Aditya Karanam

Department of Information Systems and Analytics
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Education

The University of Texas at Austin, McCombs School of Business
Ph.D.   Management Sciences (*Field*: Economics of Information Systems)   2016-2021

The University of Texas at Austin
M.S.   Economics (*Field*: Econometrics)   2020

Birla Institute of Technology & Science (BITS) - Pilani
M.Sc.(Tech.)   Information Systems   2010-2014
Thesis: Content-Based Medical Image Classification at Indian Statistical Institute, Kolkata.

Employment

National University of Singapore, Singapore.
Assistant Professor, Dept. of Information Systems and Analytics   2022- (present)

Indian School of Business, Hyderabad, India.
Research Associate, Srini Raju Center for IT & Networked Economy   2014-2016

Indian Statistical Institute, Kolkata, India.
Research Fellow, Machine Intelligence Unit   2013 – 2014

Grants, Awards & Fellowships

1. Best Student Paper Award Runner-Up at Workshop in Information Systems and Economics   2024
2. Ministry of Education (MoE), Singapore Tier-1 Grant of 250,000 SGD (185K USD)   2024
3. NUS Start-Up Research Grant of 180,000 SGD (130K USD)   2022
4. Kauffman Best Student Paper Nomination at International Conference in Information Systems 2021
5. McCombs Research Excellence Grant of 10,000 USD   2021
6. Best Paper Nomination at Workshop in Information Technology & Sciences   2020
7. Nominated for Fred Moore Teaching Excellence Award   2020
8. McCombs Dean's Fellowship   2016-2020
9. Summer Research Fellowship from Indian Academy of Sciences   2013

Research

Research Interests

- Areas: Digital and Networked Economy, Use Inspired AI/ML, & Economics of Artificial Intelligence (AI)

- Applications: Mobile App Design, Platform Governance, User Innovation, and Spillover Effects (Innovation & Design)

- Methodology: Deep Learning, Natural Language Understanding, Q-Learning, Network Analytics, & Econometrics

Journal Publications —Published/Accepted

1. Aditya Karanam, Ashish Agarwal, & Anitesh Barua. Follow Your Heart or Listen to Users? The Case of Mobile App Design, Forthcoming in *Information Systems Research* (link).

2. Aditya Karanam, Deepa Mani, & Rajib Saha. Growing Technological Relatedness to the ICT Industry and Its Impacts, Forthcoming in *Information Systems Research*,36(1):344-369. (Featured in: Forbes, ISB Insight).

3. Aditya Karanam, Ashish Agarwal, & Anitesh Barua (2022), Design for Social Sharing: The Case of Mobile Apps *Information Systems Research*, 34(2):721-743.

Manuscripts Under Revision/Preparation

1. Aditya Karanam, Deepa Mani, Rajib Saha, & Srikanth Kannan Comovement in Technology Partnerships, Under review at *Information Systems Research* (link to the earlier version)

2. Aditya Karanam, Ashish Agarwal, & Anitesh Barua. Increasing Demand While Hurting Creativity? The Curious Case of Mobile App Promotions (link)
   - Presented at INFORMS Annual Meeting (2024) and INFORMS Marketing Science Conference (2025).

3. Aditya Karanam, Daniel Tan, Ashish Agarwal & Anitesh Barua. Artificial Intelligence, Collusion, and Ad Auctions.
   - Presented at WISE (2024), CODE (2025).

Research In Progress

1. The Generative AI Dilemma: Enhancing Productivity while Managing Technical Debt in Open Source Development (with Vasundhara Sharma & Deepa Mani)

2. Adding Features vs. Fixing Bugs: The Delicate Balance of Novelty and Stability in Mobile App Development
   - Received Outstanding Computing Project Prize, School of Computing, NUS, 2022.

3. Exploring the Effects of App Tracking Transparency Policies on User Behavior in the App Store (with Qianyi Wang & Nan Chen)

Refereed Conference Proceedings

1. Aditya Karanam, Ashish Agarwal and Anitesh Barua (2021), "Machine Learning Based Product Design: The Case of Mobile Apps", International Conference on Information Systems Proceedings (Kauffman Best Student Paper Nomination).

2. Aditya Karanam, Ashish Agarwal and Anitesh Barua. (2020), "Extracting Suggestion Features from Noisy User Generated Content Using BERT", Workshop in Information Technology and Systems (Best Paper Nomination).

3. Aditya Karanam, Ashish Agarwal and Anitesh Barua (2018), "Designing for Visibility and Sharing: The Case of Mobile Apps", International Conference on Information Systems Proceedings.

Refereed Workshops

1. Aditya Karanam, Daniel Tan, Ashish Agarwal and Anitesh Barua. (2024), "Artificial Intelligence, Collusion and Ad Auction", Workshop in Information Systems and Economics, Thailand (Best Student Paper Award Runner-Up).

2. Aditya Karanam, Deepa Mani and Rajib Saha. (2023), "Comovement in Strategic Technology Partnerships", Workshop in Information Systems and Economics, Hyderabad, India.

3. Eugene Lim and Aditya Karanam (2023), "Artificial Intelligence, Collusion and Auctions", AAAI Summer Symposium on AI4FinTech, Singapore.

