

Anmol Panda

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EDUCATION

- **University of Michigan (Expected Graduation: May 2026)** Michigan, USA
Ph.D. - Information Science (GPA: 3.925) Aug 2020 - Present
Courses: Data Mining, Natural Language Processing, Categorical Data Analysis, Survey Methods, Multilevel Modelling, Public Opinion Seminar, American Political Development
- **Birla Institute of Technology and Science - Pilani** Goa, India
B.E. (Hons.) - Computer Science (GPA: 8.1) Aug 2012 - May 2016
Courses: Operating Systems, Data Structures, Design and Analysis Of Algorithms, Networking, Databases, Real Time Systems

PROJECTS

- **Generative AI + Data Curation:** In this project funded by an IMLS grant, we explore how generative AI tools can be leveraged to create metadata for datasets published on large archives. Furthermore, we leverage variable descriptions to produce knowledge graphs that can aid in improved curation and search of data archives. We test this framework using GPT models hosted on Azure and datasets published on the ICPSR data archive. We aim to illustrate how generative AI can help mitigate the high cost and time for manual metadata generation and greatly enhance relevance and utility of search results in very large public archives.
- **Social Media and Racial Attitudes:** For my dissertation, I am studying the effect of social media platforms on attitudes of Asian American communities towards racialized issues like policing, affirmative action, and immigration. Relying on prior work, I have built a conceptual model of factors that impact attitudes of Asian Americans on such policies, and the relationships between them. Based on this model, I have developed a unique survey instrument that captures the effects of key variables on the racial attitudes of Asian Americans - a hitherto understudied group. A grant proposal to fund this survey is currently under review at the Russell Sage foundation.
- **Framing in Coordinated Campaigns on Social Media:** Using a dataset of tweets published by the UMass Amherst, I am analyzing the different frames used in networked publics on Twitter. We coded tweets for narrative frames like episodic and thematic, and theme-based frames like criticism of media elites, allegations of anti-Hindu bias, or allegations of pro-minority bias. We are using RoBERTa models to classify the tweets in our corpus. This project is a collaboration with Ceren Budak, Matt Bui, Zainab Akbar, and Julia Mendelsohn.
- **Social Media Archive:** I have built the archive of tweets of over 70K US and 60K Indian politicians and influencers hosted by the Social Media Archive (SOMAR) at ICPSR at UM. Presently, I am studying **how social media followers of political parties respond to changes in party coalitions at the state level** using a combination of community detection with **NetworkX** and topic modeling using multi-lingual **TensorFlow** language models. In the past, I have analyzed election campaign strategies, topical preferences in hashtag usage on Twitter, and misinformation spread by politicians.

WORK EXPERIENCE

- **Consultant for The World Bank** May 2022 - Aug 2022
Washington, D.C., USA
As a consultant for the Water and Firms team at the World Bank, I have analysed the Bank's gold-standard Enterprise Surveys of over 173K firms from over 150 countries. I studied factors that explain water shortages experienced by firms, geographical variation globally in duration and incidents of water shortages, and how demographics of firms impact their experiences. I used data science methods in Python and statistical analysis in Stata. At the Bank, I worked with Esha Dilip Zaveri, Mohd. Asif Islam, and Patrick Behrer.
- **Research Fellow at Microsoft Research India** Jun 2018 - Aug 2020
Bangalore, India
Working with Joyojeet Pal, I led the team that compiled a published the dataset of 33K Indian and 9.6K US politicians on Twitter using a combination of machine learning and human annotations. I analysed election campaigns, extreme speech, leader centrality, issue preferences of political parties, and Twitter trending topics. I have published at myriad venues, including peer reviewed conferences and mainstream media platforms.
- **Senior Project Assistant at Indian Institute of Technology, Delhi** Aug 2016 - Jun 2018
New Delhi, India
Worked with Prof. Sorav Bansal to develop compiler optimizations in software packet processing pipelines by leveraging memory level parallelism giving up to 280 pc improvement in packet through put.
- **Mitacs Globalink Research Intern, UNBC** May 2015 - Aug 2015
Prince George, BC, Canada
Worked with Prof. Alex Aravind to test and validate four GPS-free localization algorithms to build robots that can automatically seed farms.

