

Adam J. Mersereau

PERSONAL

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Kenan-Flagler Business School
University of North Carolina
Chapel Hill, NC 27599-3490

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Research interests: dynamic optimization; parameter uncertainty and estimation; applications in retail operations management, inventory management, e-commerce, and revenue management.

EDUCATION

Massachusetts Institute of Technology

Ph.D. in Operations Research, September 2003.
Dissertation title: “Dynamic Optimization for Adaptive Customized Marketing”
Dissertation committee: Dimitris Bertsimas (advisor), Nitin Patel, John Tsitsiklis.

Princeton University

B.S.E in Electrical Engineering, *summa cum laude*, June 1996.
Certificate in Engineering and Management Systems, June 1996.

PROFESSIONAL EXPERIENCE

Kenan-Flagler Business School, University of North Carolina, Chapel Hill, NC, USA

<i>Area Chair of Operations</i>	2022 – present
<i>Professor of Operations</i>	2018 – present
<i>Sarah Graham Kenan Scholar</i>	2010 – present
<i>Associate Dean of MBA Programs</i>	2018 – 2019
<i>Associate Professor of Operations</i>	2013 – 2018
<i>Assistant Professor of Operations, Technology, and Innovation Management</i>	2007 – 2013

Graduate School of Business, University of Chicago, Chicago, IL, USA

<i>Assistant Professor of Operations Management</i>	2003 – 2007
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Sloan School of Management, Massachusetts Inst. of Technology, Cambridge, MA, USA

<i>Graduate Student, Research Assistant, Teaching Assistant</i>	1998 – 2003
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Goldman, Sachs & Company, New York, NY, USA

<i>Analyst, Fixed Income Research Department</i>	1996 – 1998
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HONORS

2009 *Manufacturing and Service Operations Management* Best Paper Award for “Retail Inventory Management when Records are Inaccurate” with Nicole DeHoratius and Linus Schrage.

Weatherspoon Award for Excellence in MBA Teaching, awarded by Kenan-Flagler Business School, 2011 and 2017. Awarded to one faculty member annually.

Award for Teaching Excellence from the Executive MBA Weekend Classes of 2014 and 2018, Kenan-Flagler Business School. Awarded to one faculty member annually.

Gerald Barrett Faculty Award for contributions to the MBA program at the Kenan-Flagler Business School, 2016.

Outstanding Instruction in the MBA Core Curriculum, awarded by Kenan-Flagler Business School MBA Classes of 2018, 2015, 2014, 2013, 2011, 2009. Awarded to one faculty member annually.

Oustanding Dedication in the MBA Core Curriculum, awarded by Kenan-Flagler Business School MBA Class of 2010. Awarded to one faculty member annually.

BIBLIOGRAPHY

Refereed Journal Articles

DeHoratius, N., A. Holzapfel, H. Kuhn, A. J. Mersereau, M. G. Sternbeck. 2023. Evaluating Count Prioritization Procedures for Improving Inventory Accuracy in Retail Stores. *Manufacturing and Service Operations Management* 25 (1) 288–306.

Çetin, O., A. J. Mersereau, A. Parlakturk. 2020. Management and Effects of In-Store Promotional Displays. *Manufacturing and Service Operations Management* 22 (3) 481–494.

Ban, G.-Y., J. Gallien, A. J. Mersereau. 2019. Dynamic Procurement of New Products with Covariate Information: The Residual Tree Method. *Manufacturing and Service Operations Management* 21 (4) 798–815.

Chen, L., A. J. Mersereau, Z. Wang. 2017. Optimal Merchandise Testing with Limited Inventory. *Operations Research* 65 (4) 968–991.

Wang, Z., A. J. Mersereau. 2017. Bayesian Inventory Management with Potential Change-Points in Demand. *Production and Operations Management* 26 (2) 341–359.

Mersereau, A. J. 2015. Demand Estimation from Censored Observations with Inventory Record Inaccuracy. *Manufacturing and Service Operations Management* 17 (3) 335–349.

Gallien, J., A. J. Mersereau, A. Garro, A. Dapena Mora, M. Nóvoa Vidal. 2015. Initial Shipment Decisions for New Products at Zara. *Operations Research* 63 (2) 269–286.

- Featured in UNC Kenan-Flagler’s *ROI* magazine. (“That’s Sooo Last Week,” Fall 2014)

Mersereau, A. J. 2013. Information-Sensitive Replenishment when Records Are Inaccurate. *Production and Operations Management* 22 (4) 792–810.