4. Aditya Karanam, Ashish Agarwal and Anitesh Barua. (2022), "Follow Your Heart or Listen to Users? The Case of Mobile App Design", Sixteenth Symposium on Statistical Challenges in eCommerce Research, Spain.

5. Aditya Karanam, Ashish Agarwal and Anitesh Barua. (2020), "Extracting Suggestion Features from Noisy User Generated Content Using BERT", Workshop in Information Technology and Systems **(Best Paper Nomination)**, Virtual.

6. Aditya Karanam, Ashish Agarwal and Anitesh Barua. (2020), "Designing New App Features: Imitate, Innovate or Follow the Crowd", Sixteenth Symposium on Statistical Challenges in eCommerce Research, Virtual.

7. Aditya Karanam, Ashish Agarwal and Anitesh Barua. (2019), "Extracting Information from User Generated Content based on Named Entity Recognition Techniques", Statistical Challenges in eCommerce Research, Hong Kong.

8. Aditya Karanam, Ashish Agarwal and Anitesh Barua (2017), "Designing for Visibility: The Case of Mobile Apps", Workshop in Information Systems and Economics, Seoul.

9. Aditya Karanam, Ashish Agarwal and Anitesh Barua (2018), "Designing for Visibility: The Case of Mobile Apps", Statistical Challenges in eCommerce Research, Rotterdam.

Invited Seminars/Conference Presentations

1. ISMS Marketing Science Conference, Washington D.C	06/2025
2. The Consortium on Digital Economy, Monash University, Melbourne, Australia	03/2025
3. The Conference on Digital Economy, Indian School of Business, Varanasi, India	01/2025
4. Cox School of Business, Southern Methodist University	12/2024
5. Mays Business School, Texas A&M University	11/2024
6. Naveen Jindal School of Business, University of Texas, Dallas	11/2024
7. Kelley School of Business, Indiana University	11/2024
8. Eller College of Management, University of Arizona	11/2024
9. Katz Graduate School of Business, University of Pittsburgh	11/2024
10. INFORMS Annual Meeting, Seattle, United States.	10/2024
11. Conference on Digital Transformation by USC, Delhi, India.	10/2023
12. Centre for Software & Information Technology Management, IIM, Bangalore, India.	11/2022
13. National University of Singapore, Singapore	05/2021
14. Center for Analytics and Transformative Technologies, UT Austin	03/2021
15. W.P. Carey School of Business, Arizona State University	02/2021
16. David Eccles School of Business, The University of Utah	02/2021
17. Mays Business School, Texas A&M University	01/2021

TEACHING EXPERIENCE

Instructor

NUS, School of Computing

IS 4242 Intelligent Systems & Techniques (undergrad elective course)	Fall (2024 -)
BT 3102 Computational Methods for BZA (undergrad core course)	Spring (2022 -)

UT Austin, McCombs School of Business

MIS 301 Introduction to Information Management (undergraduate core course)	Fall, 2019
Nominated for the Fred Moore Teaching Excellence Award	

Teaching Assistant

UT, Austin, McCombs School of Business

MSBA: User Generated Content Analysis	Fall 2016, Fall 2017
MSBA: Social Media & Network Analytics	Spring 2017
Statistics: Introduction to Data Science	Fall 2020

STUDENT SUPERVISION

Doctoral Students

National University of Singapore, Singapore

1. Co-Supervisor/Thesis Examiner

   Qianyi Wang (Expected to graduate in 2028)
   Shivin Srivatsava (Postdoc, NUS Institute for Operations Research)
   Yuting Gao (Chinese University of Hong Kong (Shenzhen), China)

Undergraduate Students

National University of Singapore, Singapore

1. Final Year Thesis Advisor

Foo Say Han (Thesis won SoC Outstanding Computing Project Prize)	2022/23
Eugene Lim (Thesis paper presented at AAAI Symposium)	2022/2023
Zhu Hao	2023/24

Qin Ziyuan	2023/24
Daniel Tan (Thesis paper accepted at WISE, 2024)	2023/24
Gerald Ho	2024/25
Sze Ying	2024/25

SERVICE

Service to Profession

1. Reviewer

    (a) Management Science — Since 2019
    (b) Information Systems Research — since 2021
    (c) Management Information Systems Quarterly (MISQ) — Since 2019
    (d) Information and Management — Since 2022
    (e) International Conference on Information Systems (ICIS) — Since 2020
    (f) Conference on Information Systems and Technology (CIST) — Since 2021

2. Organizing and/or Chairing Sessions and/or Discussants

    (a) Associate Editor — Pacific-Asia Conference on Information Systems (PACIS), 2024
    (b) Program Committee Member, CIST — Since 2022
    (c) Session Chair and/or Discussant — ICIS 2018, WISE 2023

Service to Instituition

1. National University of Singapore, Singapore

    (a) Member, Publications Ranking Committee of Information Systems — Since 2022
    (b) Faculty Participant, School of Computing Open House Event — Since 2022
    (c) Evaluator, PhD Qualifying Exams — Since 2023
    (d) Peer review teaching evaluator — Since 2023
    (e) Academic supervisor - MSBA Capstone projects — Since 2022
    (f) Academic supervisor - MComp Capstone projects — Since 2023

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