## NIGEL PATRICK MELVILLE

Program Director, Design Science Associate Professor, Stephen M. Ross School of Business Associate Professor, College of Engineering University of Michigan (by courtesy)

https://www.nigelpmelville.com/

## EMPLOYMENT

2020-present	Associate Professor (by courtesy), Integrative Systems + Design, College of Engineering, University of Michigan
2019-present	Program Director, Design Science, Integrative Systems + Design, College of Engineering, University of Michigan
2012-present	Associate Professor, Information Systems, Technology and Operations Area, Stephen M. Ross School of Business, University of Michigan
2005-2012	Assistant Professor, Information Systems, Business Information Technology Area, Stephen M. Ross School of Business, University of Michigan
2001-2005	Assistant Professor, Information Systems, Information Systems Department, Carroll School of Management, Boston College
1999-2000	President and Co-Founder, JambaTalk (interactive voice response CRM)
1995-1999	Graduate Student Researcher, Center for Research on IT and Organizations
1992-1995	Technical Editor, Congress Corporation (Osaka, Japan)
1990-1992	Product Engineer, New Product Development Engineer, Motorola

# EDUCATION

2001	Ph.D., University of California, Irvine, Management Information Systems
1990	M.S., University of California, Santa Barbara, Electrical & Computer Eng.
1988	B.S., UCLA, Electrical Engineering

## BIO

Nigel Patrick Melville is an American sociotechnical scientist, an Associate Professor of Information Systems at the University of Michigan's Ross School of Business, and the Design Science Program Director. His primary focus areas include digital transformation, energy informatics, and AI affordances. Professor Melville's significant contributions to the information systems field revolve around technology-enabled change, in particular, how organizations leverage digital technologies to improve operations and achieve strategic goals. His work, which encompasses foundational theoretical and empirical analyses, has inspired further research and extensions, earning him over 9000 citations on Google Scholar. In service to the scientific community, Professor Melville holds membership on various editorial boards, chairs tracks at premier conferences, and is a member of the UN Environment Program's Coalition for Digital Environmental Sustainability (CODES). Complementing his academic pursuits, Professor Melville also consults for large organizations aiming to achieve leadership in the fourth industrial revolution.

## **RESEARCH AREAS**

Business value of information systems, digital transformation and innovation, information systems and environmental sustainability, fourth industrial revolution.

## AWARDS AND HONORS

One paper in the *MIS Quarterly* 2012 list of the top 50 most cited articles. <u>http://www.misq.org/skin/frontend/default/misq/pdf/MISQStats/MostCitedArticles2013.pdf</u>

Awarded \$20,000 grant by the Society for Information Management Advanced Practices Council 2019-2020: "Leveraging Boundary Resources for Business Value: How Firms Operationalize and Organize to Monetize API-Enabled Resources."

Keynote Address: "Green IS/IT Research: Making an Impact in the Fourth Industrial Revolution," San Francisco, SIG Green 2018, *International Conference on Information Systems*," December 2018.

Awarded Initial Research Funding in 2018 by the CIO Advanced Practices Council (APC) for the proposal: "Organizational and Competitive Implications of API Adoption: Lessons from Industry."

Awarded \$60,000 via U-M MCubed Project "Why So Risky: Understanding Risky Decisions in Design Teams," Co-PI along with Jesse Austin-Breneman and Lionel Robert, 2016-2018.

Awarded Initial Research Funding in 2017 by the CIO Advanced Practices Council (APC) for the proposal: "Fourth Industrial Age Organizing: Insights for Leaders."

Best Publication of the Year Award from the Association for Information Systems in December 2015: "How Posture-Profile Misalignment in IT Innovation Diminishes Returns: Conceptual Development and Empirical Demonstration," co-authored with Rob Fichman.

Nominated for Junior Faculty Research Award 2010-2011, Stephen M. Ross School of Business, University of Michigan.

Small Grant Research Funding, University of Michigan (2008).

ISEF Grant, BIT Group, Stephen M. Ross School of Business, University of Michigan (2008).

Special Sworn Status researcher of the U.S. Census Bureau at the Michigan Research Data Center (2006-2010)

Doctoral Consortium, International Conference on IS (1999).

Doctoral Fellowship, KPMG Foundation (1998 - 2000).

GEM Fellowship (1989 - 1990).

