison Smith, Kevin Seppi, Niklas Elmqvist, **Jordan Boyd-Graber**, and Leah Findlater. **The Human Touch: How Non-expert Users Perceive, Interpret, and Fix Topic Models**. *International Journal of Human-Computer Studies*, 2017, 27 pages.
3. **Jordan Boyd-Graber**. **Humans and Computers Working Together to Measure Machine Learning Interpretability**. *The Bridge*, 2017, 5 pages.
4. Alison Smith, Tak Yeon Lee, Forough Poursabzi-Sangdeh, **Jordan Boyd-Graber**, Kevin Seppi, Niklas Elmqvist, and Leah Findlater. **Evaluating Visual Representations for Topic Understanding and Their Effects on Manually Generated Labels**. *Transactions of the Association for Computational Linguistics*, 2017, 15 pages.
5. Yuening Hu, **Jordan Boyd-Graber**, Brianna Satinoff, and Alison Smith. **Interactive Topic Modeling**. *Machine Learning*, 2014, 56 pages.
6. 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*, 2014, 48 pages.
7. Ke Zhai, **Jordan Boyd-Graber**, and Shay B. Cohen. **Online Adaptor Grammars with Hybrid Inference**. *Transactions of the Association for Computational Linguistics*, 2014, 12 pages.
8. 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, 48 pages.
9. Alexander Geyken and **Jordan Boyd-Graber**. **Automatic classification of multi-word expressions in print dictionaries**. *Linguisticae Investigationes*, 2003, 16 pages.

Refereed Conference Proceedings

1. Craig Stewart, Nikolai Vogler, Junjie Hu, **Jordan Boyd-Graber**, and Graham Neubig. **Automatic Estimation of Simultaneous Interpreter Performance**. *Association for Computational Linguistics*, 2018, 5 pages.
2. Ahmed Elgohary, Chen Zhao, and **Jordan Boyd-Graber**. **Dataset and Baselines for Sequential Open-Domain Question Answering**. *Empirical Methods in Natural Language Processing*, 2018, 6 pages.
3. Shi Feng, Eric Wallace, Alvin Grissom II, Pedro Rodriguez, Mohit Iyyer, and **Jordan Boyd-Graber**. **Pathologies of Neural Models Make Interpretation Difficult**. *Empirical Methods in Natural Language Processing*, 2018, 9 pages.
4. Alison Smith, Varun Kumar, **Jordan Boyd-Graber**, Kevin Seppi, and Leah Findlater. **User-Centered Design and Evaluation of a Human-in-the-Loop Topic Modeling System**. *Intelligent User Interfaces*, 2018, 12 pages (23% Acceptance Rate).
5. Paul Felt, Eric Ringger, Kevin Seppi, and **Jordan Boyd-Graber**. **Learning from Measurements in Crowdsourcing Models: Inferring Ground Truth from Diverse Annotation Types**. *International Conference on Computational Linguistics*, 2018, 10 pages (37% Acceptance Rate).
6. Michelle Yuan, Benjamin Van Durme, and **Jordan Boyd-Graber**. **Multilingual Anchoring: Interactive Topic Modeling and Alignment Across Languages**. *Neural Information Processing Systems*, 2018, 10 pages.
7. Shudong Hao, Michael J. Paul, and **Jordan Boyd-Graber**. **Lessons from the Bible on Modern Topics: Multilingual Topic Model Evaluation on Low-Resource Languages**. *North American Association for Computational Linguistics*, 2018, 9 pages (35% Acceptance Rate).
8. Mohit Iyyer, Varun Manjunatha, **Jordan Boyd-Graber**, and Larry Davis. **Learning to Color from Language**. *North American Association of Computational Linguistics*, 2018, 6 pages.
9. Jeff Lund, Connor Cook, Kevin Seppi, and **Jordan Boyd-Graber**. **Tandem Anchoring: A Multiword Anchor Approach for Interactive Topic Modeling**. *Association for Computational Linguistics*, 2017, 10 pages (22% Acceptance Rate).
10. Mohit Iyyer, Varun Manjunatha, Anupam Guha, Yogarshi Vyas, **Jordan Boyd-Graber**, Hal Daumé III, and Larry Davis. **The Amazing Mysteries of the Gutter: Drawing Inferences Between Panels in Comic Book Narratives**. *Computer Vision and Pattern Recognition*, 2017, 10 pages.
11. Weiwei Yang, **Jordan Boyd-Graber**, and Philip Resnik. **Adapting Topic Models using Lexical Associations with Tree Priors**. *Empirical Methods in Natural Language Processing*, 2017, 6 pages.
12. Khanh Nguyen, **Jordan Boyd-Graber**, and Hal Daumé III. **Reinforcement Learning for Bandit Neural Machine Translation with Simulated Human Feedback**. *Empirical Methods in Natural Language Processing*, 2017, 11 pages.
13. You Lu, Jeff Lund, and **Jordan Boyd-Graber**. **Why ADAGRAD Fails for Online Topic Modeling**. *Empirical Methods in Natural Language Processing*, 2017, 6 pages.
14. Weiwei Yang, **Jordan Boyd-Graber**, and Philip Resnik. **A Discriminative Topic Model using Document Network Structure**. *Association for Computational Linguistics*, 2016, 10 pages (28% Acceptance Rate).
15. Forough Poursabzi-Sangdeh, **Jordan Boyd-Graber**, Leah Findlater, and Kevin Seppi. **ALTO: Active Learning with Topic Overviews for Speeding Label Induction and Document Labeling**. *Association for Computational Linguistics*, 2016 (28% Acceptance Rate).
16. Hadi Amiri, Philip Resnik, **Jordan Boyd-Graber**, and Hal Daumé III. **Learning Text Pair Similarity with Context-sensitive Autoencoders**. *Association for Computational Linguistics*, 2016 (28% Acceptance Rate).
17. Alvin Grissom II, Naho Orita, and **Jordan Boyd-Graber**. **Incremental Prediction of Sentence-final Verbs**. *Conference on Computational Natural Language Learning*, 2016, 10 pages (20% Acceptance Rate).
18. He He, **Jordan Boyd-Graber**, Kevin Kwok, and Hal Daumé III. **Opponent Modeling in Deep Reinforcement Learning**. *International Conference on Machine Learning*, 2016, 10 pages (24% Acceptance Rate).
19. Md Arafat Sultan, **Jordan Boyd-Graber**, and Tamara Sumner. **Bayesian Supervised Domain Adaptation for Short Text Similarity**. *North American Association for Computational Linguistics*, 2016, 11 pages (24% Acceptance Rate).
20. Mohit Iyyer, Anupam Guha, Snigdha Chaturvedi, **Jordan Boyd-Graber**, and Hal Daumé III. **Feuding Families and Former Friends: Unsupervised Learning for Dynamic Fictional Relationships**. *North American Association for Computational Linguistics*, 2016, 11 pages (24% Acceptance Rate).
21. He He, **Jordan Boyd-Graber**, and Hal Daumé III. **Interpretese vs. Translationese: The Uniqueness of Human Strategies in Simultaneous Interpretation**. *North American Association for Computational Linguistics*, 2016, 6 pages (29% Acceptance Rate).

