Anmol Panda

Portfolio: anmolpanda.github.io
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Google Scholar: Link

SUMMARY

I am skilled in data science, statistical methods, NLP techniques, and survey analysis, pursuing research in racial attitudes on social media platforms, computational social science and public opinion analysis.

EDUCATION

- **University of Michigan (Expected Graduation: May 2025)** — 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*

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.

PROJECTS

- **Social Media Archive**: I have built and currently maintain the archive of tweets of over 70K US and 60K Indian politicians and influencers, which are updated daily using automated scripts. Presently, I am studying **how social media followers of Indian political parties respond to changes in party coalitions at the state level**, with a focus on the Indian state of Maharashtra. In the past, I have analyzed election campaign strategies, topical preferences in hashtag usage on Twitter, and misinformation spread by politicians.

- **Race, Technology, and Racial Justice**: I have used results from election surveys to understand attitudes of two key minority groups - Asian and Latino Americans - towards racial justice causes like the BLM movement, affirmative action, and preferential treatment to Black Americans. 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. Moving forward, I plan to study the **role of social media as a mediating variable in shaping attitudes of Asian American communities** toward racialized policies for my dissertation.

- **News Media and Paywalls**: In this project, we considerd the impact of paywall introduction on news content in local newspapers. Using data from ProQuest, I used LDA models from tomotopy to model topics of articles published by US newspapers. I then used a difference-in-difference approach along with synthetic control groups for each newspaper to model its topical preferences before and after paywall introduction. We also considered the variation in soft and hard news. This work is being presented at **2022 Conference on Digital Experimentation @ MIT (CoDE@MIT)**.

Skills

- **Research Expertise::** Data Science, Machine Learning, Natural Language Processing, Statistical Analysis, Survey Research, Social Media, Computational Social Science, Opinion Analysis, Race, Information Communication Technology and Development (ICTD)

- **Languages/Frameworks**: Python, R, Stata, C, Java, JavaScript, SQL, Bash, HTML, Scikit-Learn, TensorFlow, Keras, Tomotopy

- **Teaching Experience**: Data Mining, Deep Learning (as Graduate Student Instructor at UMSI), Object Oriented Programming, Effective Public Speaking (at BITS Pilani)

Major Publications

- **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 <u>Anmol Panda</u>

- **Presentation: Do Digital Paywalls Impact Topical Content Coverage?(Conference on Digital Experimentation @ Massachussetts Institute of Technology, 2022)**: <u>Anmol Panda</u>, Xiangyu Qin, Libby Hemphill, Paramveer Dhillon

- **Paper: DISMISS: Database of Indian Social Media Influencers on Twitter (ICWSM 2022)**: Arshia Arya, Soham De, Dibyendu Mishra, Gazal Shekhawat, Ankur Sharma, <u>Anmol Panda</u>, 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, <u>Anmol Panda</u>, 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, <u>Anmol Panda</u>, 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)**: <u>Anmol Panda</u>, 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)**: <u>Anmol Panda</u>, 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, <u>Anmol Panda</u>, 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)**: <u>Anmol Panda</u>, 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, <u>Anmol Panda</u>, 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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