Mochen Yang

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ACADEMIC APPOINTMENTS

Carlson School of Management, University of Minnesota

Associate Professor, Department of Information and Decision Sciences	2023 - present
Assistant Professor, Department of Information and Decision Sciences	2019 - 2023

Kelley School of Business, Indiana University

Assistant Professor, Department of Operations & Decision Technologies	2018 - 2019

EDUCATION

Carlson School of Management, University of Minnesota — 2013 - 2018

PhD in Business Administration, Department of Information & Decision Sciences
Thesis: Towards a Comprehensive Understanding of User-Generated Content and Engagement Behavior on Facebook Business Pages
Committee: Yuqing Ren (Advisor), Gediminas Adomavicius (Advisor), Gordon Burtch, Jisu Huh

School of Economics and Management, Tsinghua University — 2009 - 2013

Bachelor of Information Management and Information System

Rotman School of Management, University of Toronto — 9/2011 - 12/2011

Exchange Student

JOURNAL PUBLICATIONS

1. Yang M, Bi X. Understanding Partnership Formation and Repeated Contributions in Federated Learning: An Analytical Investigation. ***Management Science****, forthcoming.*

2. Cheng X, Bala H, Yang M. User Engagement on Social Media Business Pages: The Interplay between User Comments and Firm Responses. ***MIS Quarterly***, *forthcoming.*

3. Liu C, Yang M, Wen M. Judge Me on My Losers: Does Adaptive Robo-Advisors Outperform Human Investors during the COVID-19 Financial Market Crash? ***Production and Operations Management***, *forthcoming.*

4. Bi X, Yang M, Adomavicius G. Consumer Acquisitions for Recommender Systems: A Theoretical Framework and Empirical Evaluations. ***Information Systems Research***, *forthcoming.*

5. Travadi Y, Peng L, Bi X, Sun J, Yang, M. Welfare and Fairness Dynamics in Federated Learning: A Client Selection Perspective. ***Statistics and Its Interface***, *forthcoming.*

6. Kim A, Yang M, Zhang J (2023). When Algorithms Err: Differential Impact of Early vs. Late Errors on Users' Reliance on Algorithms. ***ACM Transactions on Computer-Human Interaction (TOCHI)***, 30(1), 1-36.

7. Yang M, McFowland E, Burtch G, Adomavicius G (2022). Achieving Reliable Causal Inference with Data-Mined Variables: A Random Forest Approach to the Measurement Error Problem. ***INFORMS Journal on Data Science (IJDS)*** 1(2), 115-195.

8. Adomavicius G, Yang M. (2022). Integrating Behavioral, Economic, and Technical Insights to Understand and Address Algorithmic Bias: A Human-Centric Perspective. ***ACM Transactions on Management Information Systems (TMIS)***, 13(3), 1-27.

   Selected Media Coverage: The Carlson School Magazine (Spring 2022)

9. Adomavicius G, Gupta A, & Yang M (2022). Bidder Support in Multi-Item Multi-Unit Continuous Combinatorial Auctions: A Unifying Theoretical Framework. ***Information Systems Research***, 33(4),1174-1195.

10. Yang M, Ren Y, & Adomavicius G. (2020) Engagement by Design: An Empirical Study of the "Reactions" Feature on Facebook Business Pages. ***ACM Transactions on Computer-Human Interaction (TOCHI)***, 27(6), 1-35.

    Selected Media Coverage: Discover at Carlson

11. Adomavicius G, Gupta A, & Yang M. (2019). Designing Real-Time Feedback for Bidders in Homogeneous-Item Continuous Combinatorial Auctions. ***MIS Quarterly***, 43(3), 721-743.

12. Yang M, Adomavicius G, & Gupta A. (2019). Efficient Computational Strategies for Dynamic Inventory Liquidation. ***Information Systems Research***, 30(2), 595–615.

13. Yang M, Ren Y, & Adomavicius G. (2019) Understanding User-Generated Content and Customer Engagement on Facebook Business Pages. ***Information Systems Research***, 30(3), 839–855.

    Selected Media Coverage: INFORMS Press Release, INFORMS "Resoundingly Human" Podcast, EurekAlert, Tech Xplore, eurasia review, EDWEEK Market Brief

14. Yang M, Adomavicius G, Burtch G, & Ren Y. (2018). Mind the Gap: Accounting for Measurement Error and Misclassification in Variables Generated via Data Mining. ***Information Systems Research***, 29(1), 4-24.