22. [Mohit Iyyer](#), Varun Manjunatha, [Jordan Boyd-Graber](#), and Hal Daumé III. **Deep Unordered Composition Rivals Syntactic Methods for Text Classification**. *Association for Computational Linguistics*, 2015, 11 pages (25% Acceptance Rate).
23. Vlad Niculae, Srijan Kumar, [Jordan Boyd-Graber](#), and Cristian Danescu-Niculescu-Mizil. **Linguistic Harbingers of Betrayal: A Case Study on an Online Strategy Game**. *Association for Computational Linguistics*, 2015, 10 pages (25% Acceptance Rate).
24. [Viet-An Nguyen](#), [Jordan Boyd-Graber](#), Philip Resnik, and Kristina Miler. **Tea Party in the House: A Hierarchical Ideal Point Topic Model and Its Application to Republican Legislators in the 112th Congress**. *Association for Computational Linguistics*, 2015, 11 pages (25% Acceptance Rate).
25. Paul Felt, Eric Ringger, [Jordan Boyd-Graber](#), and Kevin Seppi. **Making the Most of Crowdsourced Document Annotations: Confused Supervised LDA**. *Conference on Computational Natural Language Learning*, 2015, 10 pages (30% Acceptance Rate).
26. [Weiwei Yang](#), [Jordan Boyd-Graber](#), and Philip Resnik. **Birds of a Feather Linked Together: A Discriminative Topic Model using Link-based Priors**. *Empirical Methods in Natural Language Processing*, 2015, 5 pages (28% Acceptance Rate).
27. Yi Yang, Doug Downey, and [Jordan Boyd-Graber](#). **Efficient Methods for Incorporating Knowledge into Topic Models**. *Empirical Methods in Natural Language Processing*, 2015, 9 pages (24% Acceptance Rate).
28. [He He](#), [Alvin Grissom II](#), [Jordan Boyd-Graber](#), and Hal Daumé III. **Syntax-based Rewriting for Simultaneous Machine Translation**. *Empirical Methods in Natural Language Processing*, 2015 (24% Acceptance Rate).
29. Stephen H. Bach, Bert Huang, [Jordan Boyd-Graber](#), and Lise Getoor. **Paired-Dual Learning for Fast Training of Latent Variable Hinge-Loss MRFs**. *International Conference on Machine Learning*, 2015, 10 pages (20% Acceptance Rate).
30. [Jordan Boyd-Graber](#), [Mohit Iyyer](#), [He He](#), and Hal Daumé III. **Interactive Incremental Question Answering**. *Neural Information Processing Systems*, 2015.
31. [Thang Nguyen](#), [Jordan Boyd-Graber](#), Jeff Lund, Kevin Seppi, and Eric Ringger. **Is your anchor going up or down? Fast and accurate supervised topic models**. *North American Association for Computational Linguistics*, 2015, 10 pages (26% Acceptance Rate).
32. Anupam Guha, [Mohit Iyyer](#), Danny Bouman, and [Jordan Boyd-Graber](#). **Removing the Training Wheels: A Coreference Dataset that Entertains Humans and Challenges Computers**. *North American Association for Computational Linguistics*, 2015, 11 pages (26% Acceptance Rate).
33. [Thang Nguyen](#), [Yuening Hu](#), and [Jordan Boyd-Graber](#). **Anchors Regularized: Adding Robustness and Extensibility to Scalable Topic-Modeling Algorithms**. *Association for Computational Linguistics*, 2014, 10 pages (26% Acceptance Rate).
34. [Mohit Iyyer](#), Peter Enns, [Jordan Boyd-Graber](#), and Philip Resnik. **Political Ideology Detection Using Recursive Neural Networks**. *Association for Computational Linguistics*, 2014, 10 pages (26% Acceptance Rate).
35. [Yuening Hu](#), [Ke Zhai](#), Vlad Eidelman, and [Jordan Boyd-Graber](#). **Polylingual Tree-Based Topic Models for Translation Domain Adaptation**. *Association for Computational Linguistics*, 2014, 11 pages (26% Acceptance Rate).
36. [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, 12 pages (26% Acceptance Rate).
37. [Alvin Grissom II](#), [He He](#), [Jordan Boyd-Graber](#), 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, 11 pages (30% Acceptance Rate).
38. [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, 6 pages (30% Acceptance Rate).
39. [Viet-An Nguyen](#), [Jordan Boyd-Graber](#), Philip Resnik, and Jonathan Chang. **Learning a Concept Hierarchy from Multi-labeled Documents**. *Neural Information Processing Systems*, 2014, 9 pages (25% Acceptance Rate).
40. [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, 9 pages (20% Acceptance Rate).