Adelman, D., A. J. Mersereau. 2013. Dynamic Capacity Allocation to Customers Who Remember Past Service. *Management Science* 59 (3) 592–612.

Mersereau, A. J., D. Zhang. 2012. Markdown Pricing with Unknown Fraction of Strategic Customers. *Manufacturing and Service Operations Management* 14 (3) 355–370.

Mersereau, A. J., P. Rusmevichientong, J. N. Tsitsiklis. 2009. A Structured Multiarmed Bandit Problem and the Greedy Policy. *IEEE Transactions on Automatic Control* 54 (3) 2787–2802.

Adelman, D., A. J. Mersereau. 2008. Relaxations of Weakly Coupled Stochastic Dynamic Programs. *Operations Research* 56 (3) 712–727.

DeHoratius, N., A. J. Mersereau, L. Schrage. 2008. Retail Inventory Management when Records Are Inaccurate. *Manufacturing and Service Operations Management* 10 (2) 257–277.

- Winner of M&SOM journal’s 2009 Best Paper Award.
- Featured in UNC Kenan-Flagler’s *ROI* magazine. (“Retailers’ Dirty Little Secret: Inventory discrepancies can cost retailers money in lost sales,” Spring 2010)

Bertsimas, D., A. J. Mersereau. 2007. A Learning Approach for Interactive Marketing to a Customer Segment. *Operations Research* 55 (6) 1120–1135.

Invited Book Chapter

Chen, L. and A. J. Mersereau. 2015. Analytics for Operational Visibility in the Retail Store: The Cases of Censored Demand and Inventory Record Inaccuracy. N. Agrawal and S. Smith (eds.). *Retail Supply Chain Management* (2nd ed.). Springer Science+Business Media, LLC. 79–112.

Working Papers

Bernstein, F., B. Keskin, A. J. Mersereau, S., Ziya, M. Wood. 2023. Data-driven Population Tracking in Large Service Systems.

Ziaei, Z., A. J. Mersereau, S. Emadi, V. B. Gargeya. 2023. Inferring Consideration Sets from Heatmap Data. Under review at *Management Science*

Çetin, O., A. J. Mersereau, A. Parlakturk. 2023. Retailer and Manufacturer Perspectives on Trade Deals Involving In-Store Promotional Displays. Under review at *Manufacturing and Service Operations Management*

Natarajan, K., D. Kostamis, A. J. Mersereau. 2012. Strategic Demand Information Sharing Between Competitors.

Grants

Triangle Impact Challenge: FlyRDU. 2021. Investigator. \$50,000.

Peer-Reviewed Conference Proceedings

Mersereau, A. J., P. Rusmevichientong, J. N. Tsitsiklis. 2008. A Structured Multiarmed Bandit Problem and the Greedy Policy. *47th IEEE Conference on Decision and Control* 4945-4950.

Bertsimas, D., A. J. Mersereau, N. R. Patel. 2003. Dynamic Classification of Online Customers. *2003 SIAM International Conference on Data Mining (SDM03)* 107-118.

Peer-Reviewed Conference Presentations

Initial Shipment Decisions for New Products at Zara. Manufacturing and Service Operations Management (MSOM) Supply Chain SIG Workshop, Seattle, June 2014.

Demand Estimation from Censored Observations with Inventory Record Inaccuracy. Manufacturing and Service Operations Management (MSOM) Conference, New York, June 2012.

Dynamic Capacity Allocation to Customers Who Remember Past Service. Manufacturing and Service Operations Management (MSOM) Service SIG Workshop, Ann Arbor, MI, June 2011.

Markdown Pricing with Unknown Fraction of Strategic Customers. Manufacturing and Service Operations Management (MSOM) Conference, Boston, June 2009.

Information-Sensitive Replenishment When Records Are Inaccurate. Manufacturing and Service Operations Management (MSOM) Conference, College Park, MD, June 2008.

