

Jordan Boyd-Graber
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 (920) 524-9464 <http://cs.colorado.edu/~jbg> <http://cs.colorado.edu/~jbg>
 111B ECCS Computer Science College of Engineering and Applied Science Boul-
 der, CO 80309
 0.9em-0.4em
 University Appointments
<http://colorado.edu> University of Colorado Boulder BOULDER, CO Assistant
 Professor, Computer Science 2014–Present
<http://umd.edu> University of Maryland COLLEGE PARK, MD Assistant Pro-
 fessor, College of Information Studies 2010–2014 Assistant Professor, Institute
 for Advanced Computer Studies 2011–2014 Affiliate Assistant Professor, Com-
 puter Science 2011–2015 Postdoc (Advisor: <http://www.umiacs.umd.edu/~resnik/> Philip
 Resnik) 2009–2010
 Education
<http://princeton.edu> Princeton University PRINCETON, NJ Ph.D., Computer
 Science 2010 Thesis: http://www.cs.colorado.edu/~jbg/docs/2010_jbg_thesis.pdf *Linguistic Extension of Topic Models*
<http://idse.columbia.edu/david-blei> David Blei M.A., Computer Science 2007
<http://caltech.edu> California Institute of Technology PASADENA, CA B.S.,
 Computer Science 2004 B.S., History 2004
 Other Employment
 Princeton University PRINCETON, NJ Writing Fellow, <http://www.princeton.edu/writing/center/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, <http://www.einstein.caltech.edu/who/past.html> Einstein Papers
 Project 2003–2004 Peer Tutor, <https://writing.caltech.edu/Hixon> Writing Cen-
 ter 2001–2004 Lab Technician, <https://www.amt.caltech.edu/Caltech> Digital
 Media Center 2001–2003

Immigration status: U.S. citizen

Fellowships, Prizes, and Awards

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

American Association for Artificial Intelligence student award, International
 Science and Engineering Fair 2000

Caltech Jorgensen Scholarship 2001–2004

Publications

Students directly advised or co-advised in underline. **2015**

1. <http://www.cs.umd.edu/~vietan/index.htm> Viet-An Nguyen, Jordan Boyd-Graber, Philip Resnik, and Kristina Miler. http://cs.colorado.edu/~jbg/docs/2015_acl_eaparty.pdf *ACL EAParty*, 2015.
2. <http://www.umiacs.umd.edu/~hhe/> He He, <http://www.umiacs.umd.edu/~alvin/> Alvin Grissom, Jordan Boyd-Graber, and Hal Daumé III. http://cs.colorado.edu/~jbg/docs/2015_emnlp_rewrite.pdf *EMNLP*, 2015.
3. Forough Poursabzi-Sangdeh and Jordan Boyd-Graber. Speeding Document Annotation with Topic Models. *NAACL Student Research Workshop*, 2015.
4. Anupam Guha, <http://cs.umd.edu/~miyyer/> Mohit Iyyer, Danny Bousamra, and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg/docs/2015_naacl_bcoref.pdf *NAACL*, 2015.
5. Stephen H. Bach, Bert Huang, Jordan Boyd-Graber, and Lise Getoor. http://cs.colorado.edu/~jbg/docs/2015_icml_paired_dual.pdf *Paired – Dual Learning for Fact Extraction*, 2015.
6. Paul Felt, Eric Ringger, Jordan Boyd-Graber, and Kevin Seppi. http://cs.colorado.edu/~jbg/docs/2015_conll_csl_da.pdf *Making the Most of Crowdsourced Document Annotations*, 2015.
7. Vlad Niculae, Srikanth Kumar, Jordan Boyd-Graber, and Cristian Danescu-Niculescu-Mizil. http://cs.colorado.edu/~jbg/docs/2015_acl_diplomacy.pdf *Linguistic Hierarchy in Diplomacy*, 2015.
8. <http://www.umiacs.umd.edu/~daithang/> Thang Nguyen, Jordan Boyd-Graber, Jeff Lund, Kevin Seppi, and Eric Ringger. http://cs.colorado.edu/~jbg/docs/2015_emnlp_mt.pdf *EMNLP*, 2015.
9. Yi Yang, Doug Downey, and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg/docs/2015_emnlp_mt.pdf *EMNLP*, 2015.
10. <http://cs.umd.edu/~miyyer/> Mohit Iyyer, Varun Manjunatha, Jordan Boyd-Graber, and Hal Daumé III. http://cs.colorado.edu/~jbg/docs/2015_acl_da.pdf *DeepU*, 2015.
11. Weiwei Yang, Jordan Boyd-Graber, and Philip Resnik. http://cs.colorado.edu/~jbg/docs/2015_acl_da.pdf *DeepU*, 2015.
12. Philip Resnik, William Armstrong, Leonardo Claudino, <http://www.umiacs.umd.edu/~daithang/> Thang 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.

