Dibyendu Mishra

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Education

Present	Cornell University	New York, USA
Aug 2023	PhD Student in Information Science	
	Minor: Science and Technology Studies	
	Committee: Steven J Jackson and Daniel Susser	
	Research Areas: Algorithmic Governance, Government Digitalization, Work	and Organizations
May 2019	Ashoka University	Delhi NCR, India
Aug 2015	BS in Computer Science Minor: Mathematics	
_	Thesis: Verifying Individual Fairness in Linear Models	
	Graduated Magna Cum Laude	

Publications

J=Journal, C=Conference, P=Poster, I=Informal and Other Submissions, *=Equal Contribution

Data Science in the Indian Public Sector

with Rajesh Veeraraghavan Work Under Progress

Coding the State: Errors, Exceptions and Patchwork in Structuring India's Right to Work Program with Steven J. Jackson

Work Under Progress | Presented at SIGCIS 2025: power surge

[I.2] Generative Propaganda [%]

> with Madeleine Daepp, Robert Ness and Joyojeet Pal Preprint

- Explorable Explainable AI: Improving AI Understanding for Community Health Workers in India [%] [C.8]Ian René Solano Kamaiko, Dibyendu Mishra, Nicki Dell, Aditya Vashistha Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems
- Use of Algorithms in the Public Sector: Decision Support or Control Systems? [%] [P.1] Sanjana Malhotra, Harsh Nisar, <u>Dibyendu Mishra</u>, Richa Marwah Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO '22)
- Sporting the Government: Sportspersons' Engagement with Causes in India and USA on Twitter % [J.1] Dibyendu Mishra, Ronojoy Sen, Joyojeet Pal Digital Politics in India: A Global Perspective for the Global Policy Journal
- Voting with the Stars: Analyzing Partisan Engagement between Celebrities and Politicians in India [%] Ramaravind Kommiya Mothilal, <u>Dibyendu Mishra</u>, Sachita Nishal, Faisal M Lalani, Joyojeet Pal Proceedings of the ACM Conference on Human-Computer Interaction, Volume 6, Issue CSCW1
- [C.6] Divided We Rule: Influencer Polarization on Twitter During Political Crises in India [%] Saloni Dash*, <u>Dibyendu Mishra</u>*, Gazal Shekhawat, Joyojeet Pal International Conference on Web and Social Media (ICWSM) 2022
- DISMISS: Database of Indian Social Media Influencers on Twitter [%] [C.5]

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(* = Equal Contribution)

International Conference on Web and Social Media (ICWSM) 2022

- Devotees on an Astroturf: Media, Politics, and Outrage in the Suicide of a Popular FilmStar [%] Syeda Zainab Akbar, Ankur Sharma, Dibyendu Mishra, Ramaravind Kommiya Mothilal, Himani Negi, Sachita Nishal, Anmol Panda, Joyojeet Pal ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS) 2022
- Insights Into Incitement: A Computational Perspective of Dangerous Speech on Twitter in India [%] [C.3] Saloni Dash, Rynaa Grover, Gazal Shekhawat, Sukhnidh Kaur, Dibyendu Mishra, Joyojeet Pal ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS) 2022 Thonorable Mention for Best Paper

[C.2] Virality and the Virus: Drugs and Cures on Twitter During the COVID-19 Crisis in India [%]
<u>Dibyendu Mishra</u>, Syeda Zainab Akbar, Gazal Shekhawat, Joyojeet Pal

Proceedings of the 55th Hawaii International Conference on System Sciences (HICSS) 2022

[I.1] Rihanna versus Bollywood: Twitter Influencers and the Indian Farmers' Protest [%] Dibyendu Mishra, Syeda Zainab Akbar, Arshia Arya, Saloni Dash, Rynaa Grover, Joyojeet Pal

[C.1] NivaDuck: A Scalable Pipeline to Build a Database of Political Twitter Handles [%]