## PUBLICATIONS

### [Total Google Scholar Citations: 9,100+]

#### Journal Articles

- Melville, N., Robert, L., Xiao, Z., 2023. "Putting Humans Back in the Loop: An Affordance Conceptualization of the 4th Industrial Revolution," forthcoming, *Information Systems Journal*. [Journal Quality Tier: <u>A</u>]
- Saldanha, Terence J. V.; Mithas, Sunil; Khuntia, Jiban; Whitaker, Jonathan; and Melville, Nigel P. 2022. "How Green Information Technology Standards and Strategies Influence Performance: Role of Environment, Cost, and Dual Focus," *MIS Quarterly*, (46: 4) pp. 2367-2386. [<u>A+</u>]
- 3. Melville, N., and Kohli, R., 2021, "Models for API Value Generation," *MIS Quarterly Executive*, Vol 20, Issue 2, pp. 151-167.
  - Winner of Society for Information Management (SIM) Advanced Practices Council Grant..
- Kohli, R., and Melville, N., 2019, "Digital Innovation: A Review and Synthesis," *Information Systems Journal*, Vol. 29, Issue 1, pps. 200–223. [A]

- Highly cited paper in the **top 1%** of the academic field of Social Sciences, general based on a highly cited threshold for the field and publication year as of May 2021.
- 5. Melville, N., Saldanha, T., and Rush, D., 2017, "Systems Enabling Low-Carbon Operations: The Salience of Accuracy," *Journal of Cleaner Production*, Vol. 166, pps. 1074-1083. [A]
- Fichman, R., and Melville, N., 2014, "How IT Innovation Posture-Profile Misalignment Diminishes Returns to IT Innovation: Conceptual Development and Empirical Demonstration," *Journal of Management Information* Systems, Vol. 31, No. 1, pps. 203-240. [<u>A+</u>]
  - Association for Information Systems Best Information Systems Publication Award 2015
- Melville, N., and Whisnant, R., 2014, "Energy and Carbon Management Systems: Organizational Implementation and Application," *Journal of Industrial Ecology*, Vol. 18, No. 6., pps. 920-930. [A]
- Saldanha, T., Melville, N., Ramirez, R., and Richardson, V., 2013, "Information Systems for Collaborating versus Transacting: Impact on Plant Performance in the Presence of Demand Volatility," *Journal of Operations Management*, Vol. 31, No. 6, pps. 313-329. [A]
- Melville, N., and McQuaid, M., 2012, "Generating Shareable Statistical Databases for Business Value: Multiple Imputation with Multimodal Perturbation," *Information Systems Research*, Vol. 23, Issue 2, pps. 559-574. [<u>A+</u>]
- Ramirez, R., Melville, N., and Lawler, E., 2010, "Information Technology Infrastructure, Organizational Process Redesign, and Business Value: An Empirical Analysis," *Decision Support Systems*, Vol. 49, No. 4, pps. 417-429. [<u>A</u>]
- Melville, N., 2010, "Information Systems Innovation for Environmental Sustainability," *MIS Quarterly*, Vol. 34, No. 1, pps. 1-21. [<u>A+</u>]
  - Lead article. Highly cited paper in the **top 1%** of the academic field of Social Sciences, general based on a highly cited threshold for the field and publication year as of September/October 2020.
- Chwelos, P., Ramirez, R., Kraemer, K., and Melville, N., 2010, "Does Technological Progress Alter the Nature of Information Technology as a Production Input? New Evidence and New Results," *Information Systems Research*, Vol. 21, No. 2, pps. 392-408. [A+]
- 13. Kohli, R., and Melville, N., 2009, "Learning to Build an IT Innovation Platform," *Communications of the ACM*, Vol. 52, No. 8, pps. 122-126.
- 14. Plice, R., Melville, N., and Pavlov, O., 2009, "Toward an Information-Compatible Anti-Spam Strategy," *Communications of the ACM*, Vol. 52, No. 5, pps. 128-130.

- Melville, N., and Ramirez, R., 2008, "Information Technology Innovation Diffusion: An Information Requirements Paradigm," *Information Systems Journal*, Vol. 18, Issue 3, pps. 247-273. [<u>A</u>]
- Melville, N., Gurbaxani, V., and Kraemer, K., 2007, "The Productivity Impact of Information Technology across Competitive Regimes: The Role of Industry Concentration and Dynamism," *Decision Support Systems*, Vol. 43, No. 1, pps. 229-242. [A]
- Melville, N., Stevens, A., Plice, R., and Pavlov, O., 2006, "Unsolicited Commercial Email: Empirical Analysis of a Digital Commons," *International Journal of Electronic Commerce*, Vol. 10, No. 4, pps. 143-170. [A]
- 18. Gallaugher, J., Melville N., 2004, "Electronic Frontiers in Foreign Exchange Trading," *Communications of the ACM*, Vol. 47, No. 8, pps. 81-87.
- Melville, N., Kraemer, K., and Gurbaxani, V., 2004, "Information Technology and Organizational Performance: An Integrative Model of IT Business Value," *MIS Quarterly*, Vol. 28, No. 2, pps. 283-322. [<u>A+</u>]
- Gurbaxani V., Melville N., and Kraemer K., 2000, "The Production of Information Services: A Firm-Level Analysis of Information Systems Budgets," *Information Systems Research*, Vol. 11, No. 2, pps. 159-176. [<u>A+</u>]

