

Madhav Kumar

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Harvard Business School
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Academic Positions

Harvard Business School	Boston
Assistant Professor	Jul 2025 –
MIT Sloan School of Management	Cambridge
Digital Fellow, Initiative on the Digital Economy	Jul 2025 –
MIT Sloan School of Management	Cambridge
Post-Doctoral Associate, Initiative on the Digital Economy	Jun 2022 – Jun 2025

Education

Massachusetts Institute of Technology	Cambridge
Ph.D. Quantitative Marketing	2022
MSI Alden G. Clayton Dissertation Proposal Award, 2021	
MIT Sloan Doctoral Forum Best Dissertation Award, 2022	
ASA Statistics in Marketing Dissertation Award Finalist, 2022	
Indira Gandhi Institute of Development Research	Mumbai
M.Sc. Economics	2011
Hindu College, University of Delhi	New Delhi
B.Sc. (Honors) Physics	2008

Publications

1. [How Do Successful Scholars Get their Best Research Ideas? An Exploration](#)
w/ C. Cao, X. Cao, M. Cashman, A. Timoshenko, J. Yang, S. Yu, J. Zhang, Y. Zhu, and B. Wernerfelt
Marketing Letters, 2019
2. [Identity Effects in Social Media](#)
w/ S. Taylor, L. Muchnik, and S. Aral
Nature Human Behavior, 2022
3. [Are Crypto Ecosystems \(De\)centralizing? A Framework for Longitudinal Analysis](#)
w/ H. Ju, E. Valavi, and S. Aral
Communications of the ACM, 2025
4. Scalable Bundle Recommendations: A Large Scale Field Experiment
w/ D. Eckles and S. Aral
Management Science, 2025
Best paper nomination, WISE 2019
2022 ASA Statistics in Marketing Doctoral Research Award Finalist
5. [Generative AI and Personalized Video Advertisements](#)
w/ A. Kapoor
Marketing Science, 2025
Best Paper Award, Runner-up, WISE 2024

Peer-Reviewed Conferences

1. [Inclusive Recommendations and User Engagement: Experimental Evidence from Pinterest](#)
w/ P. Silva, A. Singh, and A. Varma
Extended Abstract, **ACM Economics & Computation**, 2024

Work in Progress

[Explaining Sustained Blockchain Decentralization with Quasi-Experiments: Resource Flexibility and Consensus Mechanisms](#)
w/ H. Ju, E. Valavi, and S. Aral
Major Revision, **Information Systems Research**, 2024

Building Inclusive Platforms: Experimental Evidence from Pinterest

w/ P. Silva, and A. Singh, Working Paper, 2025

Best Paper Award, CIST 2024

When Machines Reveal Themselves: How AI Disclosure and Assurance Cues Shape Ad Effectiveness, with A. Kapoor

Working Paper, 2025

Display Model Diversity and Product Success in Online Fashion, with A. Kapoor and P. Chintagunta

Working Paper, 2025

Algorithmic Pricing and Consumer Sensitivity to Price Volatility, with D. Aparicio and D. Eckles

Working Paper, 2024

Best paper nomination, CIST 2021

Structural Evolution of Ad Design, with N. Wang and J. Hauser

Working Paper, 2024

Leveraging Marketing Theory for Next Basket Recommendations, with A. Jain and S. Aral

Working Paper, 2024

Challenges in Online Experimentation, with I. Bojinov, D. Holtz, R. Johari, N. Kallus, and multiple industry co-authors

Technical Report, 2023

Teaching & Advising

Analytics Lab, Prof. Sinan Aral

TA (Evaluation: 6.5/7)

MBA: Masters in Business Analytics

MBA, MBAn, Exec. MBA

Fall 2020, Summer 2020, Summer 2019

Marketing Analytics, Prof. Dean Eckles

TA (Evaluation: 6.5/7)

MBA, MBAn

Spring 2021, Spring 2020, Spring 2019

Global Startup and Teaching Labs

Course Developer and Instructor

Exec., Masters, High School

Designed and taught a hands-on deep learning course to promote AI-based entrepreneurship.

Led a technology incubator for company executives, graduate researchers, and high-school students.

MicroMasters Program in Statistics and Data Science

Masters thesis co-advisor - 3 students

Masters

Spring 2021 (Uruguay)

Analytics Lab Project Mentor

Mentored group of 3-4 students for company-sponsored projects

MBA, MBAn, Exec. MBA

Fall 2017, Fall 2018, Fall 2019

Undergraduate Research Mentor

Supervised data collection and annotation, and survey design

UG

Spring 2021, Fall 2020

Corporate Training

Course Developer and Instructor

Analysts, Mid-level Managers

2016, 2017, 2018

Data Science and Machine Learning training for one of the largest insurance providers in the US.