41. **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, 9 pages.
42. **Ke Zhai** and **Jordan Boyd-Graber**. **Online Topic Models with Infinite Vocabulary**. *International Conference on Machine Learning*, 2013, 9 pages (20% Acceptance Rate).
43. **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, 9 pages (25% Acceptance Rate).
44. **Viet-An Nguyen**, **Jordan Boyd-Graber**, and Philip Resnik. **Lexical and Hierarchical Topic Regression**. *Neural Information Processing Systems*, 2013, 10 pages (25% Acceptance Rate).
45. **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, 4 pages (50% Acceptance Rate).
46. 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, 6 pages.
47. **Ke Zhai**, **Jordan Boyd-Graber**, Nima Asadi, and **Mohamad Alkhouja**. **Mr. LDA: A Flexible Large Scale Topic Modeling Package using Variational Inference in MapReduce**. *ACM International Conference on World Wide Web*, 2012, 10 pages (12% Acceptance Rate).
48. **Yuening Hu** and **Jordan Boyd-Graber**. **Efficient Tree-Based Topic Modeling**. *Association for Computational Linguistics*, 2012, 5 pages (21% Acceptance Rate).
49. Vladimir Eidelman, **Jordan Boyd-Graber**, and Philip Resnik. **Topic Models for Dynamic Translation Model Adaptation**. *Association for Computational Linguistics*, 2012, 5 pages (21% Acceptance Rate).
50. **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, 10 pages (19% Acceptance Rate).
51. **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, 12 pages (25% Acceptance Rate).
52. **Yuening Hu**, **Ke Zhai**, Sinead Williamson, and **Jordan Boyd-Graber**. **Modeling Images using Transformed Indian Buffet Processes**. *International Conference of Machine Learning*, 2012, 8 pages (27% Acceptance Rate).
53. 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, 10 pages (31% Acceptance Rate).
54. **Yuening Hu**, **Jordan Boyd-Graber**, and **Brianna Satinoff**. **Interactive Topic Modeling**. *Association for Computational Linguistics*, 2011, 10 pages (25% Acceptance Rate).
55. 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, 4 pages (10% Acceptance Rate).
56. Clay Templeton, Kenneth R. Fleischmann, and **Jordan Boyd-Graber**. **Comparing Values and Sentiment Using Mechanical Turk**. *iConference*, 2011, 2 pages.
57. 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, 2 pages.
58. **Jordan Boyd-Graber** and Philip Resnik. **Holistic Sentiment Analysis Across Languages: Multilingual Supervised Latent Dirichlet Allocation**. *Empirical Methods in Natural Language Processing*, 2010, 11 pages (25% Acceptance Rate).
59. Eric Hardisty, **Jordan Boyd-Graber**, and Philip Resnik. **Modeling Perspective using Adaptor Grammars**. *Empirical Methods in Natural Language Processing*, 2010, 10 pages (25% Acceptance Rate).
60. 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, 8 pages (31% Acceptance Rate).
61. Xiaojuan Ma, **Jordan Boyd-Graber**, Sonya S. Nikolova, and Perry Cook. **Speaking Through Pictures: Images vs. Icons**. *ACM Conference on Computers and Accessibility*, 2009, 8 pages (31% Acceptance Rate).