Retail Inventory Management When Records are Inaccurate. Manufacturing and Service Operations Management (MSOM) Conference, Chicago, IL, June 2005. (presented with Nicole DeHoratius)

Other Invited Presentations

- “Evaluating Count Prioritization Procedures for Improving Inventory Accuracy in Retail Stores”
 - INFORMS Annual Meeting, Virtual, November 2020.
- “Optimal Worker Assignment with Learning Curves”
 - INFORMS Annual Meeting, Houston, TX, October 2017.
- “Dynamic Procurement of New Products with Covariate Information”
 - INFORMS Annual Meeting, Houston, TX, October 2017.
- “Optimal Merchandise Testing with Limited Inventory”
 - University of Texas at Dallas, Naveen Jindal School of Management, October 2016.
 - University of Minnesota, ISyE Department, December 2015.
 - Northwestern University, Kellogg School of Management, October 2015.
 - London Business School, February 2015.
- “Bayesian Inventory Management with Potential Change-Points in Demand”
 - INFORMS Annual Meeting, San Francisco, CA, November 2014.
- “Demand Estimation from Censored Observations with Inventory Record Inaccuracy” (and related)
 - University of California, Los Angeles, Anderson School of Management, May 2013.
 - University of Florida ISOM Workshop, February 2013.
 - CERET Retail Workshop, Santiago, Chile, January 2013.
 - INFORMS Annual Meeting, Phoenix, AZ, October 2012.
 - INFORMS Annual Meeting, Charlotte, NC, November 2011.
 - UNC CIBER Junior Faculty Roundtable, April 2011.
- “Initial Shipments of New Products at Zara”
 - Kümpem Forum Retail Conference, Istanbul, May 2016.
 - Manufacturing and Service Operations Management (MSOM) Supply Chain SIG Workshop, Seattle, June 2014.
 - DIIE/LBS Workshop on Operational Innovation, London, UK, July 2013.
 - University of Chicago, Booth School of Business, December 2012.
 - Southern Methodist University, Cox School of Business, November 2012.
 - University of California Berkeley, Haas School of Business, October 2012.
 - University of North Carolina, Kenan-Flagler Business School, April 2012.
 - POMS Annual Conference, Reno, NV, May 2011.
 - INFORMS Annual Meeting, Austin, TX, November 2010.
- “Inventory Record Inaccuracy and Dynamic Cycle Counting”
 - Consortium for Operational Excellence in Retailing, Harvard University, May 2011.
- “Dynamic Capacity Allocation to Customers Who Remember Past Service”
 - Universidad de Chile, January 2013.
 - INFORMS Annual Meeting, Charlotte, NC, November 2011.
 - University of Michigan Ross School of Business, November 2011.
 - NYU Stern School of Business, November 2010.
 - INFORMS Annual Meeting, Austin, TX, November 2010.
 - Duke-UNC Operations Management Research Workshop, April 2010.
 - INFORMS Annual Meeting, San Diego, CA, October 2009.

“Markdown Pricing with Unknown Fraction of Strategic Customers” (and related)

- INFORMS Annual Meeting, San Diego, CA, October 2009.
- INFORMS Annual Meeting, Washington, DC, October 2008.

“A Structured Multiarmed Bandit Problem and the Greedy Algorithm”

- University of Texas at Austin, McCombs School of Business, March 2009.
- Duke University, Fuqua School of Business, November 2008.
- INFORMS Annual Meeting, Seattle, November 2007.

“Information-Sensitive Replenishment When Records Are Inaccurate” (and related)

- Columbia University IEOR/DRO, April 2009.
- University of North Carolina, Department of Operations Research, April 2009.
- Massachusetts Institute of Technology, Sloan School of Management, November 2008.
- University of Florida ISOM/ISE, February 2008.
- INFORMS Annual Meeting, Seattle, November 2007.
- University of Illinois Urbana-Champaign, IESE Department, April 2007.
- Washington University in St. Louis, Olin School of Business, March 2007.
- University of North Carolina, Kenan-Flagler Business School, January 2007.
- INFORMS Annual Meeting, Pittsburgh, November 2006.
- University of Chicago, Graduate School of Business, November 2006.

“Retail Inventory Management When Records are Inaccurate” (and related)

- “Cutting Edge” Speaker Series, Kenan-Flagler Business School, University of North Carolina, December 2009.
- Consortium for Operational Excellence in Retailing (COER), April 2006 (teleconference).
- Production and Operations Management Society (POMS) Annual Conference, Chicago, April 2005 (presented with Nicole DeHoratius).

“Relaxations of Weakly Coupled Stochastic Dynamic Programs”

- International Symposium on Mathematical Programming (ISMP), Rio de Janeiro, Brazil, Aug. 2006.
- Georgia Institute of Technology, ISyE Department, January 2006.
- Northwestern University, IEOR Department, November 2004.
- INFORMS Annual Meeting, Denver, October 2004.