#### Edited Books, Book Chapters and Other Journal Articles

- Seidel, S., Bharati, P., Fridgen, G., Watson, R., Albizri, A. Boudreau, M., Butler, T., Kruse, C., Guzman, I., Karsten, H., Lee, H.; Melville, N., Rush, D., Toland, J., and Watts, S., 2017, "The Sustainability Imperative in Information Systems Research," *Communications of the AIS*, Vol. 40, Article 3, pps. 40-52.
- Robert, L.P., Bansal, G.B., Melville, N., Stafford, T., 2020, "Introduction to the Special Issue on AI Fairness, Trust, and Ethics," *AIS Transactions on Human-Computer Interaction* Vol. 12, Issue 4, pps. 172-178.
- Malhotra, A., Melville, N., and Watson, R., 2013, "Spurring Impactful Research on Information Systems for Environmental Sustainability," *MIS Quarterly*, Vol. 37, No. 4, pps. 1265-1274. [<u>A+</u>]
  - Editorial, Special Issue on Information Systems and Environmental Sustainability
- Lim, S., Saldanha, T., Malladi, S., and Melville, N., 2013, "Theories Used in Information Systems Research: Insights from Complex Network Analysis," *Journal of Information Technology Theory and Application*, Vol. 14, Issue 2, pps. 5-46.

- Vom Brocke, J., Watson, R.T., Dwyer, C., Elliot, S., and Melville, N., 2012. "Green Information Systems: Directives for the IS Discipline," *Communications of the AIS*, Vol. 33, Article 30, pp. 509-520.
- 26. Melville, N., 2011, "Information Systems, Business, and the Natural Environment: Can Digital Business Transform Environmental Sustainability?" *in* <u>The Oxford Handbook of</u> <u>Business and the Natural Environment</u>, P. Bansal and A. Hoffman (eds.), Oxford: **Oxford University Press**, p. 624.
- 27. Whitaker, J.W., Melville, N., Plice, R, Dedrick, J., 2010 "Global Diffusion of the Internet XVI: The Role of Economic Development and Firm Internationalization in Internet Business Practices, *Communications of the AIS*, Vol. 27, Article 31, pp. 611-626.
- Plice, R., Pavlov, O., and Melville, N., 2008, "Spam and Beyond: An Information-economic Analysis of Unwanted Commercial Messages," *Journal of Organizational Computing and Electronic Commerce*, Vol. 18, No. 4, pps. 278-306.
- Pavlov, O., Plice, R., and Melville, N., 2008, "A Communication Model with Limited Information-Processing Capacity of Recipients," *System Dynamics Review*, Vol. 24, Issue 3, pps. 377-405.
- Cederlund, J., Kauffman, R.J., Kohli, R., Markus, M.L., Melville, N., and Pavlou, P.A., 2007, "Global Sourcing of IT Services: Necessary Evil or Blessing in Disguise," *Communications* of the AIS, Vol. 19, pps. 278-293.
- 31. Pavlov, O., Melville, N., and Plice, R., 2007, "Toward a Sustainable Email Marketing Infrastructure," *Journal of Business Research*, Vol. 61, Issue 11, pps. 1191-1199.
- 32. Kraemer, K.L., Dedrick, J., and Melville, N.P. 2006. "Globalization and National Diversity: E-Commerce Diffusion and Impacts Across Nations," *in <u>Global E-Commerce: Impacts of</u>* <u>National Environment and Policy</u>, K.L. Kraemer, J. Dedrick, N.P. Melville and K. Zhu (eds.), Cambridge: Cambridge University Press, p. 444.
- Pavlov, O., Plice, R., and Melville, N., 2005, "Mitigating the Tragedy of the Digital Commons: the Problem of Unsolicited Commercial E-mail," *Communications of the AIS*, Vol. 16, pps. 73-90.

#### Articles in Refereed Conferences

34. Bluhm, S., Staudt, P., and Melville, N., 2022, "Designing Digital Interventions for Energy Self-Efficacy," *AIS Special Interest Group on Green IS, Pre-ICIS Workshop*, Copenhagen, 2022.