62. Jonathan Chang, **Jordan Boyd-Graber**, and David M. Blei. **Connections between the Lines: Augmenting Social Networks with Text**. *Knowledge Discovery and Data Mining*, 2009, 9 pages (9% Acceptance Rate).
63. 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, 9 pages (24% Acceptance Rate).
64. **Jordan Boyd-Graber** and David M. Blei. **Multilingual Topic Models for Unaligned Text**. *Uncertainty in Artificial Intelligence*, 2009, 8 pages (31% Acceptance Rate).
65. **Jordan Boyd-Graber** and David M. Blei. **Syntactic Topic Models**. *Neural Information Processing Systems*, 2008, 8 pages (25% Acceptance Rate).
66. **Jordan Boyd-Graber**, David M. Blei, and Xiaojin Zhu. **A Topic Model for Word Sense Disambiguation**. *Empirical Methods in Natural Language Processing*, 2007, 10 pages (27% Acceptance Rate).
67. **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, 10 pages (23% Acceptance Rate).
68. **Jordan Boyd-Graber**, Christiane Fellbaum, Daniel Osherson, and Robert Schapire. **Adding Dense, Weighted, Connections to WordNet**. *Proceedings of the Global WordNet Conference*, 2006, 10 pages.

Refereed Workshops

1. [Eric Wallace](#) and **Jordan Boyd-Graber**. **Trick Me If You Can: Adversarial Writing of Trivia Challenge Questions**. *ACL Student Research Workshop*, 2018, 6 pages.
2. [Mozhi Zhang](#), Yoshinari Fujinuma, and **Jordan Boyd-Graber**. **Exploiting Cross-Lingual Subword Similarities in Low-Resource Document Classification**. *ACL Workshop on Deep Learning Approaches for Low-Resource Natural Language Processing*, 2018, 6 pages.
3. [Alison Smith](#), Varun Kumar, **Jordan Boyd-Graber**, Kevin Seppi, and Leah Findlater. **Accounting for Input Uncertainty in Human-in-the-Loop Systems**. *CHI 2017 Designing for Uncertainty Workshop*, 2017.
4. [Alison Smith](#), Tak Yeon Lee, [Forough Poursabzi-Sangdeh](#), **Jordan Boyd-Graber**, Kevin Seppi, Niklas Elmqvist, and Leah Findlater. **Human-Centered and Interactive: Expanding the Impact of Topic Models**. *CHI Human Centred Machine Learning Workshop*, 2016.
5. [Weiwei Yang](#), **Jordan Boyd-Graber**, and Philip Resnik. **Birds of a Feather in the Same Nest: A Discriminative Topic Model using Block-based Priors**. *Mid-Atlantic Student Colloquium on Speech, Language, and Learning*, 2016.
6. Anupam Guha, [Mohit Iyyer](#), and **Jordan Boyd-Graber**. **A Distorted Skull Lies in the Bottom Center: Identifying Paintings from Text Descriptions**. *NAACL Human-Computer Question Answering Workshop*, 2016.
7. [Forough Poursabzi-Sangdeh](#) and **Jordan Boyd-Graber**. **Speeding Document Annotation with Topic Models**. *NAACL Student Research Workshop*, 2015.
8. Philip Resnik, William Armstrong, Leonardo Claudino, [Thang Nguyen](#), [Viet-An Nguyen](#), and **Jordan Boyd-Graber**. **Beyond LDA: Exploring Supervised Topic Modeling for Depression-Related Language in Twitter**. *NAACL Workshop on Cognitive Modeling and Computational Linguistics*, 2015.
9. 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.
10. [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.
11. [Ke Zhai](#), **Jordan Boyd-Graber**, and Shay B. Cohen. **Hybrid Online Inference with Adaptor Grammars**. *NIPS Workshop on Advances in Variational Inference*, 2014.
12. Jason Chuang, John D. Wilkerson, Rebecca Weiss, Dustin Tingley, Brandon M. Stewart, Margaret E. Roberts, [Forough Poursabzi-Sangdeh](#), Justin Grimmer, Leah Findlater, **Jordan Boyd-Graber**, and Jeffrey Heer. **Computer-Assisted Content Analysis: Topic Models for Exploring Multiple Subjective Interpretations**. *NIPS Workshop on Human-Propelled Machine Learning*, 2014.
13. [Mohit Iyyer](#), **Jordan Boyd-Graber**, and Hal Daumé III. **Generating Sentences from Semantic Vector Space Representations**. *NIPS Workshop on Learning Semantics*, 2014.