    Appears in INFORMS Editor's Cut on Artificial Intelligence

WORKING PAPERS

1. Tan X, Yang M, Wang G. Promoting Algorithm Adoption in the Presence of Human Experts: A Field Study.

2. Burtch G, Yang M, McFowland E, Adomavicius G. EnsembleIV: Creating Instrumental Variables from Ensemble Learners for Robust Statistical Inference.

3. Yang M, Bi X. Cost-Aware Calibration of Classifiers.

CONFERENCE PAPERS AND PRESENTATIONS

(presentations marked by [✓])

1. Zandvakili R, Chan J, Hedgcock W, Yang M. Predicting Customers' Recall Using Psychophysiological Measures.

   INFORMS Annual Meeting, Indianapolis, Indiana, 2022.
   Conference on Digital Experimentation (***CODE***), Boston, Massachusetts, 2022.

2. Burtch G, Yang M, McFowland E, Adomavicius G. EnsembleIV: Creating Instrumental Variables from Ensemble Learners for Robust Statistical Inference.

   [✓]INFORMS Workshop on Data Science, Indianapolis, Indiana, 2022. (**Best Paper Award**)

3. Yoon S, Subramani G, Subramani M, Yang M. The Effect of Peer-to-Peer Tangible Donation on Donors and Receivers Participation in Online Charity Platform.

   International Conference on Information Systems (***ICIS***), Copenhagen, Denmark, 2022.
   Statistical Challenges in Electronic Commerce Research (***SCECR***), Madrid, Spain, 2022.

4. Liu C, Yang M, Wen M. Judge Me on My Losers: Does Adaptive Robo-Advisors Outperform Human Investors during the COVID-19 Financial Market Crash?

   Conference on Information Systems and Technology (***CIST***), Newport Beach, California, 2021.

5. Yang M, Bi X. The Goldilocks Principle of Cooperation: Understanding Federated Learning in Healthcare via Iterated Prisoner's Dilemma.

   [✓]China Summer Workshop on Information Management (***CSWIM***), Virtual, 2021.
   [✓]Conference on Information Systems and Technology (***CIST***), Newport Beach, California, 2021.

6. Kim A, Yang M, Zhang J. When Algorithms Err: Differential Impact of Early vs. Late Errors on Users' Reliance on Algorithms.

   [✓]Conference on Artificial Intelligence, Machine Learning, and Business Analytics, Virtual, 2020.
   Conference on Information Systems and Technology (***CIST***), Virtual, 2020.

7. Bi X, Yang M, Adomavicius G. Consumer Acquisitions for Recommender Systems: A Theoretical Framework and Empirical Validations.

   [✓]Workshop on Information Technologies and Systems (***WITS***), Virtual, 2020.
   [✓]INFORMS Annual Meeting, Virtual, 2020.
   Winter Conference on Business Analytics (***WCBA***), Snowbird, Utah, 2020.

8. Tan X, Yang M, Wang G. Managing Adoption of Artificial Intelligence in the Presence of Human Intelligence: A Field Study.

   Conference on Artificial Intelligence, Machine Learning, and Business Analytics, Philadelphia, Pennsylvania, 2019.

9. Yang M, McFowland E, Burtch G, Adomavicius G. Seeing the Forest for the Trees: Generating Instrumental Variables via Random Forest to Address Endogeneity due to Prediction Error in Data-Mined Variables.

   Winter Conference on Business Analytics (**WCBA**), Snowbird, Utah, 2019.
   [✓]Conference on Digital Experimentation (**CODE**), Boston, Massachusetts, 2018.
   [✓]INFORMS Workshop on Data Science, Phoenix, Arizona, 2018. (**Best Paper Nomination**)

10. Yang M, Ren Y, & Adomavicius G. Engagement by Design: An Empirical Study of the "Reactions" Feature on Facebook Business Pages.

    [✓]Workshop on Information Technologies and Systems (**WITS**), Seoul, Korea, 2017.
    [✓]Conference on Information Systems and Technology (**CIST**), Houston, Texas, 2017.
    [✓]Winter Conference on Business Analytics (**WCBA**), Snowbird, Utah, 2017.