2014

1. <http://www.cs.umd.edu/~vietan/index.htm> Viet-An Nguyen, Jordan Boyd-Graber, and Philip Resnik. http://cs.colorado.edu/~jbg/docs/2014_emnlp_howto_gibbs.pdf *Sometimes*, 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. <http://www.cs.umd.edu/~ynhu/> Yuening Hu, <http://www.umiacs.umd.edu/~zhaike/> Ke Zhai, Vlad Eidelman, and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg/docs/2014_acl_ptlda_mt.pdf *ACL*, 2014.

4. [http://cs.umd.edu/~miyyer/Mohit Iyyer](http://cs.umd.edu/~miyyer/Mohit_Iyyer), Peter Enns, Jordan Boyd-Graber, and Philip Resnik. http://cs.colorado.edu/~jbg//docs/2014_acl_rnn_deology.pdf *Political I*
5. [Kimberly Glasgow](http://cs.colorado.edu/~jbg//docs/2014_acl_rnn_deology.pdf), Clay Fink, and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg//docs/2014_acl_rnn_deology.pdf
6. [http://www.umiacs.umd.edu/~zhai/Ke Zhai](http://www.umiacs.umd.edu/~zhai/Ke_Zhai), Jordan Boyd-Graber, and Shay B. Cohen. http://cs.colorado.edu/~jbg//docs/2014_acl_agv_online.pdf *Online Adaptor Gra*
7. <http://www.cs.umd.edu/~vietan/index.htm> Viet-An Nguyen, Jordan Boyd-Graber, Philip Resnik, Deborah Cai, Jennifer Midberry, and Yuanxin Wang. http://cs.colorado.edu/~jbg//docs/mlj2013_influencer.pdf *Modeling T*
8. <http://www.cs.umd.edu/~vietan/index.htm> Viet-An Nguyen, Jordan Boyd-Graber, Philip Resnik, and Jonathan Chang. http://cs.colorado.edu/~jbg//docs/2014_acl_agv_online.pdf
9. [http://www.cs.umd.edu/~ynhu/Yuening Hu](http://www.cs.umd.edu/~ynhu/Yuening_Hu), Jordan Boyd-Graber, Brianna Satinoff, and Alison Smith. http://cs.colorado.edu/~jbg//docs/mlj2013_tm.pdf *Interact*
10. [http://www.umiacs.umd.edu/~zhai/Ke Zhai](http://www.umiacs.umd.edu/~zhai/Ke_Zhai), Jordan Boyd-Graber, and Shay B. Cohen. Hybrid Online Inference with Adaptor Grammars. *NIPS Workshop on Advances in Variational Inference*, 2014.
11. [http://cs.umd.edu/~miyyer/Mohit Iyyer](http://cs.umd.edu/~miyyer/Mohit_Iyyer) and Jordan Boyd-Graber Hal Daumé III. Generating Sentences from Semantic Vector Space Representations. *NIPS Workshop on Learning Semantics*, 2014.
12. [http://www.umiacs.umd.edu/~alvin/Alvin Grissom II](http://www.umiacs.umd.edu/~alvin/Alvin_Grissom_II), [http://www.umiacs.umd.edu/~hhe/Hal Daumé III](http://www.umiacs.umd.edu/~hhe/Hal_Daume_III), Jordan Boyd-Graber, John Morgan, and Hal Daumé III. http://cs.colorado.edu/~jbg//docs/2014_acl_agv_online.pdf
13. Alison Smith, Jason Chuang, [http://www.cs.umd.edu/~ynhu/Yuening Hu](http://www.cs.umd.edu/~ynhu/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.
14. 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.
15. Jordan Boyd-Graber, David Mimno, and David Newman. http://cs.colorado.edu/~jbg//docs/2014_acl_agv_online.pdf
16. [http://www.umiacs.umd.edu/~daithang/Thang Nguyen](http://www.umiacs.umd.edu/~daithang/Thang_Nguyen), [http://www.cs.umd.edu/~ynhu/Yuening Hu](http://www.cs.umd.edu/~ynhu/Yuening_Hu), and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg//docs/2014_acl_anchor_reg.pdf *Anchor's Regu*
17. [http://cs.umd.edu/~miyyer/Mohit Iyyer](http://cs.umd.edu/~miyyer/Mohit_Iyyer), Jordan Boyd-Graber, Leonardo Claudino, Richard Socher, and Hal Daumé III. http://cs.colorado.edu/~jbg//docs/2014_acl_agv_online.pdf