14. Thang Nguyen, [Yuening Hu](#), and **Jordan Boyd-Graber**. **Evaluating Regularized Anchor Words**. *NIPS Workshop on Topic Models: Computation, Application, and Evaluation*, 2013.
15. [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.
16. [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.
17. [Yuening Hu](#) and **Jordan Boyd-Graber**. **Suggesting Constraints for Interactive Topic Modeling**. *ICML Workshop on Machine Learning in Human Computation and Crowdsourcing*, 2012.
18. [Yuening Hu](#) and **Jordan Boyd-Graber**. **Bayesian Hierarchical Clustering with Beta Coalescents**. *Mid-Atlantic Student Colloquium on Speech, Language, and Learning*, 2012.
19. [Ke Zhai](#) and **Jordan Boyd-Graber**. **Online Topic Model with Infinite Vocabulary**. *Mid-Atlantic Student Colloquium on Speech, Language, and Learning*, 2012.
20. [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.
21. 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, 7 pages.
22. **Jordan Boyd-Graber**. **Linguistic Resource Creation in a Web 2.0 World**. *NSF Workshop on Collaborative Annotation*, 2011, 7 pages.
23. 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, 5 pages.
24. [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.
25. Nitin Madnani, **Jordan Boyd-Graber**, and Philip Resnik. **Measuring Transitivity Using Untrained Annotators**. *Creating Speech and Language Data With Amazon’s Mechanical Turk*, 2010, 6 pages.
26. 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, 6 pages.
27. Jonathan Chang, **Jordan Boyd-Graber**, and David M. Blei. **Discovering social networks from free text**. *3rd Annual Machine Learning Symposium*, 2008.
28. **Jordan Boyd-Graber** and David M. Blei. **Multilingual Topic Models**. *NIPS Workshop on Unsupervised Latent Variable Models*, 2008.
29. **Jordan Boyd-Graber** and David M. Blei. **PUTOP: Turning Predominant Senses into a Topic Model for WSD**. *4th International Workshop on Semantic Evaluations*, 2007, 5 pages.

Sponsored Research and Programs

Active Grants

RI: EAGER: Collaborative Research: Adaptive Heads-up Displays for Simultaneous Interpretation
10/2017–2/2019 (NSF)

Investigators: Jordan Boyd-Graber CO-PI

Award: \$150,000 (Share: \$75,000)

Collaboration: Carnegie Mellon, University of Washington (only UMD portion shown)

CAREER: Human-Computer Cooperation for Word-by-Word Question Answering 2/2017–1/2022 (NSF)

Investigators: Jordan Boyd-Graber PI

Award: \$500,000 (Share: \$500,000)

CHS: Medium: Hyperlocal and Hypertemporal Information in Mass Emergencies Events: Next Generation Crisis Informatics Data Collection & Analytics 8/2016–8/2020
(NSF)

Investigators: Ken Anderson PI, Leysia Palen CO-PI, and Jordan Boyd-Graber CO-PI

Award: \$1,200,000 (Share: \$300,000)

eTASC: Empirical Evidence for a Theoretical Approach to Semantic Components 12/2015–11/2018
(DTRA)

Investigators: Martha Palmer (PI), Laura Michaelis (CO-PI) and Jordan Boyd-Graber (CO-PI)

Award: \$1,250,000 (Share: \$200,000)

Collaboration: Brandeis, Princeton, Stanford

Temporal Relation Discovery for Clinical Text 9/2015–9/2018 (NIH)

Investigators: Martha Palmer (PI) and Jordan Boyd-Graber (CO-PI)

Award: \$531,328 (Share: \$76,896)

Collaboration: Harvard, University of Alabama (Only Colorado portion shown)

Multilingual Interactive Topic Modeling 8/2015–7/2019 (DARPA LORELEI)

Investigators: Jordan Boyd-Graber (PI) and Mans Hulden (CO-PI)

Award: \$426,654 (Share: \$325,000)

Collaboration: Rayethon BBN (prime) with University of Maryland, Johns Hopkins University, and University of Washington (only Colorado portion shown)

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)

Collaboration: University of Chicago and American Institutes for Research (only Colorado portion shown)

Closing the User-Model Loop for Understanding Topics in Large Document Collections² 8/2014–7/2018 (NSF)

Investigators: Jordan Boyd-Graber (PI) and Leah Findlater (CO-PI)

Award: \$650,000 (Share: \$325,000)

Collaboration: Brigham Young University and University of Maryland (only Maryland portion shown)

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)

Collaboration: Grant located at University of Maryland

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-Graber³ (CO-PI)

Award: \$350,000 (Share: \$175,000)

Language Evidence for Social Goals 8/2009–10/2012 (IARPA)

²After I moved to Colorado, Leah Findlater assumed the role of PI to enable a new subcontract to Colorado; the original grant as awarded is provided here.

³I 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.

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, Extension, Mentoring, and Advising

Courses Taught

CMSC 389A: Practical Deep Learning UMD, Spring 2018

30 students, Student-led course initiative: classroom instruction by Sujith Vishwajith

INST 414: Data Science Methods UMD, Spring 2018

50 students

CMSC 726: Machine Learning UMD, Fall 2017

60 students

CSCI 7000: Advanced Machine Learning for Natural Language Processing Colorado, Spring 2017

24 students

CSCI 3022: Introduction to Data Science Algorithms Colorado, Fall 2016

100 students

CSCI 5622: Machine Learning Colorado, Fall 2015

104 students

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

LBSC 690: Introduction to Information Technology UMD, Fall 2012

30 students

INST728C / CMSC 773 / LING 773: Computational Linguistics II UMD, Spring 2012

11 Students

LBSC 690: Introduction to Information Technology UMD, Fall 2011

30 students

INFM 718G: Web Scale Information Processing Applications UMD, Spring 2011

12 students

LBSC 690: Introduction to Information Technology UMD, Fall 2010

30 students

COS/LIN 280: Computational Linguistics Princeton, Fall 2008

40 students, Taught by Christiane Fellbaum (I developed homeworks)

Course or Curriculum Development

- Developed new undergraduate course, *INST 414: Data Science Methods*
- Developed new undergraduate course, *CSCI 3022: Data Science Algorithms* 100-person first offering without TA support
- New offering of *CSCI 5622: Machine Learning* (Spring / Fall 2015) as a flipped classroom
- Significant revisions to *LBSC 690: Information Technology* (Fall 2012)
- Chair of committee developing new undergraduate Information Science program at Universities at Shady Grove for University of Maryland (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.