11. Adomavicius G, Gupta A, & Yang M. Providing Real-Time Bidder Support in Homogeneous Item Combinatorial Auctions.

    [✓]Workshop on Information Technologies and Systems (**WITS**), Dublin, Ireland, 2016.

12. Yang M, Adomavicius G, Burtch G, & Ren Y. Mind the Gap: Accounting for Measurement Error and Misclassification in Variables Generated via Machine Learning.

    [✓]Winter Conference on Business Intelligence (**WCBI**), Snowbird, Utah, 2016.

13. Adomavicius G, Gupta A, & Yang M. Computational Strategies for Inventory Liquidation.

    [✓]Workshop on Information Technologies and Systems (**WITS**), Dallas, Texas, 2015.

14. Yang M, Ren Y, & Adomavicius G. Understanding Word-of-Mouth and Customer Engagement on Facebook Business Pages.

    [✓]Conference on Information Systems and Technology (**CIST**), San Francisco, California, 2014.

INVITED TALKS AND SEMINARS

1. Understanding Partnership Formation and Repeated Contributions in Federated Learning: An Analytical Investigation, School of Economics and Management, Tsinghua University, Virtual, 2022.

2. Robust Statistical Inference with ML-Generated Variables, Wisconsin School of Business, University of Wisconsin-Madison, 2022.

3. Artificial Intelligence and Analytics Symposium, Lubar School of Business, University of Wisconsin-Milwaukee, 2022.

4. Understanding Federated Learning in Healthcare via Iterated Prisoner's Dilemma. McCombs School of Business, University of Texas at Austin, 2022.

5. Understanding Federated Learning in Healthcare via Iterated Prisoner's Dilemma. IDSc Departmental Friday Seminar, 2022.

6. Understanding Federated Learning in Healthcare via Iterated Prisoner's Dilemma. Carlson School Summer Applied Economics Seminar Series, 2021.

7. Analyzing User-Generated Content on Firms' Social Media Pages. Twin Cities Knowledge Management Forum, 2019.

8. Achieving Reliable Causal Inference with Data-Mined Variables: A Random Forest Approach to the Measurement Error Problem. George Washington University School of Business, George Washington University, Washington, D.C., 2019.

9. Seeing the Forest for the Trees: Generating Instrumental Variables with Random Forest for Bias Correction in Statistical Inferences. School of Economics and Management, Tsinghua University, Beijing, China, 2018.

10. Seeing the Forest for the Trees: Generating Instrumental Variables with Random Forest for Bias Correction in Statistical Inferences. INFORMS Session - Business Applications of Artificial Intelligence, Phoenix, Arizona, 2018.

11. Understanding Word-of-Mouth and Customer Engagement on Facebook Business Pages. University of Georgia, Terry College of Business, Athens, Georgia, 2017 (Job Talk).

12. Mind the Gap: Accounting for Measurement Error and Misclassification in Variables Generated via Data Mining. Carnegie Mellon University, Tepper School of Business, Pittsburgh, Pennsylvania, 2017 (Job Talk).

13. Mind the Gap: Accounting for Measurement Error and Misclassification in Variables Generated via Data Mining. Indiana University, Kelley School of Business, Bloomington, Indiana, 2017 (Job Talk).

14. Mind the Gap: Accounting for Measurement Error and Misclassification in Variables Generated via Data Mining. New York University, Stern School of Business, New York, 2017 (Job Talk).

15. Analyzing User-Generated Content on Firm-Hosted Social Media Pages. Financial and Retail Conference (***FARCON***), MinneAnalytics, 2017.

16. Understanding Word-of-Mouth and Customer Engagement on Facebook Business Pages. Social Media and Business Analytics Collaborative (***SOBACO***) Symposium, Carlson School of Management, 2015.

TEACHING

Teaching at University of Minnesota

MSBA 6130: Introduction to Business Analytics in R
MSBA 6440: Causal Inference via Econometrics and Experiments
MSBA 6460: Advanced AI for Business Application
CHEMBA Residency Program: Business Analytics

Teaching at Indiana University

K353: Business Analytics and Modeling, Spring 2019
K579: Business Analytics Concepts and Management, Spring 2019

C552: IT for Managers: The Strategic Use of Information Technology in Business, one session on Business Application of Machine Learning, Guest Lecturer, Fall 2018, Summer 2019

