

# Dhanya Sridhar

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## CONTACT INFORMATION

Mudd Building  
Data Science Institute  
Columbia University  
New York, NY 10025

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<https://dsridhar91.github.io>

## EDUCATION

### Ph.D. Computer Science

University of California Santa Cruz (September 2013 – August 31, 2018)

- *Thesis topic*: Learning Structured and Causal Probabilistic Models for Computational Science
- *Thesis Advisor*: Prof. Lise Getoor

### B.S. Computer Science, B.A. Mathematics

Binghamton University (August 2009 – May 2013)

- *Distinction*: Graduated with High University Honors and Department Honors

## EMPLOYMENT

**Postdoctoral Researcher**, *Data Science Institute*, Columbia University. **Oct. 2018 –**  
Working with David Blei on causal inference methods for text and social networks.

**Data Scientist Intern**, *Microsoft Corporation – Bellevue*. **June – Sept. 2016**  
Worked with Bing Ads group on improving quality of text ads.

**Data Scientist Intern**, *Microsoft Corporation – Bellevue*. **June – Sept. 2015**  
Worked with Bing Ads group on native ads.

**Graduate Student Researcher**, *Computer Science Dept.*, UC Santa Cruz. **2013–2018**  
Worked with Lise Getoor on applying relational learning methods to text and biological data.

## JOURNAL ARTICLES

**Dhanya Sridhar**, Shobeir Fakhraei, Lise Getoor. “A Probabilistic Approach for Collective Similarity-based Drug-Drug Interaction Prediction.” *Bioinformatics*. doi:10.1093/bioinformatics/btw342. 2016.

## REFEREED CONFERENCES

Jason Hartford, Victor Veitch, **Dhanya Sridhar**, Kevin Leyton-Brown. “Valid Causal Inference with (Some) Invalid Instruments.” In International Conference on Machine Learning (ICML). 2021.

Reid Pryzant, Dallas Card, Dan Jurafsky, Victor Veitch, **Dhanya Sridhar**. “Causal Effects of Linguistic Properties.” In North American Chapter of the Association for Computational Linguistics (NAACL-HLT). 2021.

Aaron Schein, Keyon Vafa, **Dhanya Sridhar**, Victor Veitch, James Moffet, Jeffrey Quinn, Naseem Makiya, David Blei, Donald Green. “A Digital Field Experiment Reveals Large Effects of Friend-to-Friend Texting on Voter Turnout.” In The Web Conference (WWW). 2021.

Victor Veitch\*, **Dhanya Sridhar**\*<sup>1</sup>, David Blei. “Adapting Text Embeddings for Causal Inference.” In Uncertainty in Artificial Intelligence (UAI). 2020.

**Dhanya Sridhar**, Lise Getoor. “Estimating Causal Effects of Tone in Online Debates.” In International Joint Conference of Artificial Intelligence (IJCAI). 2019.

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<sup>1</sup>Equal contribution

**Dhanya Sridhar**, Jay Pujara, Lise Getoor. “Scalable Probabilistic Causal Structure Discovery.” In International Joint Conference of Artificial Intelligence (IJCAI). 2018.

Yue Zhang, Arti Ramesh, Jennifer Golbeck, **Dhanya Sridhar**, Lise Getoor. “A Structured Approach to Understanding Recovery and Relapse in AA.” In The Web Conference (WWW). 2018.

**Dhanya Sridhar**, James Foulds, Bert Huang, Lise Getoor, Marilyn Walker. “Joint Models of Disagreement and Stance.” In Association for Computational Linguistics (ACL). 2015.

IN  
PROGRESS

**Dhanya Sridhar**, Hal Daume III, David Blei. “Heterogeneous Supervised Topic Models for Text Prediction.” Under review at TACL.

**Dhanya Sridhar**, Caterina De Bacco, David Blei. “Estimating Social Influence from Observational Data.” Under review at KDD.

Yixin Wang, **Dhanya Sridhar**, David Blei. “Adjusting ML Decisions for Equal Opportunity and Counterfactual Fairness.” arXiv preprint arXiv:1905.10870.

REFEREED  
WORKSHOPS AND  
SYMPOSIA

Aaron Schein, Keyon Vafa, **Dhanya Sridhar**, Victor Veitch, James Moffet, Jeffrey Quinn, Naseem Makiya, David Blei, Donald Green. “An Experimental Study of Friend-to-Friend GOTV Text Messages in the 2018 US Midterm Elections.” International Conference on Computational Social Science (IC2S2). 2020. [Award for Best Oral Presentation.]

**Dhanya Sridhar\***, Victor Veitch\*, David Blei. “Using Text Embeddings for Causal Inference.” New Directions in Analyzing Text as Data (TADA). 2019. [Selected for oral presentation.]