- 35. Author(s): Melville, N., and Kohli, R., 2021, "Roadblocks to Implementing Modern Digital Infrastructure: Exploratory Study of API Deployment in Large Organizations," *Hawaii International Conference on System Sciences*, 2021.
- 36. Ning, X., Khuntia, J., Saldanha, T., and Melville, N. "The Role of Green IS Governance: Climate Change Risk Identification and Carbon Disclosure Performance, *International Conference on Information Systems*, Munich, 2019.
- 37. Khuntia, J., Ning, X., Saldanha, T., and Melville, N. "Operational Green IT Implementation for Risk Management: Green Governance for Carbon Disclosure" *POMS* 2019.
- Chefitz, M., Austin-Breneman, J., and Melville, N. "Designing Conversational Interfaces to Reduce Dissonance," *Designing Interactive Systems (DIS) Conference*, Hong Kong, *Association for Computing Machinery*, 2018.
- Melville, N.P., and Zik, Ory, 2016. "Energy Points: A New Approach to Optimizing Strategic Resources by Leveraging Big Data," *Hawaii International Conference on System Sciences*, 2016.
- 40. Rush, D., Melville, N., Ramirez, R., Kobelsky, K. 2015 "Enterprise Information Systems Capability and GHG Pollution Emissions Reductions, *International Conference on Information Systems*, Fort Worth, 2015.
- 41. Melville, N.P., 2015. "Digital Fitness: Four Principles for Successful Development of Digital Initiatives," *Hawaii International Conference on System Sciences*, 2015.
- 42. Rush, D., Melville, N. 2014. "Market Value Impacts of Information Systems Around the World: A Monte Carlo Investigation to Reduce Bias in International Event Studies," *Americas Conference on Information Systems*, Savannah, 2014.
- 43. Melville, N.P., 2014. "Crowd-Sourced Peer Feedback (CPF) for Learning Community Engagement: Results and Reflections from a Pilot Study," *Hawaii International Conference on System Sciences*, 2014.
- 44. Melville, N.P. and Saldanha, T., 2013. "Information Systems for Managing Energy and Carbon Emission Information: Empirical Analysis of Adoption Antecedents," *Hawaii International Conference on System Sciences*, 2013.
- 45. Rush, D., and Melville, N.P., 2012. "Do Carbon Management System Adoption Announcements Affect Firm Value," *International Conference on Information Systems* 2012, Research-in-Progress Track.
- Melville, N.P. 2012. "Systematic Service Innovation in Organizations: A Template for Human-Centered Design of E-Services," *Hawaii International Conference on System Sciences*, 2012.

- 47. Saldanha, T., Melville, N., Ramirez, R., and Richardson, V., 2011, "Collaborating versus Transacting in the Digital Supply Chain: Impact on Plant Performance in the Presence of Demand Volatility," *Workshop on Information Systems and Economics*, Shanghai, China, December 7-9.
- 48. Lim, S., Saldanha, T., Malladi, S., and Melville, N., 2009, "Theories Used in Information Systems Research: Identifying Theory Networks in Leading IS Journals," *International Conference on Information Systems* 2009, Proceedings, Paper 91.
- 49. Melville, N., Saldanha, T., Ramirez, R., and Richardson, V., 2009, "Information Technology in the Supply Chain under Volatile Demand Conditions: Empirical Analysis of Inventory and Productivity," 2009 Joint U.S.-Canadian Census Research Data Center Conference, Poster Session, Cornell Institute for Social and Economic Research, Cornell University, Ithaca NY, October 5-6.
- 50. Fichman, R., and Melville, N., 2008, "Organizational Performance Impacts of IT Innovation Misfit: Conceptual Development and Empirical Test," *Workshop on Information Systems and Economics*, Paris, France, December 13.
- 51. Pavlov, O., Plice, R., and Melville, N., 2005, "Mitigating the Tragedy of the Digital Commons: the Case of Unsolicited Commercial Email," *11th International Conference on Computing in Economics and Finance*, Washington, DC. June 23-25.
- 52. Melville N., and Ramirez R., 2003, "Assessing IT Value within Interfirm Business Processes," *Americas Conference on Information Systems*, August 4-6.
- Robins J., and Melville N., 2001, "A Critical Assessment of First-mover Advantage in Business-to-Consumer Electronic Commerce," *Strategic Management Society Annual Conference*, San Francisco.
- 54. Gurbaxani V., Melville N., and Kraemer K., 1998, "Disaggregating the Return on Investment to IT Capital," *International Conference on Information Systems*, Helsinki, Finland, December.

#### Articles Under Review

- 1. Rush, D., Fuller, C., Melville, N., 2023. "Market Value of Carbon Management Systems: An International Investigation," revise and resubmit, *Information & Management*.
- Baptista, J., Chasin, F., Horita, F., Ixmeier, A., Johnson, S., Ketter, W., Kranz J., Miranda, S., Nan, N., Pentland, B., Recker, J., Sadeghiforoushani, S., Sarker, S., Sarker, S., Sutanto, J., Wang., P., Wilopo, W., Boh, W., Melville, N., 2023, "Digital Resilience for the Climate Crisis: Theoretical Perspectives and Ideas for Future Information Systems Research," under review, *MIS Quarterly*.

#### Manuscripts in Preparation

- 1. Bluhm, S, Staudt, P, Melville, N., 2023, "Energy Affordability: Analysis of the Effect of Digital Technology on Self-Efficacy in the Smart Meter Context," working paper in development.
- 2. Melville, N., 2023, "Digital Platforms for Sustainable Development: Theory Insights in Support of Design Principles," working paper.

#### **Other Publications**

- 1. Melville, N., 2018, "Managing in the Fourth Industrial Age," *BizEd*, 2018
- 2. Melville, N., 2014, "How to Think about MOOCS?" EDUCAUSE, 2014.
- 3. Melville, N., 1998, Review of <u>The Computer Revolution: An Economic Perspective</u>, by Daniel Sichel, *Social Science Computer Review*, Vol. 16, No. 4, Winter, pps. 443 449.

