

ACADEMIC APPOINTMENTS AND AFFILIATIONS

Postdoctoral Research Associate

Sep 2023 - Aug 2025

Network Science Institute, College of Social Sciences and Humanities

Northeastern University

Advisor: Prof. David Lazer

EDUCATION

Ph.D., Computer Science

2018 - 2023

University of Maryland, College Park

Dissertation: Analyzing communicative choices to understand their motivations, context-based variation, and social consequences

Advisor: Philip Resnik

Masters, Computer Science

2018 - 2020

University of Maryland, College Park

B.Tech. Computer Science & Engineering (with Honors in AI)

2014 - 2018

Indian Institute of Technology (BHU) Varanasi, India

Advisor: Anil Kumar Singh

RESEARCH AND PROFESSIONAL EXPERIENCE

Visiting Research Scholar: Lazer Lab, Northeastern University

June 2021 - Aug 2023

Project: Mainstream News Sharing in Online Misinformation Networks

Supervisor: Prof. David Lazer

Summer Research Fellow: National Institute of Science & Technology (NIST)

June-Sep 2022

Project: An Interactive Document Annotation Tool using Technical Language Processing for Measurement Science, working with the NIST Community Resilience Program

Supervisor: Prof. Jordan Boyd-Graber & Dr. Juan Fung

Research Intern: NLP Group, Microsoft Research, Redmond

June 2020 - Aug 2020

Project: Money Talks? Associations between Donor Activity and Congressional Floor Speech

Supervisor: Dr. Nebojsa Jojic

Research Intern: NLP Group, Microsoft Research, Redmond

June 2019 - Aug 2019

Project: Different Language Generation Mechanisms for Chatbots - What are the Differences?

Supervisor: Dr. Nebojsa Jojic

Research Intern: Articulab, Carnegie Mellon University

May 2017 - July 2017

Project: Conversational Strategy Classification for a Virtual Assistant and Detecting Indirectness

Supervisors: Prof. Yoichi Matsuyama and Prof. Justine Cassell

Research Intern: CFILT Lab, Indian Institute of Technology Bombay

May 2016 - July 2016

Project: Sarcasm Target Identification

Supervisors: Dr. Aditya Joshi and Prof. Pushpak Bhattacharyya

Software Engineering Intern: Ephesoft, India

Dec 2016 - Jan 2017

Project: Comparing Content Analysis Approaches (with the Data Science team)

PEER-REVIEWED PUBLICATIONS

[1] **Pranav Goel**, Nikolay Malkin*, SoRelle W. Gaynor*, Kristina Miler, Nebojsa Jojic, Philip Resnik. 2022. “Donor Activity is Associated with US Legislators Attention to Political Issues.” *PLOS ONE*. 2023.

[2] **Pranav Goel**, David Lazer, Philip Resnik. “Mainstream News Articles Co-Shared with Fake News Buttress Misinformation Narratives.” *International AAAI Conference on Web and Social Media (ICWSM)* 2023. (Non-archival track). *Outstanding Study Design Award*.

[3] Alexander Hoyle, **Pranav Goel**, Rupak Sarkar, and Philip Resnik. “Are Neural Topic Models Broken?” *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP)* (Findings). 2022.

[4] **Pranav Goel***, Alexander Hoyle*, Denis Peskov*, Andrew Hian-Cheong*, Jordan Boyd-Graber, and Philip Resnik. “Is Automated Topic Model Evaluation Broken?: The Incoherence of Coherence.” *Advances in Neural Information Processing Systems* (2021). *Spotlight Presentation at NeurIPS 2021*

[5] Nikolay Malkin, Sameera Lanka, **Pranav Goel**, and Nebojsa Jojic. “Studying word order through iterative shuffling.” *Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. 2021.

[6] Nikolay Malkin, Sameera Lanka, **Pranav Goel**, Sudha Rao, and Nebojsa Jojic. “GPT Perdetry Test: Generating new meanings for new words” In *Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL)*. 2021.