Anmol Panda, A'ndre Gonawela, Sreangsu Acharyya, <u>Dibyendu Mishra</u>, Mugdha Mohapatra, Ramgopal Chandrasekaran, Jovojeet Pal

International Conference on Social Media and Society(SMSociety'20)

Work Experience

July 2024 | Microsoft Research Bengaluru, India

May 2024 | Research Consultant (Contract) | Advisor: Dr. Madeleine Daepp

Researched the use of Gen-AI in news and social media during the 2024 Indian general elections through interviews with AI startups, journalists, media houses and public policy professionals

Skills: User Interviews, Policy and Content Analysis, Thematic Analysis

Aug 2023 | Cornell University Remote

Feb 2023 | Research Consultant (Contract)

Researched explainability scaffolds for improving AI understanding of community health workers

Jan 2023 | Ministry of Rural Development, Government of India

New Delhi, India

Bengaluru, India

Sep 2021 Data Scientist

- > Developed various ML and GIS based decision support tools for administrators across rural infrastructure, skill development and rural livelihoods programs.
- > Provided audit support through data analysis and policy recommendations for the ministry's projects through a distributive justice lens

Skills: Python, QGIS, MySQL, PyTorch, AWS & Azure (Server-less Architecture, State Machines, ML Model Deployment, API Development & Hosting), PowerBI, User Interviews, Policy Analysis, Prototyping

Sep 2021 | Microsoft Research | Social Media and Society

Mar 2020 | Research Software Engineer | Advisor: Dr. Joyojeet Pal

Used mixed methods approaches to research political polarisation, crisis informatics and disinformation on social media in India. Focused on the role of social media influencers and celebrities in political capture **Skills:** Python (Sklearn, Dask, Numpy, Pandas, Matplotlib), MySQL, Gephi, Thematic Analysis

Feb 2020 | Microsoft Research | Technology for Emerging Markets Bengaluru, India

Aug 2019 | Research Intern | Advisor: Dr. Joyojeet Pal

Sep 2018 Koç University Distributed Systems Lab Istanbul, Turkey

Jul 2018 | Research Intern

Aug 2017 | Trivedi Center For Political Data Delhi NCR, India

May 2017 Data Science Intern

Developed entity resolution algorithms and visualizations on Indian electoral datasets

Skills: R/RShiny, Selenium, Python, Plotly

Awards and Fellowships

[2025] Einaudi Center International Research Travel Award, Cornell University

[2023] Information Science Department Fellowship, Cornell University

[2022] Best Paper Nominee, HICSS'22

[2022] Honorable Mention For Best Paper, COMPASS'22

[2015] Merit cum Means Scholarship, Ashoka University

Teaching

Graduate Teaching Assistant, Cornell University

2024-2025

- > INFO-2300: Intermediate Design and Programming for the Web, Prof. Kyle Harms
- > INFO-2951: Introduction to Data Science with R, Prof. Benjamin Soltoff
- > INFO-2950: Introduction to Data Science, Prof. Matt Wilkens

Teaching Assistant, Ashoka University

2018-2019

- > CS-104: Discrete Mathematics, Prof. Sumit Kumar Pandey
- > CS-303: Introduction to Machine Learning, Prof. Ravi Kothari

Presentations

> Student Presentation, Special Interest Group for Computing, Information, and Society (SIGCIS): power surge	2025
> Guest Lecture, Politics and Ethics of Data, Azim Premji University	2024
> Invited talk, MISDOOM Conference, Oxford Internet Institute	2021

Service *Special Recognitions in Bold

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> Student Organiser, Social Media and Society in India Conference	2020, 2025
> Reviewer, CSCW'22, CHI'25 and DIS'25	2022, 2025
> Cornell IS Student-Applicant Reading Program (SARP)	2023, 2024
> Co-organiser, Effective Dashboards and Self-Service Analytics Workshop for Govt. Employees, MORD	2022
> Undergraduate Application Reading Program, Swaero Circle Schools in India	2021-2022
> Technical Interviewer for Data Scientist Positions, National Highways Authority of India	2022