#### PRESENTATIONS

"Implications of AI for University Career Development Services," March 21, 2023.

"Advancing Environmental Sustainability in the Fourth Industrial Revolution," American University, March 24, 2023.

"Keeping Humans in the Loop: A New Conceptualization of the Fourth Industrial Revolution," Temple University, April 1, 2022.

"Generating Business Value from Machine Interfaces: Models of Efficiency, Focus, & Transformation," Digital Infrastructure, Innovation and Economy Series London (DIIESL) -INDEX, IRIS and the LSE, May 2021.

"Roadblocks to Implementing Modern Digital Infrastructure: Exploratory Study of API Deployment in Large Organizations," Hawaii International Conference on System Sciences, January 2021.

"Monetizing API Infrastructure: Insights from Organizations & Leaders," SIM Advanced Practices Council, October 2020.

"Cloud Computing and APIs," MBA Tech Club, Ross School of Business, University of Michigan, October 2019.

"Effective Adoption & Implementation of APIs: Achieving Speed to Market, Lower Costs, & Increased Revenue," Society for Information Management, Advanced Practices Council, Chicago, October 2019.

"The Platform Within: Organizing to Expose Resources Via Digital Interfaces for Competitive Advantage," IESE Business School, Barcelona, Spain, June 2019.

"Cloud Computing Basics: Connecting Via APIs," BBA Tech Club, Ross School of Business, University of Michigan, February 2019.

"Fourth Industrial Age Organizing: Enabling Role of APIs," Queen's University, January 2019.

"Big Data Ecosystems and Applications," Big Data Day, Ross School of Business, University of Michigan, January 2019.

"Navigating Career Paths in the Emerging Fourth Industrial Age," MBA Tech Club, Ross School of Business, University of Michigan, November 2018.

Melville, N., "ROI of AI: Value and Operational Implications of Artificial Intelligence," *INFORMS* Artificial Intelligence Cluster, 2018.

"Digital Transformation and IT Management," PI Seminar, Ross School of Business, University of Michigan, November 2017.

"Sustainable Enterprise in the Fourth Industrial Age: Implications for Low-Carbon Operations" HEC Montréal - GReSI (Groupe de recherche en systèmes d'information), May 2017.

"Sustainable Enterprise in the Fourth Industrial Age," University of Surrey, Centre for Environment and Sustainability (CES), April 2017.

"Research on IT & Innovation," panelist at ISDSA Meeting, San Diego, CA, August 2016.

"Digital Innovation: Review and Synthesis," Sauder School of Business, University of British Columbia, April 2016.

"IS Innovation: Understanding the Past to Chart the Future," Terry College of Business, University of Georgia, October 2015.

"Digital Fitness: Four Principles for Successful Development of Digital Initiatives," 48th Hawaii International Conference on System Sciences, January 2015.

"Can Information Systems Enhance Carbon Productivity? Empirical Analysis of Global Corporations," Research Seminar, Desautels Faculty of Management, McGill University, Montreal CA, October 24, 2014.

"Future of Information Systems and Opportunities for IS Researchers," Doctoral Student Corner, Americas Conference on Information Systems, Savannah, GA, August 9, 2014.

"Crowd-Sourced Peer Feedback (CPF) for Learning Community Engagement: Results and Reflections from a Pilot Study," 47th Hawaii International Conference on System Sciences, January 2014.

"Digital Business," PI Seminar, Ross School of Business, University of Michigan, November 15, 2013.

"Information Systems for Collaborating versus Transacting: Impact on Plant Performance in the Presence of Demand Volatility," MIS Seminar, UT Dallas, February 2013.

"Information Systems for Managing Energy and Carbon Emission Information: Empirical Analysis of Adoption Antecedents," 46th Hawaii International Conference on System Sciences, January 2013.

"Green Information Systems: Directives for the IS Discipline," panelist, International Conference on Information Systems, Orlando, Florida, December 19, 2012.

"Emerging IS Topics on Environmental Sustainability," Paul Merage School of Business, UC Irvine, IT Teaching Workshop, June 8, 2012.

"Adoption of Energy and Carbon Emission Management Systems: Exploratory Analysis of Global Organizations," Robert H. Smith School of Business, University of Maryland, DO & IT Seminar Series, January 27, 2012.

"Systematic Service Innovation in Organizations: EDCI - A Template for Human-Centered Design of E-Services," 45th Hawaii International Conference on System Sciences, January 5, 2012.

"Doing Influential Research" BIT Seminar, Stephen M. Ross School of Business, University of Michigan, November 11, 2011.

"Why Do Firms Adopt Systems for Managing Carbon Emission Information? Empirical Analysis of Global Organizations," Sauder School of Business, University of British Columbia, October 7, 2011.

"Why Do Firms Adopt Systems for Managing Carbon Emission Information? Empirical Analysis and Implications for Designing Information Systems for Enhancing Environmental Sustainability," Weatherhead School of Management, Case Western Reserve University, May 14, 2011.