1. <http://www.cs.umd.edu/~vietan/index.htm> 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.
2. <http://www.cs.umd.edu/~ynhu/> Yuening Hu, <http://www.umiacs.umd.edu/~zhaike/> Ke Zhai, Vlad Edelman, and **Jordan Boyd-Graber**. **Topic Models for Translation Domain Adaptation**. *NIPS Workshop on Topic Models: Computation, Application, and Evaluation*, 2013.
3. **Jordan Boyd-Graber**, Kimberly Glasgow, and Jackie Sauter Zajac. <http://cs.colorado.edu/~jbg/>
4. <http://www.umiacs.umd.edu/~zhaike/> Ke Zhai and **Jordan Boyd-Graber**. http://cs.colorado.edu/~jbg//docs/2013_cml_infvoc.pdf *Online Topic Models with Infinite Vocabulary*
5. <http://www.cs.umd.edu/~vietan/index.htm> Viet-An Nguyen, **Jordan Boyd-Graber**, and Philip Resnik. http://cs.colorado.edu/~jbg//docs/2013_shlda.pdf *Lexical Semantics*
6. Thang Nguyen, <http://www.cs.umd.edu/~ynhu/> Yuening Hu, and **Jordan Boyd-Graber**. **Evaluating Regularized Anchor Words**. *NIPS Workshop on Topic Models: Computation, Application, and Evaluation*, 2013.
7. Naho Orita, Rebecca McKeown, Naomi H. Feldman, Jeffrey Lidz, and **Jordan Boyd-Graber**. http://cs.colorado.edu/~jbg//docs/2013_cogsci_pronoun.pdf *Disambiguating Pronouns*
8. <http://www.cs.umd.edu/~vietan/index.htm> Viet-An Nguyen, **Jordan Boyd-Graber**, and Stephen Altschul. http://cs.colorado.edu/~jbg//docs/2013_approtein.pdf *Protein-Protein Interactions*
9. <http://www.cs.umd.edu/~ynhu/> Yuening Hu, **Jordan Boyd-Graber**, Hal Daumé III, and Z. Irene Ying. http://cs.colorado.edu/~jbg//docs/2013_coalescent.pdf *Binary Tree Coalescent*
10. <http://www.cs.umd.edu/~vietan/index.htm> Viet-An Nguyen, <http://www.cs.umd.edu/~ynhu/> Yuening Hu, **Jordan Boyd-Graber**, and Philip Resnik. http://cs.colorado.edu/~jbg//docs/2013_argviz.pdf *Argument Visualization*

2012

1. <http://www.cs.umd.edu/~vietan/index.htm> Viet-An Nguyen, **Jordan Boyd-Graber**, and Philip Resnik. http://cs.colorado.edu/~jbg//docs/acl2012_sits.pdf *SITS : A Hierarchical Synchronous Topic Model*
2. <http://www.umiacs.umd.edu/~zhaike/> Ke Zhai, **Jordan Boyd-Graber**, Nima Asadi, and Mohamad Alkhrouja. <http://cs.colorado.edu/~jbg//docs/mrllda.pdf> **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).
3. <http://www.cs.umd.edu/~vietan/index.htm> 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.

