

PERSONAL DETAILS

E-Mail pgoel1@umd.edu

EDUCATION

Ph.D. Computer Science 2018 -
University of Maryland, College Park
Advisor: Philip Resnik

Masters, Computer Science 2018 - 2020
University of Maryland, College Park
GPA: 4.0/4.0

B.Tech. Computer Science and Engineering (with Honors in AI) 2014 - 2018
Indian Institute of Technology (BHU) Varanasi, India
GPA: 9.34/10.0
Advisor: Anil Kumar Singh

RESEARCH AND PROFESSIONAL EXPERIENCE

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

Visiting Research Scholar: Lazer Lab, Northeastern University June 2021 - Dec 2022
Project: Mainstream News Sharing in Online Misinformation Networks

Research Intern: NLP Group, Microsoft Research, Redmond June 2020 - Aug 2020
Project: Money Talks? The Connections between the Rhetoric on the Congressional Floor and Donations by Political Action Committees and Corporations
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 (SARA) and Detecting Indirectness in Conversation [5]
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 [6]
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] 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.

- [2] **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*
- [3] 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.
- [4] 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.
- [5] **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
- [6] **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
- [7] **Pranav Goel***, Devang Kulshreshtha*, and Anil Kumar Singh. “How emotional are you? Neural Architectures for Emotion Intensity Prediction in Microblogs”. COLING 2018. Presentation
- [8] **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.)
- [9] 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
- [10] **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
- [11] **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

TECHNICAL SKILLS

- Languages: Python, C, C++, R
- Technologies: PyTorch, Keras, Scikit-learn, AllenNLP, NLTK, Git, BASH, L^AT_EX, Flask

SERVICE TO PROFESSION

- 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

- 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.