"Why Do Firms Adopt Systems for Managing Carbon Emission Information?" Hosmer Seminar, Stephen M. Ross School of Business, University of Michigan, March 22, 2011.

"Self-selection Models in IS Research," BIT Seminar, Stephen M. Ross School of Business, University of Michigan, February 7, 2011.

"Carbon Management Systems and Carbon Emissions: Empirical Analysis of Adoption and Impacts," University of Georgia, December 3, 2010.

"Business, Climate Change, and Innovation: Deconstruction and Re-imagination," Interdisciplinary Committee on Organizational Studies (ICOS), University of Michigan, November 19, 2010.

"Information Systems for Environmentally Sustainable Strategies," (Panelist), Net Impact Conference, October 29, 2010,

"Environmental Sustainability in the Digital Age," Erb Third Year Seminar Series, University of Michigan, April 12, 2010,

"Theories Used in Information Systems Research: Identifying Theory Networks in Leading IS Journals," Poster session, International Conference on Information Systems, Phoenix, AZ, December 17, 2009,

"Information Systems for Environmental Sustainability: A Framework for Research and Practice," Erb Colloquium Series, University of Michigan, November 30, 2009.

"Design Thinking: The Missing Link in Business Schools? Reflections from Research and Teaching," Design Science Colloquium, University of Michigan, November 19, 2009.

"The Role of Information Systems in Business: Lessons from Research, Teaching, and Managing," Preparation Initiative Professional Development Seminar, University of Michigan, November 13, 2009.

"IS Innovation for Environmental Sustainability: Applications to Sustainable Urban Mobility," SMART Global Research Collaborative Meeting, SMART 2009: *Moving Minds: The Next Transportation Infrastructure*, University of Michigan, November 12, 2009.

"IS Innovation for Environmental Sustainability," BIT Group Seminar, University of Michigan. October 29, 2009.

"Organizational Performance Impacts of Innovation Misfit," Hosmer Luncheon, Stephen M. Ross School of Business, University of Michigan, October 28, 2008.

"Preserving Data Utility While Minimizing Identity Disclosure Risk," CREW Seminar, School of Information, University of Michigan, February 19, 2008.

"Innovation Misfit and Organizational Performance: A Conceptual and Empirical Analysis," University of California Irvine, October 30, 2007.

"To Share or Not to Share: Synthetic Data Accelerate Knowledge Generation in Management and Social Science Research," Oxford Internet Institute, Oxford University, May 10, 2007.

"To Share or Not to Share: Synthetic Data Accelerate Knowledge Generation in Management Research" Hosmer Luncheon, Stephen M. Ross School of Business, University of Michigan, April 3, 2007.

"Synthetic Data Archives: Advancing Management Research" BIT Group, Stephen M. Ross School of Business, March 23, 2007.

"Global Sourcing of IT: Necessary Evil or Blessing in Disguise" at the International Conference on Information Systems, Milwaukee, Wisconsin, December 10-13, 2006 (Panel co-chair).

"Analyzing IT-based Innovation: The Computer Network Use Supplement to the Annual Survey of Manufacturers," BIT Group, Stephen M. Ross School of Business, September 30, 2005.

"Information Technology, Business Value, and the Competitive Environment," Big Ten IS Research Symposium, University of Wisconsin – Milwaukee, April 29-30, 2005.

"Information Technology & Organizational Performance: An Industry Analysis" Haskayne School of Business, University of Calgary, March 4, 2005.

"Information Technology & Organizational Performance: Why Do IT Returns Vary Across Industries?," Stephen M. Ross School of Business, University of Michigan, January 13, 2005.

"Solving the Spam Problem: An Information-Economics Approach," CRITO, UC Irvine, August 12, 2004.

"Organizational Implications of Spam," Boston College, May 11, 2004.

"Electronic Frontiers in Foreign Exchange," Operations and Strategic Management Research Colloquium, Boston College, November 7, 2002.

"An Industry Analysis of IT Value," Carroll School of Management, Boston College, October 20, 2000.

"An Empirical Analysis of IT Value Using a Translog Variable Cost Function," Stern School of Management, New York University, March 23, 2000.

"IT Value and Industry Effects," University of Texas, Dallas, February 25, 2000.

"IT Value, Unionization, and Competitiveness," Center for Research on Information Technology and Organizations, UC Irvine, February 18, 2000.

## SERVICE ACTIVITIES

Generative Artificial Intelligence Advisory Committee (GAIA), Provost Laurie McCauley and CIO Ravi Pendse Co-Sponsors, Charge to provide recommendations for how University of Michigan should approach evaluation, use, and development of emergent AI, 2023

Guest Associate Editor, "Frontiers in Digital Transformation Research," *Information Systems Journal* (ISJ).

Editorial Review Board: Journal of the Association for Information Systems (2018-present)

Member of Tenure Project Conference Planning Committee, IS/OM Discipline along with Noah Gans (Wharton) and Sonja Wiley (LSU).