“A Learning Approach for Interactive Marketing to a Customer Segment” (and related)

- Lehigh University, IMSE Department, February 2003.
- University of Chicago, Graduate School of Business, February 2003.
- University of North Carolina, Department of Statistics and Operations Research, February 2003.
- University of Toronto, Rotman School of Management, February 2003.
- Duke University, Fuqua School of Business, January 2003.
- INFORMS Annual Meeting, San Jose, CA, November 2002.

“Dynamic Classification of Online Customers”

- SIAM International Conference on Data Mining, San Francisco, April 2003.

TEACHING RECORD

PhD Students Supervised

Zahra Ziaei, 2019–present

- Research topic: “Estimating Consider-then-Choose Choice Models”

Oğuz Çetin, 2014–2019 (co-supervised with Ali Parlakturk)

- Dissertation topic: “Novel Assortment Problems in Retail Operations.”
- Completion: Summer 2019.
- Initial employer: Kelley School of Business, Indiana University.

Zhe Wang, 2010–2015

- Dissertation title: “Models for Retail Inventory Management with Demand Learning”
- Completed Summer 2015.
- Current employer: LinkedIn Corporation

Other PhD projects supervised

- Karthik Natarajan, 2008-2010
- Jyoti Ray, 2009-2010
- Ming Jin, 2007-2008

Full-time MBA program, Kenan-Flagler Business School, University of North Carolina

- Twice awarded Weatherspoon Award for Excellence in MBA Teaching, 2011 and 2017.
- Awarded Outstanding Instruction in the MBA Core Curriculum by Classes of 2018, 2015, 2014, 2013, 2011, 2009.
- Awarded Outstanding Dedication in the MBA Core Curriculum by Class of 2010.
- Co-instructor of Analytical Skills Workshop course “Analytical Tools”, Summers 2015–2021.

MBA715 “Data Analytics and Decision Making”, 2019–present

- 1.5-credit MBA core course on business analytics, advanced regression, and machine learning

MBA706A “Thinking and Communicating with Data”, 2020–2021, 2023

- 1.5-credit MBA elective course on data visualization and critical thinking
- Co-designed and co-taught with Professor Patty Harms

Business Foundations: Business Statistics, 2022

- 10-unit online, asynchronous preparation course on probability, statistics, and data analysis for incoming MBA students
- Designed and recorded, 2022

Analytical Skills Workshop “Analytical Tools”, 2016–2021

- Summer preparation course on probability, statistics, and data analysis for incoming MBA students
- Delivered online for 2020 and 2021
- Co-taught with Brad Staats and Tarun Kushwaha, 2016-2019
- Co-taught with Brad Staats, 2020 (online)
- Co-taught with Ali Parlakturk and Srirani Venkataraman, 2021

MBA714 “Business Statistics and Analytics”, 2015–2017

- 1.5-credit MBA core course on business statistics and linear regression.
- Developed as part of MBA curriculum redesign, 2015.
- Course transferred to Profs. Saravanan Kesavan and Ali Parlakturk beginning in Fall 2018.

MBA706 “Data Analytics: Tools and Opportunities”, 2014–2015

- 1.5-credit MBA elective course on business analytics
- New course design
- Elective Course Teaching All-Star, 2014-2015.
- Course transferred to Professor Seyed Emadi beginning in Spring 2016.

MBA700 “Analytical Tools for Decision Making”, 2007–2014

- 2.5-credit elective course on business statistics, linear regression, decision analysis, and Monte Carlo simulation.
- Redesigned and renamed to MBA714 in 2015.

Weekend Executive MBA program, Kenan-Flagler Business School, University of North Carolina

- Award for Teaching Excellence from Weekend Executive MBA Classes of 2014, 2018.

MBA700 “Analytical Tools for Decision Making”, 2013-2022

- 3-credit core course on business statistics, linear regression, and Monte Carlo simulation.
- Moved to “blended” format of live and recorded materials, 2014.

MBA714 “Business Statistics and Analytics”, 2023–present

- 2-credit core course on business statistics and linear regression
- Asynchronous materials designed and recorded with Prof. Wendell Gilland, 2022.

MBA@UNC online MBA program, Kenan-Flagler Business School, University of North Carolina

MBA700 “Analytical Tools”, 2011–present

- 4-credit core course on probability, business statistics, linear regression, decision analysis, and Monte Carlo simulation.
- Fully revised in July 2019; partially revised 2014, 2022.
- Development lead professor (with Alan Neebe), 2011–2019.
- Developed and introduced among first four online courses, Fall 2011.
- Section instructor, Winter 2018. Session effectiveness: 4.73/5.

