

Aarushi Kalra

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REFERENCES

Professor **Andrew Foster**
Department of Economics
Brown University
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Professor **Peter Hull**
Department of Economics
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Providence, Rhode Island 02912
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Professor **Brian Knight**
Department of Economics
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Professor **Stelios Michalopoulos**
Department of Economics
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Professor **Daniel Björkegren**
School of International and Public Affairs
Columbia University
New York, New York 10027
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EDUCATION

Brown University Ph.D. Candidate in Economics	Providence, RI, USA 2025 (<i>expected</i>)
Delhi School of Economics M.A. Economics	New Delhi, India 2017
Lady Shri Ram College, University of Delhi B.A. (Honors) Economics Exchange: National University of Singapore	New Delhi, India 2015

TEACHING AND RESEARCH FIELDS

Development Economics, Political Economy, and Economics of Digital Platforms and AI

JOB MARKET PAPER

Social Media Algorithms versus Preferences in a Large-scale RCT

Awards: Distinguished Paper Award, North Eastern Universities Development Consortium

Presented at: Summer Meetings of the Econometric Society 2024 (Nashville), Brown Applied Microeconomics Seminar 2024, Harvard Grad PE Seminar, North Eastern Universities Development Consortium (NEUDC) 2024, ETH Zürich and UZH Workshop in AI + Economics 2024, NBER Conference on Information and Competition in the Digital Economy 2024, ISI-Delhi Growth and Development Conference 2024

How do profit-driven personalization algorithms compete with user preferences in radicalizing social media users? I conduct an individually randomized experiment with 5 million people replacing feed-ranking algorithms with random content delivery of a prominent TikTok-like platform in India. I find a trade-off: random post recommendation lowers exposure to anti-minority (“toxic”) content by 27%, but at a substantial cost to the platform, as overall platform usage falls by 35%. However, the impact of the policy was blunted as the proportion of toxic posts shared per toxic post viewed increased by 18%. This effect is driven by users with a higher interest in toxic content at baseline, as they sought out posts that the algorithm did not show them. I rationalize these results with a model of an engagement-maximizing algorithm that faces heterogeneous users who choose what social media posts to consume, according to their preferences. Estimated model parameters reveal that user behavior is relatively immalleable, with a 0.16 elasticity of sharing with respect to exposure to toxic posts. This results in limited effectiveness of regulatory measures that target algorithms.

WORKING PAPERS

A ‘Ghetto’ of One’s Own: Communal Violence, Residential Segregation, and Group Education Outcomes in India

Awards: Winner, Spatial Structures in the Social Sciences Graduate Student Paper Prize (2022)

Presented at: Comparative Welfare State Conference 2024 (Brown), Summer Meetings Econometric Society 2023 (UCLA), Asian Meetings of the Econometric Society 2023 (IIT-Bombay), NEUDC 2022 (Yale), Population Association of America Conference 2022 (Atlanta), Indus Action (New Delhi), Spatial Structures in Social Science Colloquium 2022 (Brown), Annual Conference on Economic Growth and Development 2021 (ISI-Delhi), Brown-MIT Graduate Development Workshop 2021, Brown Applied Micro Lunch 2020

Elections, Leader Identity, and Backlash

Presented at: NBER Conference on Entrepreneurship, Public Policy, and Economics Outcomes 2022 (ISB-Hyderabad), Machine Learning for Economics Summer Institute 2022 (UChicago), Data Science Institute 2022 (Brown), Young Economists’ Symposium 2022 (Yale), Development Data Lab, Annual Conference on Economic Growth and Development 2022 (ISI-Delhi)

Hate Thy Neighbor: Evidence on the Effects of Local News on Political Polarization from a Large-Scale RCT

Presented at: Brown University Applied Micro Lunch Seminar 2023

Internet Shutdowns: Causes and Consequences (with Ro’ee Levy and Martin Mattsson)

SELECTED WORKS IN PROGRESS

Impact of Personalization Algorithms on Mental Health Outcomes (with Juan Pereira)

Understanding Reporting of Intimate Partner Violence: Evidence from Victim-Level Data

(with Marcela Mello and Mahima Vasishth)

WORK EXPERIENCE

Brown University, Economics Department Research Assistant for Professor Alisa Tazhitdinova	Providence, RI 2020
Center for Development Economics, Delhi School of Economics Research Assistant for Professor Mausumi Das	New Delhi, India 2017–2018
Ranchi University and IIT-Delhi Field Investigator for Professors Jean Drèze and Reetika Khera	Jharkhand/ New Delhi, India 2013–2018

FELLOWSHIPS AND AWARDS

• Global Mobility Research Fellowship, Brown University	2023
• Merit Dissertation Fellowship, Brown University	2022
• Center for Contemporary South Asia Teaching Fellowship, Brown University	2021
• Graduate Student Fellowship, Brown University	2018
• Faculty Prize, Lady Shri Ram College, Delhi University	2015
• Exchange Scholarship, National University of Singapore	2014

GRANTS

• NSF Dissertation Research Improvement Grant, National Science Foundation	2023
• Weiss Fund for Research in Development Economics	2023
• Saxena Center for Contemporary South Asia Summer Fellowship, Brown University	2022
• Orlando Bravo Center for Economic Research Funding, Brown University	2022, 2021
• Saxena Center for Contemporary South Asia Winter Fellowship, Brown University	2021
• Swearer Center Engaged Course Mini-Grant, Brown University	2021
• Graduate Program in Development Summer Funds, Watson Institute, Brown University	2021, 2020
• Stone Wealth and Income Inequality Fund, Brown University	2020

TEACHING

Instructor for Undergraduate Course at Brown University

• Economic and Human Development in South Asia	2021
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Teaching Assistant at Brown University

- Machine Learning, Text Analysis, and Economics (*Professor Amy Handlan*) 2024
- Statistical Methods and Economic Analysis for MPA (*Professors Jesse Bruhn, Bryce Steinberg, Neil Thakral, Alex Poterack*) 2022
- Game Theory and Application to Economics (*Professor Roberto Serrano*) 2020
- Intermediate Microeconomics (*Professor Fahri Ulusoy*) 2020
- PhD Mathematics for Economists (*Professor Alex Poterack*) 2019

Instructor for Training Indian Economic Service Officers (GoI) at the Institute for Economic Growth, New Delhi

- Quantitative Methods in Economics with STATA 2018

PEER REVIEWED PUBLICATIONS

Impacts of regional lockdown policies on COVID-19 transmission in India in 2020 (with Paul Novosad, *Economic and Political Weekly*, 2022)

Birth Pangs: Universal Maternity Entitlements in India (with Aditi Priya, *Economic and Political Weekly*, 2020)

OTHER

- **Service:** Co-founder, *Bahujan Economists*
- **Referee:** Journal of Development Economics, PLOS One, ACM Journal of Computing and Sustainable Societies
- **Organization:** Fair February 2022, Data Science Initiative, Brown University; Women in Data Science Datathon 2023, Brown University
- **Affiliations:** Populations Studies and Training Center at Brown, Watson Institute of International and Public Affairs, Saxena Center for Contemporary South Asia
- **Languages:** English (fluent), Hindi (native), Punjabi (advanced), Urdu (elementary)