[7] **Pranav Goel***, Alexander Hoyle*, and Philip Resnik. “Improving Neural Topic Models Using Knowledge Distillation.” *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. 2020. Presentation

[8] **Pranav Goel**, Shi Feng, and Jordan Boyd-Graber. “How Pre-trained Word Representations Capture Commonsense Physical Comparisons”. *Proceedings of the 1st Workshop on Commonsense Inference in Natural Language Processing at EMNLP 2019*. Presentation

[9] **Pranav Goel***, Devang Kulshreshtha*, and Anil Kumar Singh. “How emotional are you? Neural Architectures for Emotion Intensity Prediction in Microblogs”. *COLING 2018*. Presentation

[10] **Pranav Goel**, Yoichi Matsuyama, Michael Madaio, and Justine Cassell. “I think it might help if we multiply, and not add”: Detecting Indirectness in Conversation. *Proceedings of the International Workshop Series on Spoken Dialogue Systems Technology (IWSDS)* 2018. Presentation (Also published as a Chapter in the Book: *9th International Workshop on Spoken Dialogue System Technology* pp 27-40, *Lecture Notes in Electrical Engineering*, vol 579. Springer, Singapore.)

[11] Aditya Joshi, **Pranav Goel**, Pushpak Bhattacharyya, and Mark J. Carman. “Sarcasm Target Identification: Dataset and An Introductory Approach.” *LREC 2018-11th edition of the Language Resources and Evaluation Conference* 2018. Poster

[12] **Pranav Goel***, Devang Kulshreshtha*, Prayas Jain and K.K. Shukla. “Prayas at emoint 2017: An ensemble of deep neural architectures for emotion intensity prediction in tweets.” *Proceedings of the 8th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis at EMNLP 2017*. (Shared Task Winner!) Presentation

[13] **Pranav Goel** and Anil Kumar Singh. “IIT (BHU): System Description for LSDSem’17 Shared Task.” *Proceedings of the 2nd Workshop on Linking Models of Lexical, Sentential and Discourse-level Semantics at EACL 2017*. Poster

* joint first author

Under Review:

- SoRelle W. Gaynor, Kristina Miler, **Pranav Goel**, Alexander M. Hoyle, and Philip Resnik. “Express Yourself (Ideologically): Legislators’ Ideal Points Across Audiences.” *Journal of Politics*.
- McCabe, Stefan, Jon Green, **Pranav Goel**, and David Lazer. “Inequalities in Online Representation: Who follows their own Member of Congress on Twitter?”. *Journal of Quantitative Description (JQD)*.

SERVICE TO PROFESSION

- Reviewer at NeurIPS 2023.
- Program Committee at ACL 2023.
- Reviewer Committee for the Computational Social Science and Cultural Analytics track at EMNLP 2022.
- Reviewer for the ACL Rolling Review (ARR).
- Reviewer for EMNLP 2021, Computational Social Science and Cultural Analytics track; Information Retrieval and Text Mining track.
- Reviewer for CLPsych 2021 workshop at NAACL 2021.
- Reviewer for ACL 2021, Computational Social Science and Cultural Analytics track.

TEACHING

Teaching Assistant <i>Discrete Mathematics at Dept of Computer Science, University of Maryland</i>	Spring 2020
Teaching Assistant <i>Discrete Mathematics at Dept of Computer Science, University of Maryland</i>	Fall 2019
Teaching Assistant <i>Introduction to Natural Language Processing at Dept of Computer Science, University of Maryland</i>	Spring 2019
Teaching Assistant <i>Discrete Mathematics at Dept of Computer Science, University of Maryland</i>	Fall 2018
Teaching Assistant <i>Introduction to Artificial Intelligence at Dept of Computer Science & Engineering, Indian Institute of Technology (BHU) Varanasi</i>	Spring 2018
Teaching Assistant <i>Introduction to Programming in C at Dept of Computer Science & Engineering, Indian Institute of Technology (BHU) Varanasi</i>	Fall 2016

AWARDS AND SCHOLARSHIPS

- Outstanding Study Design Award at ICWSM 2023
- Dean's Fellowship, University of Maryland, 2019-2020.
- Dean's Fellowship, University of Maryland, 2018-2019.
- Received about USD 700 from IIT (BHU) Varanasi as Travel Grant to attend EACL 2017.
- Selected for the DAAD-WISE scholarship/internship program for 2017.