Yixin Wang, **Dhanya Sridhar**, David Blei. “Equal Opportunity and Affirmative Action with Counterfactual Predictions.” NeurIPS Workshop on Causal ML. 2019. [Selected for oral presentation.]

**Dhanya Sridhar**, Varun Embar, Golnoosh Farnadi and Lise Getoor. “Scalable Structure Learning for Probabilistic Soft Logic.” In ICML Workshop on Statistical Relational AI. 2018.

**Dhanya Sridhar**, Aaron Springer, Victoria Hollis, Steve Whittaker, Lise Getoor. “Estimating Causal Effects of Exercise from Mood Logging Data.” In ICML Workshop on CausalML. 2018.

**Dhanya Sridhar**, Jay Pujara, Lise Getoor. “Using Noisy Extractions to Discover Causal Knowledge.” NIPS Workshop on Automated Knowledge Base Construction. 2017.

**Dhanya Sridhar**, Lise Getoor. “Joint Probabilistic Inference of Causal Structure.” *ACM SIGKDD Workshop on Causal Discovery*. 2016. [Selected for oral presentation.]

**Dhanya Sridhar**, James Foulds, Bert Huang, Lise Getoor, Marilyn Walker. “Collective Stance and Disagreement Classification in Online Debate Forums.” *Baylearn Machine Learning Symposium*. 2014. [Selected for oral presentation.]

**Dhanya Sridhar**, Lise Getoor, Marilyn Walker. “Collective Stance Classification of Posts in Online Debate Forums.” *ACL Workshop on Latent Attributes in Social Media*. 2014.

INVITED TALKS

**Beyond Prediction: NLP for Causal Inference**

ETH Zurich NLP Seminar

April, 2020

ETH Workshop and Lecture Series in Law and Economics

April, 2020

Simon Fraser University

April, 2020

Google Research – Seattle

March, 2020

Purdue University	March, 2020
University of Montreal	March, 2020
University of Southern California	March, 2020
Northeastern University	March, 2020
University of British Columbia	March, 2020
University of Michigan,	February, 2020
Johns Hopkins University,	February, 2020
Microsoft Research – New England	February, 2020
Microsoft Research – Cambridge	January, 2020
Google Research – Cambridge	December, 2020

**Causal Effects in Social Networks and Text**

Yahoo Research – NYC	October, 2019
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**Structured and Causal Probabilistic Models**

Stanford University	March, 2018
Columbia University	February, 2018
Microsoft Research – NYC	February, 2018

**Probabilistic Soft Logic**

Santa Cruz Machine Learning Cooperative	May, 2017
UC Santa Cruz Games and Playable Media Group	October, 2016

**Collective Models of Stance and Disagreement in Online Debates**

Classification Society Conference	June, 2017
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HONORS

EECS Rising Star, UC Berkeley, 2020.  
 President’s Dissertation-Year Fellowship, UC Santa Cruz, 2017.  
 Outstanding Teaching Assistant Award, UC Santa Cruz, 2016.  
 Advancement to Candidacy with Honors, UC Santa Cruz, 2016.  
 Graduate Student Fellowship Honorable Mention, NSF, 2015.  
 Regents’ Fellowship, UC Santa Cruz, 2013.  
 Academic Achievement Honor for Computer Science, Binghamton University, 2013.  
 Research in Science and Engineering Scholarship, German Academic Exchange Service, 2012.  
 Thomas J. Watson Memorial Scholarship, IBM Corporation, 2009.

TEACHING  
EXPERIENCE

<b>Recitation Instructor</b> , <i>Columbia University</i>	<b>2019</b>
STCS 6701: Foundations of Graphical Models	

<b>Teaching Assistant</b> , <i>University of California Santa Cruz</i>	<b>2015, 2016</b>
CMPS 140: Introduction to Artificial Intelligence	

PROFESSIONAL  
ACTIVITIES

**Co-organizer of First Workshop on Causal Inference & NLP.** *EMNLP Conference.* 2021.  
**Co-organizer of Data Science Institute Speaker Series.** *Columbia University.* 2019.  
**Volunteer for Data Science Santa Cruz.** *UC Santa Cruz.* 2014–2017.

CONFERENCE  
REFEREEING

Neural Information Processing Systems (**NeurIPS**), 2017, 2019 & 2020.  
 Artificial Intelligence and Statistics (**AISTATS**), 2019 & 2018.  
 International Conference for Machine Learning (**ICML**), 2018.  
 International Conference on the Web and Social Media (**ICSWM**), 2018.  
 The Web Conference (**WWW**), 2017.  
 International Joint Conference on Artificial Intelligence (**IJCAI**), 2016.