Mentor, MIS Quarterly Scholarly Development Academy focused on scholars in the Global South and members of indigenous and underserved ethnic or racial groups in high-income countries.

Reviewer, reviewer for the Dow Fellows Program.

Launch Committee Member for Professor Aditi Verma, other members including Todd Allen, Glenn F. and Gladys H. Knoll Department Chair of Nuclear Engineering and Radiological Sciences; Xiaodong Sun, Professor of Nuclear Engineering and Radiological Sciences; and Tanya Rosenblat, Professor of Information, School of Information and Professor of Economics, Department of Economics, 2022-2023

University of Michigan, Ross School of Business, Dean's Search Advisory Committee, 2021-2022

Track Chair, DESRIST Conference, 2022, 2023

TO 300 Core Class Coordinator, Ross BBA Program

DEI Committee Member, Ross School (2017-present) Collaborated with other members to support and promote DEI initiatives at Ross.

AMCIS mini-track co-chair on Cloud Computing and Sustainability, 2022

DEI Committee Member, ISD, College of Engineering (2021-present) Collaborated with other members to support and promote DEI initiatives at ISD/CoE

Associate Editor, International Conference on Information Systems, 2020-2021.

Special Issue Editorial Board: Journal of the Association for Information Systems Special Issue on Digital Transformation (2020-2021)

Association for Information Systems Sandra Slaughter Awards Committee member (2019-2020)

Associate Editor, Management Science Special Issue, "Business and Climate Change" (2019-present).

DEI Curriculum Task Force (Winter semester 2021)

PTMBA Online Program Core Curriculum Task Force, Ross School (2017-2019) Collaborated to develop plans for an online MBA program.

Led a panel discussion at the 2019 Tauber Global Operations Conference focusing on "Industry 4.0 in the Upcoming Decade."

Special Issue Co-Editor, AIS Transactions on HCI (THCI): "AI Fairness, Trust and Ethics," (2019-present)

Community Values Committee, (2018-present) Served on several subcommittees for specific contexts.

Information Technology Council member-CIO Office, University of Michigan (2019-present)

Faculty Grievance Board Panel Candidate (2018-present)

TO 300 Core Course Coordinator, 2016-present.

MBA Tech Club, Informal Faculty Advisor (2018-present) Hold tech bootcamp sessions.

BBA Tech Club, Informal Faculty Advisor (2018-present) Hold tech bootcamp sessions.

Big Idea Working Group member, Office of the Provost (2018-2019) Member of working group charged with developing a plan for new University initiative.

University Library Council Committee Member (2014 - 2019) Advise regarding allocation of funds, formulating policies, developing educational values. "ROI of AI" Track Chair, INFORMS, Artificial Intelligence Cluster, 2018.

Chair, SIG Green Strategic Planning Committee, 2019

Chair, SIG Green Best Paper Award Committee, 2018-2019

Editorial Board Journal of AIS (2014-present).

Guest Associate Editor MIS Quarterly (2018-2019)

Reviewer for Information Systems Research, Journal of MIS, MIS Quarterly.

Judge, Michigan Ross Datathon, April 13, 2018.

Teaching Effectiveness Task Force Member, Ross School (2017-2018) Collaborated with other members to develop proposals to enhance teaching effectiveness.

Hybrid MBA Advisory Committee Member, Ross School (2017-2018) Collaborated with other members to develop initial plans for a hybrid MBA program.

Research Computing Interview Committee, Ross School (2017) Collaborated to refine research computing needs, identify ideal candidate skills and background, and interview candidates.

School of the Environment and Sustainability (SEAS), themes committee member (2017) Collaborated with other members to explicate disciplinary clusters and themes.

Search Committee Member, VP of IT and CIO, University of Michigan (Summer 2016)

University of Michigan Alumni Association, Strategic Council to Steve Grafton, President and CEO, regarding data science and data-driven organizing (2016-2017) Also, led two workshops for Alumni Relations Council (ARC) on data science and data-driven organizations.

Faculty Advisory Council Member, Academic Innovation, University of Michigan (2016 - ) Strategic Advice to University of Michigan Vice Provost for Digital Educational Initiatives

Digital Innovation Advisory Group Committee Member (2013 - 2016) Strategic Advice to University of Michigan Vice Provost for Digital Educational Initiatives

Associate Editor, MIS Quarterly (2013-2017)

Associate Editor, Journal of AIS (2014-2016)

BBA Faculty Committee (2012-)

Provost's Online Policy and Strategy (POPS) Committee Member (2013-2015)

Reviewer for Dow Masters/Professional Sustainability Fellowship applications (2013-)

Committee Chair, Dow Fellowship Selection Committee, Fall 2012.

Discussion Leader, "The Michigan Difference in Online Learning," President's Advisory Group Meeting, October 2012.

Committee Member, BBA Program Committee, 2012-2013.

Committee Member, Classroom Delivery Innovation, Summer 2012.

Session Chair, International Conference on Information Systems, Shanghai, China, December, 2011.

