Sandeep B. Soni

CONTACT 1000 Northside Dr NW Unit 1553 678-702-3780

Information Atlanta, GA 30318 sandeepsoni@gatech.edu

Research Computational Social Science, Applied Machine Learning, Digital Humanities,

Interests Social Networks.

EDUCATION Georgia Institute of Technology, Atlanta, GA

Ph.D., Computer Science, Expected: Summer 2021

Advisor: Jacob Eisenstein

M.S., Computer Science (Machine Learning), May 2014

Pune Institute of Computer Technology, Pune, India

B.E., Computer Engineering, June 2010

INTERNSHIPS Research Intern

Information Sciences Institute, USC

Mentor: Kristina Lerman May 2018 - Aug 2018

Max Plank Institute for Software Systems, Germany

Mentor: Manuel Gomez-Rodriguez May 2017 - Aug 2017

FUSE Labs, Microsoft Research

Mentor: Justin Cranshaw May 2016 - Aug 2016

Software Engineering Intern

Yahoo!.

Mentors: Donald Swanson and Pradhan Pattnayak May 2013 - Aug 2013

WORK Graduate Teaching Assistant

EXPERIENCE School of Interactive Computing,

Georgia Institute of Technology

Courses:

Natural Language Processing

Aug 2020 - Dec 2020
Social Computing
Aug 2019 - Dec 2019
Natural Language Processing

Aug 2015 - Dec 2015

Graduate Research Assistant

School of Interactive Computing, Georgia Institute of Technology

Supervisor: Jacob Eisenstein Jan 2016 - Jul 2020 Supervisors: Jacob Eisenstein and Eric Gilbert Aug 2013 - May 2014

Software Development Engineer

Yahoo!, Jun 2014 - Jun 2015

Research Engineer

Oneirix Labs, Pune, India

Aug 2010 - Jul 2012

WORKING PAPERS

- 1. Soni, S., and Eisenstein, J. "Nonparametric Semantic Change Detection using Contextualized Embeddings"
- 2. Ziems, C., He, B., **Soni, S.**, and Kumar, S. (2020) "Racism is a Virus: Anti-Asian Hate and Counterhate in Social Media during the COVID-19 Crisis" arXiv:2005.12423 (under review)
- 3. Beel, J., Xiang, T., Soni, S., and Yang, D. (2020) "Linguistic Characterization of Contentious Topics Online: Case Studies on Controversy in Abortion, Climate Change, and Gun Control" (under review)

Journal Papers

- 1. Soni, S., Klein, L., and Eisenstein, J. (2021) "Abolitionist Networks: Modeling Language Change in Nineteenth-Century Activist Newspapers" In the *Journal of Cultural Analytics*
- 2. Soni, S., Lerman, K., and Eisenstein, J. (2020) "Follow the Leader: Documents on the Leading Edge of Semantic Change Get More Citations" In the Journal of the Association for Information Science and Technology

Conference Papers

- Cranshaw, J., Elwany, E., Newman, T., Soni, S., Kocielnik, R., Yu, B., Teevan, J. and Hernandez, A.M. (2017) "Calendar.help: Designing a Workflow-Based Scheduling Agent with Humans in the Loop". In Proceedings of the CHI Conference on Human Factors in Computing Systems, Denver. (Acceptance rate ≤ 25 %)
- 2. Goel, R., Soni, S., Goyal, N., Paparrizos, J., Diaz, F., Wallach, H. and Eisenstein, J. (2016) "The Social Dynamics of Language Change in Online Networks" In *International Conference on Social Informatics*, Seattle. (Acceptance rate ≤ 28%)
- 3. Soni, S., Mitra, T., Gilbert, E. and Eisenstein, J. (2014). "Modeling Factuality Judgments in Social Media Text" In *Proceedings of Association of Computational Linguistics*, Baltimore (Acceptance rate ≤ 30 %)

Workshop Papers

- 1. Soni, S., Klein, L., Eisenstein, J. (2020) "A Lexical Semantic Leadership Network of Nineteenth Century Abolitionist Newspapers" in *Proceedings* of the Fourth Workshop on NLP and CSS at EMNLP, 2020
- 2. Soni, S., Ramirez, S., Eisenstein, J. (2019) "Detecting Social Influence in Event Cascades using Discriminative Rankers" in *Proceedings of the SIGKDD Workshop on Causal Discovery*, 2019

- 3. Soni, S., Klein, L., Eisenstein, J. (2019) "Correcting Whitespace Errors in Digitized Historical Texts" in *Proceedings of the Joint SIGHUM Workshop on Computational Linguistics for Cultural Heritage, Social Sciences, Humanities and Literature.* 2019, Minneapolis USA.
- 4. Tavabi, N., Bartley, N., Abeliuk, A., **Soni, S.**, Ferrara, E., Lerman, K. in Companion Proceedings of The 2019 World Wide Web Conference
- 5. Soni, S., Ling Ramirez, S., Eisenstein, J. (2018) "Follow the money: Linking legislative co-sponsorship to a network of campaign donors" in 11th Annual Political Networks Conference and Workshops, Washington DC USA.
- 6. Hohman, F., **Soni, S.**, Stewart, I., Stasko, J. (2017) "A Viz of Ice and Fire: An Interactive Visualization for Entertainment Videos" in 2nd Workshop on Visualization for the Digital Humanities, Phoenix USA.

SERVICE

- Student Volunteer: ACL' 14, NAACL' 19, KDD' 19, EMNLP' 20
- Reviewer: ICWSM' 17, ICWSM' 18, EMNLP' 17, COLING' 17, ACL' 18, WWW' 19, EMNLP' 20, NAACL' 21

AWARDS

- Travel awards: ACL' 14, Polnets' 18, KDD' 19.
- Google Summer of Code: 2010 and 2012.
- Winner of Best undergrad project, Bits Goa, India
- 2nd Runner up, Best undergrad project, IIT Kanpur, India.

PRESENTATIONS

- Follow the Leader: Documents on the Leading Edge of Semantic Change Get More Citations, at the 3rd Behavioral Insights from Text Conference, Philadelphia, University of Pennsylvania

 Jan 2020
- Measuring and Modeling Language Change, at the 5th International Conference on Computational Social Science, Amsterdam, Netherlands July 2019
- Multivariate Hawkes Process to Model Spread of Lexical Innovations in a Network, at the 3rd Workshop on Computational Social Science, Atlanta, GA

 Dec 2015
- Informational Determinants of Shaming Intensity: A Text Analytic Study of Human Rights Reporting, at the 1st Workshop on Computational Social Science, Atlanta, GA
 Nov 2013