4. Vladimir Eidelman, Jordan Boyd-Graber, and Philip Resnik. http://cs.colorado.edu/~jbg//docs/acl2012_tutorial.pdf *Topic Models for Dynamic Translation Models*.
5. <http://www.cs.umd.edu/~ynhu/>Yuening Hu and Jordan Boyd-Graber. Suggesting Constraints for Interactive Topic Modeling. *ICML Workshop on Machine Learning in Human Computation and Crowdsourcing*, 2012.
6. <http://www.umiacs.umd.edu/~zhai/>Ke Zhai and Jordan Boyd-Graber. Online Topic Model with Infinite Vocabulary. *Mid-Atlantic Student Colloquium on Speech, Language, and Learning*, 2012.
7. <http://www.cs.umd.edu/~ynhu/>Yuening Hu, <http://www.umiacs.umd.edu/~zhai/>Ke Zhai, Sinead Williamson, and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg//docs/mtibp_icml2012.pdf
8. Asad B. Sayeed, Jordan Boyd-Graber, Bryan Rusk, and Amy Weinberg. http://cs.colorado.edu/~jbg//docs/srt_aacl2012.pdf *Grammatical structures for word –*
9. <http://www.cs.umd.edu/~ynhu/>Yuening Hu and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg//docs/acl2012_fttm.pdf *Efficient Tree – Based Topic Modeling*
10. Jordan Boyd-Graber, <http://www.umiacs.umd.edu/~hhe/>He He, and Hal Daumé III. http://cs.colorado.edu/~jbg//docs/qb_emnlp2012.pdf *Besting the Quiz Master :*
11. <http://www.cs.umd.edu/~ynhu/>Yuening Hu and Jordan Boyd-Graber. Bayesian Hierarchical Clustering with Beta Coalescents. *Mid-Atlantic Student Colloquium on Speech, Language, and Learning*, 2012.

2011

1. <http://www.umiacs.umd.edu/~hhe/>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.
2. Clay Templeton, Kenneth R. Fleischmann, and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg//docs/simulating_audiences.pdf *Simulating Audiences : Automating And*
3. Kenneth R. Fleischmann, Clay Templeton, and Jordan Boyd-Graber. <http://cs.colorado.edu/~jbg//docs/iconference-2011-learning.pdf> *Modeling Diverse Standpoints in Text Classification: Learning to Be Human by Modeling Human Values. iConference*, 2011, 2 pages.
4. Clay Templeton, Travis Brown, Sayan Battacharyya, and Jordan Boyd-Graber. http://cs.colorado.edu/~jbg//docs/slides_civil_war.pdf *Mining the Dispatch under Super*
5. Jordan Boyd-Graber. http://cs.colorado.edu/~jbg//docs/2011_resources.pdf *Linguistic Resource C*
6. <http://www.cs.umd.edu/~ynhu/>Yuening Hu, Jordan Boyd-Graber, and <http://www.umiacs.umd.edu/~hhe/>Brianna Satinoff. <http://cs.colorado.edu/~jbg//docs/itm.pdf> *Interactive Topic Modeling. Association for Computational Linguistics*, 2011, 10 pages (25% Acceptance Rate).

7. Clay Templeton, Kenneth R. Fleischmann, and Jordan Boyd-Graber. <http://cs.colorado.edu/jbg//docs/iconference-2011-comparing.pdf> Comparing Values and Sentiment Using Mechanical Turk. *iConference*, 2011, 2 pages.
8. Sonya S. Nikolova, Jordan Boyd-Graber, and Christiane Fellbaum. http://cs.colorado.edu/jbg//docs/2011_book_chapter_e_vocation.pdf Collecting Semantic Similarity. *Proceedings of the 2011 Conference on Empirical Methods in Natural Language Processing*, 2011, 10 pages.
9. Pranav Anand, Joseph King, Jordan Boyd-Graber, Earl Wagner, Craig Martell, Douglas W. Oard, and Philip Resnik. <http://cs.colorado.edu/jbg//docs/persuasion.pdf> Me: We Can Do This!. *The AAAI 2011 workshop on Computational Models of Natural Argument*, 2011, 5 pages.

