SACHITA NISHAL

nishalsach nishalsach.github.io nishal@u.northwestern.edu

RESEARCH INTERESTS

I build and study interactive, explainable AI-infused systems for news discovery and recommendation. Most recently, I built and tested such a system to help journalists discover and simplify complex scientific research for news reporting, with the goal of understanding their requirements for interface personalization and algorithmic transparency in this context. I am excited to pursue research internships in Machine Learning, Natural Language Processing, and Human-Computer Interaction!

EDUCATION

Northwestern University, Evanston, IL Sep '20 - Present
Ph.D., Computer Science and Communication Studies (Joint Program) *GPA : 3.82 / 4*
Advisor: Dr. Nick Diakopoulos

Birla Institute of Technology and Science (BITS) Pilani, India Aug '16 - June '20
Bachelor of Engineering (Honours), Computer Science *GPA : 8.19 / 10*
Thesis Advisor: Dr. Luís Amaral

TECHNICAL SKILLS

Research Methods
Machine Learning, Natural Language Processing, Large Language Models, Deep Learning, Data Visualization, Causal Inference, Survey Design, Qualitative Analysis, Interview Studies
Programming Languages
Python, R, SQL, HTML/CSS, JavaScript, Java
Data Analysis and Machine Learning
Python (NumPy, Pandas, SciPy, statsmodels, scikit-learn, pyTorch, Keras, spaCy, HuggingFace Transformers, NLTK), R (dplyr, igraph), Git
Information Visualization
Python (Matplotlib, seaborn, plotnine), R (ggplot2), Tableau, Gephi

RESEARCH EXPERIENCE

Computational Journalism Lab, Northwestern University Sep '20 - Present
Graduate Student Researcher (Advisor: Dr. Nick Diakopoulos)

Lab on Innovation, Networks, Knowledge, Northwestern University March '21 - June '21
Graduate Student Researcher (Advisor: Dr. Agnes Horvat)

Microsoft Research, India May '20 - Aug '20
Research Intern (Advisor: Dr. Joyojeet Pal))

Amaral Lab, Northwestern University July '19 - Dec '19
Research Intern (Advisor: Dr. Luís Amaral)

SELECTED ARCHIVAL PUBLICATIONS

S. Nishal and N. Diakopoulos. Leveraging Computational Information Subsidies to Support Science News Discovery. *Under Review.*

S. Nishal and N. Diakopoulos. From Crowd Ratings to Predictive Models of Newsworthiness to Support Science Journalism. *In Proceedings of the ACM on Human-Computer Interaction* **(CSCW 2022)**

R. Mothilal, D. Mishra, **S. Nishal**, F. Lalani, and J. Pal. Voting with the Stars: Analyzing Partisan Engagement between Celebrities and Politicians in India. *In Proceedings of the ACM on Human-Computer Interaction* **(CSCW 2022)**

A. Arya, S. De, D. Mishra, G. Shekhawat, A. Sharma, A. Panda, F. Lalani, P. Singh, R. Mothilal, R. Grover, **S. Nishal**, S. Dash, S. Rashid, S. Akbar, J. Pal. DISMISS: Database of Indian Social Media Influencers (Snowballed Sequentially) on Twitter. *In Proceedings of the International AAAI Conference on Web and Social Media* **(ICWSM 2022)**

S.Z. Akbar, A. Sharma, D. Mishra, R.K. Mothilal, H. Negi, **S. Nishal**, A. Panda, and J. Pal. Devotees on an Astroturf: Media, Politics, and Outrage in the Suicide of a Popular FilmStar. *In ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies* **(COMPASS 2022)**

SELECTED NON-ARCHIVAL TALKS AND POSTERS

S. Nishal. Designing Interactive, Configurable and Transparent Algorithmic Systems to Support Journalistic Decision-Making. Doctoral Consortium at the *ACM Conference on Fairness, Accountability, and Transparency* **(FAccT 2023, forthcoming)**

S. Nishal and N. Diakopoulos. Envisioning the Applications and Implications of Generative AI in the Newsroom. In Workshop on Generative AI and HCI at the *ACM Conference on Human Factors in Computing Systems* **(CHI 2023)**

S. Nishal and M. Cai. Motivations, Goals, and Pathways for AI Literacy for Journalism. In Workshop on AI Literacy at the *ACM Conference on Human Factors in Computing Systems* **(CHI 2023)**

S. Nishal. Imagining the Future(s) of AI-Driven Storytelling. Panel session at the *Big Local News Conference on Story Discovery at Scale* **(2023)**

S. Nishal and L. A. N. Amaral. Measuring the Impact of Trope-based Novelty on Cinematic Success. *International Conference on Computational Social Science* **(IC2S2 2022)**.

RELEVANT COURSEWORK

COMPSCI 348: Artificial Intelligence
COMPSCI 349: Machine Learning
COMPSCI 496: Interactive Information Visualization
POLISCI 490: Natural Language Processing
MTS 525: Human-Computer Interaction

HONORS AND AWARDS

Special Recognition for Outstanding Peer Reviews: CSCW 2023, DIS 2023
BITS Pilani's Summer Research Award (2018)

SERVICE

Reviewer for CSCW (2022, 2023), CHI (2023), DIS (2023), UIST (2023), NordiCHI (2022)
TSB Incoming PhD Student Mentorship Program (2021, 2022)
Editor and Student Mentor for The BITS R&D Blog (2018-2020)

Last Updated: May 7, 2023