Advising: Research Direction (Undergraduate)

1. Eric Wallace (UMD): Generating challenging questions for question answering
2. Sujith Vishwajith (UMD): Answer equivalence for question answering
3. Henrik Larsen (CU): Verb prediction
4. Davis Yoshida (CU): Active feature solicitation for question answering
5. Stephanie Hwa (UMD): Vector word representations for named entities in question answering
6. Danny Bouwman (UMD): Crowdsourced coreference annotation
7. Kenrick Kin, Joshua Lee, Lester Mackey (Princeton): Assistive vocabulary devices for people with aphasia

Advising: Research Direction (Masters)

Chair or Co-Chair

1. Davis Yoshida (CU APMA, 2016–2017): Domain Adaptation for Question Answering [First position: PhD student, TTI-Chicago]
2. You Lu (CU CSCI, 2016–2017): Task-based Evaluation of Topic Models [First position: PhD student, Virginia Tech]
3. Alison Smith (UMD CMSC, 2011–2013): Evaluating Interfaces for Interactive Topic Modeling [First position: Decisive Analytics]
4. Brianna Satinoff (UMD CMSC, 2009–2011): Incremental Models for Text Classification [First position: Wellpoint]

On Committee

1. Jordan Hoskins (German, 2015)
2. Bradley Skaggs (UMD CMSC, 2011) [First position: US Government]

Advising: Research Direction (Doctoral)

Chair or Co-chair

1. Alison Smith (UMD CMSC, 2017–): Interactive Topic Modeling
2. Michelle Yuan (UMD CMSC, 2018–): Multilingual Interactive Topic Modeling
3. Mozhi Zhang (UMD CMSC, 2017–): Multilingual Classification for Low Resource Languages
4. Pedro Rodriguez (UMD CMSC, 2017–): Distributed Machine Learning
5. Fenfei Guo (UMD CMSC, 2017–): Interactive Embedding Learning
6. Shudong Hao (CU CSCI, 2015–2017): Interactive Multilingual Topic Modeling
7. Weiwei Yang (UMD CSCI, 2014–): Linked Topic Models
8. Forough Poursabzi-Sangdeh (CU CSCI, 2014–2018): Active Labeling with Topic Models
9. Kim Glasgow⁴ (UMD iSchool 2011–2014): Social Action in Social Media
10. Thang Nguyen (UMD CMSC, 2012–2018): Anchor-Based Topic Inference
11. Alvin Grissom II (CU CSCI, 2012–2017): Reinforcement Learning for Feature-wise Language Tasks [First position: Ursinus College, Assistant Professor]
12. Mohit Iyyer (UMD CMSC, 2012–2017): Deep Learning for Question Answering [First position: University of Massachusetts Amherst, Assistant Professor]
13. He He (UMD CMSC: 2011–2016): Algorithms that Trade-Off Speed and Accuracy [First position: Stanford University, Postdoc with Percy Liang]
14. Viet-An Nguyen (UMD CMSC, 2010–2015): Detecting Influence in Text [First position: Facebook Data Science]
15. Ke Zhai (UMD CMSC, 2009–2014): Large Scale Bayesian Inference [First position: Yahoo! Research]
16. Yuening Hu (UMD CMSC: 2009–2014): Interactive Topic Modeling [First position: Yahoo! Research]

⁴now advised by Yla Tausczik

On committee

1. Xing Niu (CMSC, 2019)
2. Yogarshi Vyas (CMSC, 2019)
3. Jinfeng Rao (CMSC, 2018)
4. Anupam Guha (CMSC, 2017)
5. Nicholas Dronen (CU CSCI 2017)
6. Bill Foland (CU CSCI 2017)
7. Sam Way (CU CSCI 2017)
8. Shweta Bhandare (CU CSCI 2017)
9. Nicole Beckage (CU CSCI 2017)
10. Karl Ridgeway (CU CSCI)
11. Amir Ghasemianlangroodi (CU CSCI 2017)
12. Brett Roads (CU CSCI 2017)
13. Abbie Jacobs (CU CSCI 2017)
14. Md Arafat Sultan (CU CSCI, 2016)
15. Ben London (UMD CMSC, 2014)
16. Irene Eleta (UMD INFO, 2014)
17. Kevin Dayaratna (UMD STAT, 2014)
18. Jiarong Jiang (UMD CMSC, 2014)
19. Jagadeesh Jagarlamudi (UMD CMSC, 2013)
20. Amit Goyal (UMD CMSC, 2013)
21. Piyush Rai (Utah CMSC, 2012)
22. Arvind Agarwal (UMD CMSC, 2012)
23. Elena Zheleva (UMD CMSC, 2011)
24. Asad Sayeed (UMD CMSC, 2011)