SKILLS

- **Research Expertise::** Data Science, Causal Inference, Machine Learning, Natural Language Processing, Statistical Analysis, Survey Research, Social Media Data, Computational Social Science, Opinion Analysis, Race, Information Communication Technology and Development (ICTD)
- **Languages/Frameworks:** Python, Stata, C, Java, JavaScript, SQL, Bash, Scikit-Learn, TensorFlow, Keras, Tomotopy, R
- **Teaching Experience:** Data Science, Data Mining, Deep Learning (at University of Michigan), Object Oriented Programming, Effective Public Speaking (at BITS Pilani)

MAJOR PUBLICATIONS

- **Paper: How digital paywalls shape news coverage (PNAS *Nexus*):** Paramveer Dhillon, [Anmol Panda](#), Libby Hemphill
- **Paper: Comparative sensitivity of social media data and their acceptable use in research (Scientific Data 9, no. 1 (2022): 1-14):** Hemphill, Libby, Angela Schöpke-Gonzalez, and [Anmol Panda](#)
- **Paper: DISMISS: Database of Indian Social Media Influencers on Twitter (ICWSM 2022):** Arshia Arya, Soham De, Dibyendu Mishra, Gazal Shekhawat, Ankur Sharma, [Anmol Panda](#), Faisal Lalani, Parantak Singh, Ramaravind Kommiya Mothilal, Rynaa Grover, Sachita Nishal, Saloni Dash, Shehla Shora, Syeda Zainab Akbar, Joyojeet Pal
- **Paper: Devotees on an Astroturf: Media, Politics, and Outrage in the Suicide of a Popular FilmStar (ACM COMPASS'22):** S. Akbar, A. Sharma, D. Mishra, R. Mothilal, H. Negi, S. Nishal, [Anmol Panda](#), J. Pal. In ACM SIGCAS Computing and Sustainable Societies Conference (COMPASS'22). Association for Computing Machinery
- **Paper: Misinformation as a Window into Prejudice: COVID-19 and the Information Environment in India (CSCW'20):** Syeda Zainab Akbar, [Anmol Panda](#), Divyanshu Kukreti, Azhagu Meena, and Joyojeet Pal. 2021. Proc. ACM Hum.-Comput. Interact. 4, CSCW3, Article 249 (December 2020), 28 pages. DOI:<https://doi.org/10.1145/3432948>
- **Paper: Topical Focus of Political Campaigns and its Impact: Findings from Politicians' Hashtag Use during the 2019 Indian Elections (CSCW'20):** [Anmol Panda](#), Ramaravind Kommiya Mothilal, Monojit Choudhury, Kalika Bali, and Joyojeet Pal. 2020. Proc. ACM Hum.-Comput. Interact. 4, CSCW1, Article 053 (May 2020), 14 pages. DOI:<https://doi.org/10.1145/3392860>
- **Paper: NivaDuck - A Scalable Pipeline to Build a Database of Political Twitter Handles for India and the United States (Social Media and Society'20):** [Anmol Panda](#), A'ndre Gonawela, Sreangsu Acharyya, Dibyendu Mishra, Mugdha Mohapatra, Ramgopal Chandrasekaran, and Joyojeet Pal. 2020. In International Conference on Social Media and Society (SMSociety'20). Association for Computing Machinery, New York, NY, USA, 200–209. DOI:<https://doi.org/10.1145/3400806.3400830>
- **Paper: Leader or Party? Personalization in Twitter Political Campaigns during the 2019 Indian Elections. (Social Media and Society'20):** Ashwin Rajadesingan, [Anmol Panda](#), and Joyojeet Pal. 2020. In International Conference on Social Media and Society (SMSociety'20). International Conference on Social Media and Society (SMSociety'20). Association for Computing Machinery, New York, NY, USA, 174–183. DOI:<https://doi.org/10.1145/3400806.3400827>
- **Paper: Affording Extremes: Incivility, Social Media and Democracy in the Indian Context. (ICTD'20):** [Anmol Panda](#), Sunandan Chakraborty, Noopur Raval, Han Zhang, Mugdha Mohapatra, Syeda Zainab Akbar, and Joyojeet Pal. 2020. In Proceedings of the 2020 International Conference on Information and Communication Technologies and Development (ICTD2020). Association for Computing Machinery, New York, NY, USA, Article 9, 1–12. DOI:<https://doi.org/10.1145/3392561.3394637>
- **Paper: From Greetings to Corruption: Politicians, Political Parties, and Tweeting in India. (ICTD'20):** Lia Bozarth, [Anmol Panda](#), Ceren Budak, and Joyojeet Pal. 2020. In Proceedings of the 2020 International Conference on Information and Communication Technologies and Development (ICTD2020). Association for Computing Machinery, New York, NY, USA, Article 8, 1–13. DOI:<https://doi.org/10.1145/3392561.3394636>

HONORS AND AWARDS

- Erasmus Mundus Scholarship for Exchange Studies at Uppsala University in Sweden, 2015
- Mitacs Globalink Research Internship at UNBC in Canada, 2015
- Best Student, St. Francis D'Assisi High School in Mumbai, India, 2009
- Student Council President, St. Francis D'Assisi High School in Mumbai, India, 2009

REFERENCES

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