2010

1. Eric Hardisty, Jordan Boyd-Graber, and Philip Resnik. <http://cs.colorado.edu/jbg//docs/adaptation.pdf> Adapting to New Languages. *Proceedings of the 2010 Conference on Empirical Methods in Natural Language Processing*, 2010, 10 pages.
2. Nitin Madnani, Jordan Boyd-Graber, and Philip Resnik. <http://cs.colorado.edu/jbg//docs/measuring-transitivity.pdf> Measuring Transitivity Using Untrained Annotators. *Creating Speech and Language Data With Amazon's Mechanical Turk*, 2010, 6 pages.
3. Jordan Boyd-Graber. http://cs.colorado.edu/jbg//docs/2010_jbg_thesis.pdf Linguistic Extensions to the Probabilistic Latent Semantic Analysis Model. *PhD Thesis*, 2010.
4. Jordan Boyd-Graber and Philip Resnik. <http://cs.colorado.edu/jbg//docs/jbg-mlslda-2010.pdf> Holistic Sentiment Analysis Across Languages: Multilingual Supervised Latent Dirichlet Allocation. *Empirical Methods in Natural Language Processing*, 2010, 11 pages (25% Acceptance Rate).

2009

1. Sonya S. Nikolova, Jordan Boyd-Graber, and Perry Cook. <http://cs.colorado.edu/jbg//docs/viva.pdf> 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.
2. Xiaojuan Ma, Jordan Boyd-Graber, Sonya S. Nikolova, and Perry Cook. http://cs.colorado.edu/jbg//docs/image_conference.pdf Speaking Through Pictures: Images vs. Icons. *Proceedings of the 2009 Conference on Empirical Methods in Natural Language Processing*, 2009, 10 pages.
3. Jonathan Chang, Jordan Boyd-Graber, Chong Wang, Sean Gerish, and David M. Blei. <http://cs.colorado.edu/jbg//docs/nips2009-rtl.pdf> Reading Tea Leaves: How Humans Interpret Topic Models. *Neural Information Processing Systems*, 2009, 9 pages (24% Acceptance Rate).
4. Jordan Boyd-Graber and David M. Blei. <http://cs.colorado.edu/jbg//docs/uai2009.pdf> Multi-Topic Models for Unaligned Text. *Uncertainty in Artificial Intelligence*, 2009, 8 pages (31% Acceptance Rate).
5. Jonathan Chang, Jordan Boyd-Graber, and David M. Blei. <http://cs.colorado.edu/jbg//docs/kdd2009.pdf> Between the Lines: Augmenting Social Networks with Text. *Knowledge Discovery and Data Mining*, 2009, 9 pages (9% Acceptance Rate).

6. Sonya S. Nikolova, Jordan Boyd-Graber, Christiane Fellbaum, and Perry Cook. <http://cs.colorado.edu/~jbg//docs/evocation-viva.pdf> 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).

2008

1. Jordan Boyd-Graber and David M. Blei. <http://cs.colorado.edu/~jbg//docs/nips2008.pdf> Syntactic Topic Models. *Neural Information Processing Systems*, 2008, 8 pages (25% Acceptance Rate).
2. Jordan Boyd-Graber and David M. Blei. **Multilingual Topic Models**. *NIPS Workshop on Unsupervised Latent Variable Models*, 2008.
3. Jonathan Chang, Jordan Boyd-Graber, and David M. Blei. **Discovering social networks from free text**. *3rd Annual Machine Learning Symposium*, 2008.

2007

1. Jordan Boyd-Graber and David M. Blei. <http://cs.colorado.edu/~jbg//docs/jbg-SEMEVAL07.pdf> PUTOP: Turning Predominant Senses into a Topic Model for WSD. *4th International Workshop on Semantic Evaluations*, 2007, 5 pages.
2. Jordan Boyd-Graber, David M. Blei, and Xiaojin Zhu. <http://cs.colorado.edu/~jbg//docs/jbg-EMNLP07.pdf> A Topic Model for Word Sense Disambiguation. *Empirical Methods in Natural Language Processing*, 2007, 10 pages (27% Acceptance Rate).