Guest lectures

- 2017, PSYC 6200: Topic Models
- 2017, INFO 2301: Clustering
- 2016, HIST 6546: Topic Models
- 2016, CSCI 7000 (Data Science Team): Topic Models as Features
- 2016, CSCI 6000: Machine Learning Research
- 2015, CSCI 5832: Topic Models
- 2012, CMSC 421: Topic Models
- 2012, CMSC 726: Topic Models
- 2011, LING 773: Topic Models
- 2010, CMSC 726: Topic Models

Service and Outreach

Reviewing and Editing for Journals and Presses: Aricles

- Action Editor for *Transactions of the Association for Computational Linguistics*: 2017–present
- Reviewer for *Journal of AI Research*: 2016
- Reviewer for *International Journal on Digital Libraries*: 2016
- 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 for Journals and Presses: Books

- Reviewer for *R Programming and Data Science*, Chapman and Hall

Reviewing activities for Agencies and Foundations

- NSF III Review Panel (2018)
- NSF IIS Review Panel (2017)

- NSERC External Review (2017)
- NSF IIS External Review (2015)
- NSF IIS Review Panel (2015)
- NSF External Review (2014)
- NSF IIS Review Panel (2012)
- NSF BIGDATA Review Panel (2012)

Reviewing Activities for Conferences

- Best Paper Committee, *ACL 2018*
- 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*

Professional and Campus Service

Departmental Service

Computer Science, Colorado

- Member: Graduate Committee (2014–2017)
- Member: Search Committee (Machine Learning, 2014–2015)

Departmental Service

Institute for Advanced Computer Studies, UMD

- Hardware Czar: Computational Linguistics and Information Processing Lab (2017–present)
- 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

Engineering and Applied Science, Colorado

- Yellowshirt Interviewer, 2015

College Service

College of information Studies, UMD

- Member: Search Committee (joint with Journalism) for Computational Journalism (2017–2018)
- 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

Colorado

Faculty Advisor: *cu Trivia Buffs* (20th place, ICT D2 2016)

- Tournament Director: Rocky Mountain Region Academic Quiz Tournament 2017 (College)
- Tournament Director: Rocky Mountain Region Academic Quiz Tournament 2016 (College)
- Tournament Director: Colorado State Academic Quiz Tournament 2016 (High School)
- Tournament Director: Colorado State Academic Quiz Tournament 2015 (High School)

University Service

UMD

- Faculty Advisor: Maryland Academic Quiz Team (2018-present)
- Faculty Advisor: Maryland Academic Quiz Team (2010-2014; 5th place, D1 ICT 2014)

Leadership Roles in Meetings and Conferences

- **Senior Area Chair**, *EMNLP 2018*
- **Area Chair**, *ICML 2018*
- **Organizer**, *NIPS 2017 Human-Computer Question Answering Competition*
- **Area Chair**, *ICML 2017*
- **Area Chair** for Machine Learning, *EMNLP 2017*
- **Tutorial Co-Chair**, *ACL 2017*
- **Area Chair** for Machine Learning, *EMNLP 2015*
- **Area Chair**, *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*

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)

Paid Consulting

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

Non-Research Presentations

Outreach Presentations

1. OUSIA vs. Trivia All-Stars, 2018 (Reston, VA)
2. OUSIA vs. Trivia All-Stars, 2017 (Long Beach, CA)
3. QANTA vs. All-Star Quiz Bowl Team, 2017 (Atlanta, GA)
4. OUSIA vs. CA NASAT Team, 2016 (San Diego, CA)
5. QANTA vs. All-Star Quiz Bowl Team, 2016 (Dallas, TX)
6. QANTA vs. Ken Jennings, 2015 (Seattle, WA)
7. QANTA vs. Jeopardy Champions, 2014 (Chicago, IL)

External Visibility

Keynotes

1. *Frontiers of Engineering (National Academies of Engineering) 2017: Humans and Computers Working Together to Measure Machine Learning Interpretability* - Jordan Boyd-Graber
2. *European Conference on Information Retrieval 2016: Machine Learning Shouldn't be a Black Box*
3. *Yandex Data Science 2016: Big Data Analysis with Topic Models: Human Interaction, Streaming Computation, and Social Science Applications*

Invited Talks

1. **Opening the black box of machine learning: Interactive, interpretable interfaces for exploring linguistic tasks:** Laboratory of Telecommunication Science (College Park, MD), 2018; University of Maryland Language Science Center Winter Storm (College Park, MD), 2018
2. **Cooperative and Competitive Machine Learning through Question Answering:** DC Data Science (Washington, DC), 2018; Georgetown Computer Science (Washington, DC), 2017; New York Text as Data (New York City, NY), 2017
3. **Defining Artificial Intelligence, Data Science, and Machine Learning:** Office of the Inspector General of the US Postal Service (Arlington, VA), 2018
4. **Computational Modeling of Relationships, Spin, and Betrayal:** Stanford University, 2017 (Palo Alto, CA)
5. **Machine Learning Shouldn't be a Black Box:** Ludwig Maximilian Universität, 2016 (München, Germany); ECIR Keynote, 2016 (Padua, Italy); Cambridge Statistics Colloquium, 2016 (Cambridge, England); Royal Institute of Technology (Stockholm, Sweden), 2016; Carnegie Mellon University Language Technology Institute Colloquium (Pittsburgh, PA), 2016; University of Maryland, 2016 (College Park, MD)