MBA706 “Data Analytics”, 2015–2021

- 4-credit elective course on business analytics and marketing analytics.
- Development lead professor (with Tarun Kushwaha).
- Inaugural section instructor, Fall 2015.

“Applied Analytics: Big Data Motivation and Challenges,” 4-hour immersion session, San Francisco, March 2015.

Evening Executive MBA program, Kenan-Flagler Business School, University of North Carolina

MBA716A “Analytics & Machine Learning for Managerial Decisions”, 2023

- 2.0-credit elective course on descriptive, predictive, and prescriptive analytics
- Co-designed and co-taught with Seyed Emadi and Vinayak Deshpande

MBA703 “Operations Management”, 2008–2011

- 3-credit core course on process analysis and supply chain management

Executive Development, Kenan-Flagler Business School, University of North Carolina

- Session “Understanding Machine Learning & AI” as part of 4-day program “Understanding Data Analytics for Senior Executives”. Delivered to US Army March 2023, April 2023, July 2023.
- “Leading with Analytics” May 2021. 2-day custom program for U.S. Marine Corps, designed with Brad Staats. Delivered online via Zoom.
- “Leading with Analytics: Managing the Human-Machine Interface,” July 2020. 1.5-hour custom session for General Mills. Delivered online via Zoom.
- “Leading with Analytics” June 2018. 2-day custom program for Exxon-Mobil, designed with Tarun Kushwaha and Brad Staats.
- “Crunchy Questions for Audit Effectiveness,” Nov 2016 - Feb 2017. 4-hour custom session for MetLife Insurance, designed with Tarun Kushwaha and Brad Staats. Delivered online via Adobe Connect platform.
- “Big Data and Business Analytics,” May 2016, October 2018. 3-day open enrollment program. Delivered with Tarun Kushwaha and Brad Staats.
- “Big Data and Business Analytics,” December 2014. 3-day open enrollment program.

Full-time, evening, and weekend MBA programs, Graduate School of Business, University of Chicago

Bus 40000 “Operations Management: Business Process Fundamentals”

- 14 sections taught from 2004–2007.

Massachusetts Institute of Technology

Teaching assistantships

- “Data Mining: Algorithms and Applications,” Spring 2001 and Spring 2002.
- “Introduction to Simulation and Optimization,” Fall 1999.

PROFESSIONAL SERVICE

Academic Community

Member: INFORMS, POMS

Associate Editor for *Operations Research*, 2012-present.

Senior Editor for *Production and Operations Management*, 2018-2021.

INFORMS Dantzig Dissertation Award committee member, 2017-2018.

Meritorious Service Awards from *Manufacturing and Service Operations Management*: 2011, 2012, 2014.

Meritorious Service Award from *Management Science*: 2014.

Ad-hoc referee for

Operations Research

Manufacturing and Service Operations Mgmt.

Production and Operations Management

Journal of Operations Management

Journal of Computing

IIE Transactions

Management Science

Mathematics of Operations Research

Naval Research Logistics

European Journal of Operations Research

Sloan Management Review

Transportation Science

2nd Online Doctoral Workshop on Supply Chain Analytics, organizing committee, June 2021.

M&SOM Conference at Kenan-Flagler Business School, faculty coordinator of hospitality, June 2017.

- Responsibility for two dinner receptions, bus transportation network, and meals for 450 attendees.

INFORMS Doctoral Colloquium speaker, November 2011, October 2022.

Kenan-Flagler Business School, University of North Carolina

DEI Liaison, 2023.

Faculty Promotion and Tenure Committee, 2021-2022.

MBA program, Full-time MBA Core Redesign Committee Co-Chair, 2019-2020.

ReThink Working Group on Internal Curriculum, 2019-2020.

ReThink Committee on Financial Transparency and Enhanced Operations, 2020-2021.

OTIM area PhD program, Co-coordinator, 2009-2014.

OTIM area research seminar, Co-coordinator, 2008-2009, 2010-2011.

Operations area faculty recruiting committee, 2021.

MBA program Academic Ineligibility Committee, 2013-2017.

MBA Integrative Exercise / Core Case Competition, Judge, 2009-2017.

Deloitte case competition, Judge, 2013, 2016, 2017, 2019, 2020, 2021.

GE case competition, Judge, 2011-2012.

Graduate School of Business, University of Chicago

Operations Management research seminar, Coordinator, Spring 2005, Spring 2006, Spring 2007.

Last Updated: July 11, 2023