2006

1. 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. <http://cs.colorado.edu/~jbg//docs/paper673-boyd-graber.pdf> Participatory design with proxies: Developing a desktop-PDA system to support people with aphasia. *Computer-Human Interaction*, 2006, 10 pages (23% Acceptance Rate).
2. Jordan Boyd-Graber, Christiane Fellbaum, Daniel Osherson, and Robert Schapire. <http://cs.colorado.edu/~jbg//docs/jbg-jeju.pdf> Adding Dense, Weighted, Connections to WordNet. *Proceedings of the Global WordNet Conference*, 2006, 10 pages.

2003

1. Alexander Geyken and Jordan Boyd-Graber. <http://cs.colorado.edu/~jbg//docs/idioms.pdf> Automatic classification of multi-word expressions in print dictionaries. *Linguisticae Investigationes*, 2003, 16 pages.

Contracts and Grants

Active Funding

Multilingual Interactive Topic Modeling8/2015–7/2019 (DARPA LORELEI)
Investigators:Jordan Boyd-Graber (PI) Award:\$426,654 (Share: \$325,000)

Scaling Insight into Science: Assessing the value and effectiveness of machine assisted classification within a statistical system8/2014–7/2016 (NSF) Investigators:Jordan Boyd-Graber (PI) Award:\$195,000 (Share: \$195,000)

Closing the User-Model Loop for Understanding Topics in Large Document Collections¹8/2014–7/2018 (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 Data8/2013–7/2016 (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 Biases8/2013–8/2014 (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 Analysis9/2009–8/2014 (NSF) Investigators:Jimmy Lin (PI), Philip Resnik (CO-PI), Jordan Boyd-Graber² (CO-PI) Award:\$350,000 (Share: \$175,000)

Language Evidence for Social Goals8/2009–10/2012 (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 Analysis9/2009–8/2012 (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)

¹After I moved to Colorado, Leah Findlater assumed the role of PI to enable a new sub-contract to Colorado; the original grant as awarded is provided here.

²I 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.

Advanced Open Source Exploitation Models4/2011–12/2011 (Lockheed Martin) Investigators:Philip Resnik (PI), Jordan Boyd-Graber (CO-PI) Award:\$60,000

(Share: \$30,000)

Social Media Scanning5/2011–12/2011 (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 LearningColorado, Fall 2015 104 students

CSCI 5622: Machine LearningColorado, Spring 2015 58 students

CSCI/LING 5832: Natural Language ProcessingColorado, Fall 2014 32 students

INST 737: Digging into DataUMD, 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

Course or Curriculum Development

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.

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)

Stephanie Hwa: Vector word representations for named entities in question answering

Danny Bouwman: Crowdsourced coreference annotation
 Advising: Research Direction (Masters)
 Chair or Co-Chair

Brianna Satinoff (UMD, CMSC): Incremental Models for Text Classification [First position: Wellpoint]

Alison Smith (UMD, CMSC): Evaluating Interfaces for Interactive Topic Modeling [First position: Decisive Analytics]
 On Committee

Jordan Hoskins (German)

Bradley Skaggs (UMD, CMSC) [First position: US Government]
 Doctoral Students
 Chair or Co-chair

Pedro Rodriguez (CSCI): Distributed Machine Learning

Shudong Hao (CSCI): Interactive Multilingual Topic Modeling

Fenfei Guo (CSCI): Interactive Embedding Learning

Forough Poursabzi-Sangdeh (CSCI): Active Labeling with Topic Models

Alvin Grissom II (CSCI): Reinforcement Learning for Feature-wise Language Tasks

Kim Glasgow³ (UMD: iSchool): Social Action in Social Media

Thang Nguyen (UMD: CMSC): Evaluation of Topic Models

He He (UMD: CMSC): Algorithms that Trade-Off Speed and Accuracy

Mohit Iyyer (UMD: CMSC): Deep Learning for Question Answering

Viet-An Nguyen (UMD: CMSC, 2015): Detecting Influence in Text [First position: Facebook Data Science]