6. **Interactive Topic Modeling and The US Tea Party:** New Frontiers of Automated Content Analysis in the Social Sciences, 2015 (Zürich, CH)
7. **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, 2014 (Darmstadt, Germany); Hong Kong University of Science and Technology, 2014 (Hong Kong); Cornell University, 2015 (Ithaca, NY); 2015 Yandex School of Data Science (Berlin, Germany); Facebook 2017 (Menlo Park, CA)
8. **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); University of Maryland, 2017 (College Park, MD)
9. **Incorporating Human Knowledge and Insights into Probabilistic Models of Text:** Brigham Young University Department of Computer Science Colloquium, 2012 (Provo, UT)
10. **Besting the Quiz Master: Crowdsourcing Incremental Classification Games:** Rutgers University, 2012 (New Brunswick, NJ); Brigham Young University, 2012 (Provo, UT)
11. **Making Topic Models More Human(e):** Colorado University, 2012 (Boulder, CO); University of Maryland Institute for Technology and Humanities, 2012 (College Park, MD)
12. **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)
13. **Inference and Validation of Probabilistic Models of Language in the Cloud:** UMD Winter Storm, 2011 (College Park, MD)
14. **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)
15. **Putting Words Together: Crowdsourcing Data Collection for Lexical Similarity and Topical Coherence:** University of Massachusetts, 2010 (Amherst, Massachusetts)
16. **Topic Models, Mechanical Turk, and WordNet:** Harvard University, 2010 (Cambridge, MA)
17. **Topic Models and Hierarchical Models:** Johns Hopkins Summer Workshop for SMT, 2010 (Baltimore, MD)
18. **Linguistic Extensions to Topic Models:** University of Massachusetts, 2009 (Amherst, Massachusetts); Center for Communications Research, 2009 (Princeton, NJ); John Hopkins Human Language Technologies Center of Excellence, 2009 (Baltimore, MD); Columbia University, 2009 (New York, NY)

Press Coverage

1. Sydney Worth. **CU Boulder team to compete at national quiz tourney for second year in a row.** *Daily Camera*, 2018.
2. Yomihiro Katabuti. **The Impact of Fast-Moving AI: Dominating Trivia Champs.** *IT Media*, 2018.
3. Esther Bond. **Simultaneous Interpreters May Soon Get Real-Time Help Just When They Need It.** *Slator*, 2018.
4. Melissa Brachfeld. **Boyd-Graber Publishes Paper in PNAS that Assesses Scholarly Influence.** *UMIACS*, 2018.
5. Rob Mitchum. **New model reveals forgotten influencers and 'sleeping beauties' of science.** *University of Chicago*, 2018.
6. Melissa Brachfeld. **UMD Computerized System Beats Human Quiz Bowl Team at Atlanta Exhibition.** *UMIACS*, 2017.
7. Inderjeet Mani. **When robots read books.** *Aeon*, 2016.
8. Luke Dormehl. **Like parents from the 1950s, AI still can't understand comics. Here's why.** *Digital Trends*, 2016.
9. Katherine Gorman. **Automatic Translation and t-SNE.** *Talking Machines*, 2016.
10. Christopher Chabris. **Game On: The Psychology of Betrayal.** *Wall Street Journal*, 2016.
11. Melissa Dahl. **Should you worry about people who are too polite?.** *CNN*, 2015.
12. Emily Adams. **Professor's Quiz Bowl Robot Goes Head-To-Head With Humans.** *Colorado Computer Science Newsletter*, 2015.

13. Morgan Eichensehr. **STUDY: Changes in language, tone could reveal impending betrayal.** *Diamondback*, 2015.
14. Lexie Schapitl. **UMD researchers' computer beats 'Jeopardy!' star Ken Jennings at trivia.** *Diamondback*, 2015.
15. Leigh Weingus. **What You Should Know About Really Polite People.** *Huffington Post*, 2015.
16. Melissa Dahl. **Here's a Good Reason to Be Wary of Overly Polite People.** *New York Magazine*, 2015.
17. Nathan Collins. **Detecting a Coming Betrayal.** *Pacific Standard*, 2015.
18. Bill Steele. **Language analysis predicts a coming betrayal.** *Phys.org*, 2015.
19. Rachel Ehrenberg. **A few key signs betray betrayal.** *Science News*, 2015.
20. Liam Farrell. **Question-Answering System Built by UMD, UC Boulder Bests Ken Jennings.** *Terp*, 2015.
21. **Question: Which language scientists designed first competitive quiz bowl playing NLP system?.** *UMD Language Science Newsletter*, 2015.
22. Melissa Brachfeld. **Computerized Question-Answering System Built by UMD, UC Boulder Bests "Jeopardy!" Champion.** *UMIACS*, 2015.
23. Marcus Smith. **Prof. Ringger and Natural Language Processing.** *Thinking Aloud*, 2014.