Dhanya Sridhar

CONTACT
INFORMATION

Mudd Building
Data Science Institute
Columbia University
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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

Victor Veitch*, **Dhanya Sridhar**[*][1], David Blei. "Adapting Text Embeddings for Causal Inference." Uncertainty in Artificial Intelligence (UAI). 2020.

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

Dhanya Sridhar, Jay Pujara, Lise Getoor. "Scalable Probabilistic Causal Structure Discovery." 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." The Web Conference (WWW). 2018.

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

UNDER
REVIEW

Dhanya Sridhar, Caterina De Bacco, David Blei. "Estimating Social Influence from Observational Data." Under submission at WWW.

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[1]Equal contribution

Reid Pryzant, Dallas Card, Dan Jurafsky, Victor Veitch, **Dhanya Sridhar**. "Causal Effects of Linguistic Properties." To be submitted at NAACL. arXiv preprint arXiv:2010.12919.

Jason Hartford, Victor Veitch, **Dhanya Sridhar**, Kevin Leyton-Brown. "Valid Causal Inference with (Some) Invalid Instruments." Under submission at AISTATS. arXiv preprint arXiv:2006.11386.

Yixin Wang, **Dhanya Sridhar**, David Blei. "Algorithmic Approaches to Equal Opportunity and Affirmative Action via Counterfactual Predictions." Under submission at Science Advances. arXiv preprint arXiv:1905.10870.

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." Under submission at WWW. SSRN 3696179

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*, Victor Veitch*, David Blei. "Using Text Embeddings for Causal Inference." NeurIPS Workshop on Causal ML. 2019.

Dhanya Sridhar, Varun Embar, Golnoosh Farnadi and Lise Getoor. "Scalable Structure Learning for Probabilistic Soft Logic." In IJCAI/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 IJCAI/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, Jay Pujara, Lise Getoor. "A Scalable Probabilistic Approach for Causal Structure Discovery." Women in Machine Learning Workshop. 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	**Causal Effects in Social Networks and Text.** *Yahoo Research – NYC*. 2019.

Structured Probabilistic Models for Online Dialogue and Text. *Stanford University.* 2018.

Learning Structured and Causal Probabilistic Models for Computational Science. *Columbia University.* 2018.

Structured Probabilistic Models for Computational Social Science. *Microsoft Research – NYC.* 2018.

Probabilistic Soft Logic: A Scalable Open-Source Framework for Richly Structured Models. *Santa Cruz Machine Learning Cooperative.* 2017.

Collective Models of Stance and Disagreement in Online Debates. *Classification Society Conference.* 2017.

Probabilistic Soft Logic. *UC Santa Cruz Games and Playable Media Group.* 2016.

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

Recitation Instructor, *Columbia University* **2019**
STCS 6701: Foundations of Graphical Models
Held weekly recitation lectures on applied Bayesian statistics and probabilistic models.

Teaching Assistant, *University of California Santa Cruz* **2015, 2016**
CMPS 140: Introduction to Artificial Intelligence
Taught lectures on Search, Markov Decision Processes, Inference in Bayesian Networks and Decision Trees. Led midterm and final review sessions. Improved and maintained auto-grader infrastructure for students' assignments and final project.

PROFESSIONAL
ACTIVITIES

Co-organizer of First Workshop on Causal Inference & NLP. *EMNLP Conference.* 2020.
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.
ACM Knowledge Discovery and Data Mining Conference (**KDD**), 2016.