Conferences & Invited Seminars

- **2025:** BU Platform Symposium; Marketing Science Conference (DC); Guest Lecture, Marketing Analytics, MIT; Guest Lecture, Business Analytics, BU
- **2024:** University of British Columbia; Indiana University; Indian School of Business; Hong Kong University of Science and Technology; Chinese University of Hong Kong; Johns Hopkins University; Duke University; Harvard Business School; Wharton; University of Florida; Purdue University; UT-Austin; WISE (Bangkok) (Withdrawn); 2nd Annual Business & Generative AI Workshop (Wharton San Francisco); CIST (Seattle); 8th New Directions in Research on the Psychology of Technology (BU); ASA Marketing Section Webinar; ACM Economics and Computation (Yale); Theory + Practice in Marketing (UT Austin); Guest Lecture, Marketing Analytics, MIT; Guest Lecture, Business Analytics, BU
- **2023:** MIT Social Analytics Lab; MIT Marketing Seminar; Munich Summer Institute (Munich); Theory + Practice in Marketing (HEC Lausanne); SCECR (Bogota); 13th China India Insights Conference, (Stanford); WISE (Hyderabad)
- **2022:** Delhi School of Economics Winter School (New Delhi); JSM (Washington DC); Cornell University
- **2021:** CIST (Los Angeles); Chicago Booth; Boston College; Northeastern University; Emory University; University de Chile; National University Singapore; OI, Wharton School, University of Pennsylvania; University of Cambridge, Judge School of Business; University College London; Imperial College London; New York University, Stern School of Business; ZEW ICT Conference (Online); ISMS Marketing Science Conference (Online); Theory + Practice in Marketing (Online); WISE (Munich); MIT Marketing Research Seminar; MIT Social Analytics Lab

- **2020:** CODE@MIT (Cambridge); Guest Lecture, Analytics Lab, MIT; Guest Lecture, Marketing Analytics, MIT
- **2019:** MIT Social Analytics Lab; Advances in Field Experiments (Chicago); ZEW ICT Conference (Mannheim); ISMS Marketing Science Conference (Rome); Transatlantic Doctoral Conference (LBS); Guest Lecture, Marketing Analytics, MIT
- **2018:** CODE@MIT (Cambridge)

Honors

INFORMS Marketing Science Doctoral Consortium Fellow	Jun 2021
AMA-Sheth Foundation Doctoral Consortium Fellow	Jun 2020
Best paper nomination, WISE	Dec 2019
INFORMS Marketing Science Doctoral Consortium Fellow	Jun 2019
NBER Digital Tutorial Fellow, Stanford	Mar 2019
NBER Economics of AI, Fellow, Toronto	Sep 2018
MIT Graduate Fellowship	2016 - 2022

Work Experience

Pinterest	Remote
Research Consultant	Jun 2022 –
Microsoft Research	Remote
Ph.D. Summer Research Intern	May 2021 – Aug 2021
Stitch Fix, Algorithms Team	Remote
Research Consultant	Nov 2020 – Dec 2021
Stitch Fix, Algorithms Team	Remote
Ph.D. Summer Research Intern	Jun 2020 – Aug 2020
Reserve Bank of India, (CAFRAL)	Mumbai
Research Associate	Sep 2014 – Jun 2016
Fractal Analytics	New York/Mumbai
Data Scientist	Jun 2011 – Mar 2014

Pre-Ph.D. Research

Customer Churn Dynamics: Identifying Drivers of Customer Churn to Predict Subscription Renewals , with H. Hariharan, T. Chakravarty, and G. Dixit	
Wharton Customer Analytics Initiative	
Rapid Spatial Aggregation , with M. Loecher	
Communications in Computer and Information Science, Volume 499, Springer, 2015	
Predicting Usefulness of Online Reviews , with S. Upadhyay	
Proceedings of the 11 th Australasian Data Mining Conference, CRPIT, 2013	
Crime Analyses using R , with A. Sengupta and S. Upadhyay	
Data Mining Applications with R, Elsevier, 2013	
Ensemble of Machine Learners to Predict US Census Mail Return Rates, with S. Godbole and S. Upadhyay	
3 rd IIMA International Conference on Advanced Data Analysis, Business Analytics and Intelligence, 2013	

Software

RapidPolygonLookup , with M. Loecher	R package
Efficient nearest neighbors search for fast allocation of geo-tagged points to spatial polygons	2014

Social Good

Selected as one of the 1000 global leaders by [UNLEASH](#) to develop high-impact solutions for the UN Sustainable Development Goals *Aug 2017*

Analyzed 30 years of human rights violation data and [identified severe cases](#) using machine learning for Amnesty International *Nov 2013*

Examined the difference between living wage and minimum wage for food industry employees; with New York Communities for Change *Sep 2013*

Promoted non-formal education among school dropouts in rural areas of Jammu region with Shantineketan Bal Bhawan *Aug – Dec 2008*

Data Mining Competitions

Liberty Mutual – Fire Peril Loss Cost, [rank: 9/634](#) *2014*

See Click Predict Fix, [rank: 5/532](#) *2013*

See Click Predict Fix – Hackathon, [rank: 2/80](#) *2013*

Yelp Challenge, [rank: 3/350](#) *2013*

U.S. Census Return Rate Challenge, [rank: 7/243](#) *2012*

Skills & Interests

Areas: Machine Learning, Causal Inference, Econometrics, NLP, Computer Vision, Computational Social Science

Tools: R, Python, Tensorflow, PyTorch, SAS, STATA, SQL, Git, \LaTeX

Languages: Hindi (native), English (fluent), Marathi (conversational), Deutsch (beginner),

Personal: [Blogging on R & ML](#), Recreational data mining, Playing the violin, Hiking, Aimless wanderings

Academic Service

Program Committee Member: Conference on Information Systems and Technology (2025, 2024); Conference on Digital Experimentation, MIT (2025, 2024, 2023, 2022)

Ad-hoc Reviewer: Marketing Science, Management Science, Journal of Marketing Research, Journal of Economic Behavior & Organization