Ke Zhai (UMD: CMSC, 2014): Large Scale Bayesian Inference [First position: Yahoo! Research]

Yuening Hu (UMD: CMSC, 2014): Interactive Topic Modeling [First position: Yahoo! Research]
 On committee

Ben London (UMD: CMSC)

Irene Eleta (UMD: INFO, 2014)

Kevin Dayaratna (UMD: STAT, 2014)

Jiarong Jiang (UMD: CMSC, 2014)

Jagadeesh Jagarlamudi (UMD: CMSC, 2013) [First position: IBM Research]

³now advised by Yla Tausczik

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

Interactive Topic Modeling and The US Tea Party: New Frontiers of Automated Content Analysis in the Social Sciences, 2015 (Zurich, CH)

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)

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)

Incorporating Human Knowledge and Insights into Probabilistic Models of Text: Brigham Young University Department of Computer Science Colloquium, 2012 (Provo, UT)

Besting the Quiz Master: Crowdsourcing Incremental Classification Games: Rutgers University, 2012 (New Brunswick, NJ); Brigham Young University, 2012 (Provo, UT)

Making Topic Models More Human(e): Colorado University, 2012 (Boulder, CO); University of Maryland Institute for Technology and Humanities, 2012 (College Park, MD)

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)

Inference and Validation of Probabilistic Models of Language in the Cloud: UMD Winter Storm, 2011 (College Park, MD)

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)

Putting Words Together: Crowdsourcing Data Collection for Lexical Similarity and Topical Coherence: University of Massachusetts, 2010 (Amherst, Massachusetts)

Topic Models, Mechanical Turk, and WordNet: Harvard University, 2010 (Cambridge, MA)

Topic Models and Hierarchical Models: Johns Hopkins Summer Workshop for SMT, 2010 (Baltimore, MD)

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 IIS Review Panel (2015)

NSF External Review (2014)

NSF IIS 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 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*

Paid consultancies

Consultant: Norwegian Research Council, 2014

Consultant: Barquin International, 2013-2014

Consultant: New Brand Analytics, 2012-2014

Campus Service

Departmental ServiceComputer Science, Colorado

Member: Graduate Committee (2014-)

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

Departmental ServiceInstitute 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)
College Service Engineering and Applied Science, Colorado

Yellowshirt Interviewer, 2015

University Service UMD

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

Press Coverage

<https://languagescience.umd.edu/news/question-which-language-scientists-designed-first-competitive-quiz-bowl-playing-nlp-system> Question: Which language scientists designed first competitive quiz bowl playing NLP system? (UMD Language Science)

http://www.diamondbackonline.com/news/study-changes-in-language-tone-could-reveal-impending-betrayal/article_a4da0a7c-50f4-11e5-80d6-030e2fec745c.html *STUDY : Changes in language*

http://www.huffingtonpost.com/entry/polite-people-more-likely-to-betray_55e06f5ae4b0b7a96338a186 *What You*

<http://www.psmag.com/health-and-behavior/diplomacy-detecting-a-coming-betrayal> Detecting a Coming Betrayal (Pacific Standard)

<https://www.sciencenews.org/blog/culture-beaker/few-key-signs-betray-betrayal?mode=blogcontext=159> A few key signs betray betrayal (Science News)

<http://www.news.cornell.edu/stories/2015/08/language-analysis-predicts-coming-betrayal> Language analysis predicts a coming betrayal (Cornell Chronicle)

<http://phys.org/news/2015-08-language-analysis-betrayal.html> Language analysis predicts a coming betrayal (Phys.org)

<https://cs.byu.edu/article/prof-ringger-and-natural-language-processing> Interview with collaborator Eric Ringger (BYU Radio)

<http://www.colorado.edu/cs/2015/07/23/professorbowl-robot-goes-head-head-humans> Writeup of our quiz bowl playing robot (CU CS Newsletter)