Teaching Experiences as PhD Student

IDSc 4444: Descriptive and Predictive Analytics, Instructor, Fall 2016, Spring 2017
Predictive Analytics, Guest Lecturer, Fall 2015, Fall 2017
Exploratory Data Analytics and Visualization, Guest Lecturer, Fall 2015

PROFESSIONAL RECOGNITIONS

Honors and Awards

MSBA Faculty of the Year (Foundational Course), 2023
INFORMS ISS Cluster Best Session Chair Award, 2022
MSBA Outstanding Teacher Award (Core Course), 2022
Best Reviewer Award, INFORMS Workshop on Data Science, 2021
Best Reviewer Award, Conference on Information Systems and Technology (CIST), 2021
Best Reviewer Award, Information Systems Research (ISR), 2021
MSBA Outstanding Teacher Award (Core Course), 2021
MSBA Outstanding Teacher Award (Specialty Course), 2020
INFORMS Information Systems Society (ISS) Nunamaker-Chen Dissertation Award, 2018
International Conference on Information Systems (ICIS) Doctoral Consortium Attendee, 2017
PhD Student Teaching Award, Carlson School of Management, 2016-2017
Graduate School Dissertation Fellowship, University of Minnesota, 2017-2018
Best Reviewer Award, Workshop on Information Technologies and Systems (WITS), 2016
Graduated with Honors, Tsinghua University, 2013
National Scholarship, Ministry of Education, China, 2010

Grants

"Understanding and Improving Federated Learning in Healthcare", Cisco Research, 2021-2022 ($137,000, co-PI with Xuan Bi)
Research Data Grant, Kelley School of Business, Fall 2018 ($1800)
Graduate School Dissertation Fellowship travel grant, Fall 2017 ($1000)
Carlson School PhD Travel Fellowship, 2014-2018, 5 times
Department Travel Grant, Carlson School of Management, 2014-2018, 6 times
SOBACO Micro-Grants, Carlson School of Management, Fall 2014 ($1000)

STUDENT ADVISING

Doctoral Students

Jinghui Zhang, visiting PhD scholar from Tsinghua University, 2022-2023
Sojung Yoon, First-Year Exam Committee, 2022
Sandeep Gangarapu, Oral Prelim Committee Member, 2022
Ramin Zandvakili, Second-Year Paper Committee, 2021
Xiaoye Cheng, Dissertation Committee Member, 2019

Master Students

Yuxuan Yang, MS in Business Analytics, Independent Study Advisor, 2022
Tiruo Yan, MS in Data Science, Thesis Advisor, 2022

Undergraduate Students

Andrius Adomavicius, Honors Thesis, Chair, 2023
Alex Dimitrov, Honors Thesis, Reader, 2022

SERVICE

Editorial Appointments

Editorial Review Board, Information Systems Research, 2022-2024

Conference / Workshop Organization

INFORMS Workshop on Data Science, 2023, Program Committee Chair
INFORMS Annual Meeting, 2022, Session Chair (IS Cluster)
Americas Conference on Information Systems, 2022, Workshop Co-Chair
Workshop on Information Technologies and Systems, 2020, Webmaster
Production and Operations Management Society Conference, 2020, Session Chair (Social Media and IOT)
INFORMS Annual Meeting, 2020, Session Chair (Social Media and Platform)

Conference Program Committee Member or Associate Editor

INFORMS Data Science Workshop
Winter Conference on Business Analytics
International Conference on Information Systems
Conference on Information Systems and Technology
Workshop on Information Technologies and Systems
Pacific Asia Conference on Information Systems

Reviewer

Information Systems Research
MIS Quarterly
Management Science
Organization Science
Production and Operations Management Journal
INFORMS Journal on Data Science
European Journal of Information Systems
ACM Transactions on Management Information Systems
Journal of Strategic Information Systems
Information Systems Journal
International Conference on Information Systems
Conference on Information Systems and Technology
Pacific Asia Conference on Information Systems
Hawaii International Conference on System Sciences

Departmental Services

Ph.D. Recruiting Committee, University of Minnesota, 2021

Junior Faculty Brownbag Organization, University of Minnesota, 2021-2022
Faculty Recruiting Committee, University of Minnesota, 2020
Ph.D. Recruiting Committee, Indiana University, 2019

Other Services

VP of Communications, INFORMS Information Systems Society, 2019-2023
Diffusion Editor, Organization Science, 2021 - 2023