Discussant, IT Investment, Workshop on Information Systems and Economics, Shanghai, China, December 2011.

Conference Co-Chair for the "2011 IT Teaching Workshop" held at Stephen M. Ross School of Business (2011).

Guest Editor, Special Issue, *MIS Quarterly*, "Information Systems and Environmental Sustainability," 2011 (deadline for submissions is April 2011).

Conference Co-Chair for the "Big 10 IS Research Symposium" held at Stephen M. Ross School of Business (2010).

Guest Associate Editor for the Journal of the Association for Information Systems (JAIS) (2010).

Discussant, Workshop on Information Systems and Economics, Phoenix, AZ, December 2009.

Associate Editor, Special Issue Editorial Board, *MIS Quarterly*, "Cocreating IT Value: New Capabilities and Metrics for Multi-Firm Environments," 2009-2010.

Guest speaker for "The Preparation Initiative," course led by Prof. Frank Yates to support economically disadvantaged students in becoming business leaders, November 13, 2009.

Track Chair, Workshop on Information Systems and Economics, Paris, France, December, 2008.

Guest speaker for "The Preparation Initiative," course led by Prof. Frank Yates to support economically disadvantaged students in becoming business leaders, October 19, 2008.

BIT PhD Advisor, Doctoral Student Committee, academic year 2008-2009.

Participant, AACSB Accreditation, December 2007.

Invited talk at Worldwide Club Day to the Los Angeles Ross Alumni: "From Automation to Innovation: Global Perspectives on IT Services & Business Value" in Los Angeles, CA on September 19, 2007.

MBA Committee, BIT Group, 2007.

Faculty Sponsor, University Research Opportunity Program, 2006-2007.

Track chair, IT Business Value and Innovation Track, 37th Annual Meeting of the Decision Sciences Institute held in San Antonio, Texas on November 18-21, 2006.

Discussant, Workshop on Information Systems and Economics, UC Irvine, December, 2005.

Founding Faculty Advisor, Boston College Students in Free Enterprise (2002 – 2004), growing SIFE from a few students to an integral component of the Carroll School of Management.

Committee Member, MS in Service Operations Feasibility Study (2003), setting objectives, benchmarking, communicating, and planning the development of a potential masters program.

Faculty Liaison, Boston College Entrepreneurship Society (2002 – 2004), advise and support BCES on mission, speakers, marketing, etc.

Admitted Students Orientation Speaker (BC) (2004)

College Bound High School Speaker (BC) (2003)

Undergraduate Advisor, BC Carroll School of Mgmt. (2002 - 2004)

#### **DOCTORAL COMMITTEE SERVICE & DOCTORAL STUDENT COLLABORATION**

2009 2010 2011 2012 2011 2012 2013 2014	Ali Tafti, Ali Tafti, Lian Jian Min-Seok Pang, Terence Saldanha, Sanghee Lim Min-Seok Pang, Terence Saldanha, Sanghee Lim Terence Saldanha, Sanghee Lim Elliott Manzon Elliott Manzon Suresh Malladi, Elliott Manzon Suresh Malladi, Daniel Rush Daniel Rush	BIT Area, Ross School of Business BIT Area, Ross School of Business, SI BIT Area, Ross School of Business BIT Area, Ross School of Business BIT Area, Ross School of Business Design Science BIT Area, Ross School of Business BIT Area, Ross School of Business BIT Area, Ross School of Business
2015 2016	Daniel Rush	BIT Area, Ross School of Business
2010		

2017		
2018		
2019	Meira Chefitz	<b>Design Science</b>
2020		
2021		
2022	Hannah Shaul	Design Science
2023	Hannah Shaul	Design Science

## TEACHING

# IT Strategy for Supply Chain Management and Logistics

2012 - Present	University of Michigan Developer, Instructor Core Masters of Supply Chain Management Course				
Business Information Systems					
2015 - Present	University of Michigan Core BBA Course	Developer, Instructor			
Information Systems					
2005-2020	University of Michigan Core Evening MBA Course	Developer, Instructor			
Service Innovation Management					
2008-2013	University of Michigan BBA Elective, MBA Elective	Developer, Instructor			
Information Systems Research Doctoral Seminar					
2007-2012	University of Michigan Doctoral Required Core Clas	Developer, Instructor s			
Design Science Doctoral Seminar					
2019-2022	University of Michigan Doctoral Required Core Clas	Co-Developer, Instructor			

# EXECUTIVE EDUCATION AND CONSULTING

# Topics

Digital transformation and innovation, AI-based business models, fourth industrial revolution, digital environmental sustainability, digital platforms.

### **Example Firms**

Bouygues Immobilier, Riot Games, Alumni Association of the University of Michigan, Society for Information Management APC, Google, ICBC, Indeed, Microsoft.

## **PROFESSIONAL MEMBERSHIPS**

Association for Computing Machinery

Association for Information Systems

PhD Project IS Doctoral Student Association (1996-2001)