

N. Bora Keskin

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Education

Stanford University

Ph.D., Graduate School of Business, Jun. 2012

- Academic Area: Operations, Information & Technology
- Dissertation Title: “Dynamic Pricing with Demand Model Uncertainty”
- GPA: 6.00/6

Boğaziçi University

B.S., Mathematics, Jun. 2007

B.S., Industrial Engineering, Jun. 2006

- Overall GPA: 4.00/4

Employment

Duke University, Fuqua School of Business

Associate Professor, 2020–present

Assistant Professor, 2015–2020

University of Chicago, Booth School of Business

Assistant Professor, 2012–2015

McKinsey & Company

Business Analyst, 2006–2007

Selected Honors and Awards

Winner, Lanchester Prize, 2019

Winner, INFORMS Data Mining Best Paper Competition, 2020

Finalist, INFORMS Data Mining Best Paper Competition, 2019

Honorable Mention, INFORMS Junior Faculty Interest Group (JFIG) Paper Competition, 2018

Distinguished Service Award

Management Science, 2019

Meritorious Service Award

Management Science, 2016, 2017, 2018, 2020

Manufacturing & Service Operations Management, 2019, 2020

Operations Research, 2012

STAR Visitor, Netherlands Organization for Scientific Research, 2015

Publications

1. Bayesian dynamic pricing policies: Learning and earning under a binary prior distribution, with J.M. Harrison & A. Zeevi (2012), *Management Science*, 58(3), 570-586.
2. Dynamic pricing with an unknown demand model: Asymptotically optimal semi-myopic policies, with A. Zeevi (2014), *Operations Research*, 62(5), 1142-1167.
3. Chasing demand: Learning and earning in a changing environment, with A. Zeevi (2017), *Mathematics of Operations Research*, 42(2), 277-307.
 - Lead article.
 - Winner, **Lanchester Prize**, 2019.

4. On incomplete learning and certainty-equivalence control, with A. Zeevi (2018), *Operations Research*, 66(4), 1136-1167.
5. Dynamic selling mechanisms for product differentiation and learning, with J. Birge (2019), *Operations Research*, 67(4), 1069-1089.
6. Discontinuous demand functions: Estimation and pricing, with A. den Boer (2020), *Management Science*, 66(10), 4516-4534.
7. Competition between two-sided platforms under demand and supply congestion effects, with F. Bernstein & G. DeCroix (2020), forthcoming, *Manufacturing & Service Operations Management*.
8. Personalized dynamic pricing with machine learning: High dimensional features and heterogeneous elasticity, with G.-Y. Ban (2020), forthcoming, *Management Science*.
 - Honorable mention, INFORMS Junior Faculty Interest Group (JFIG) Paper Competition, 2018.
 - Finalist, INFORMS Data Mining Best Paper Competition, 2019.
9. Impact of information asymmetry and limited production capacity on business interruption insurance, with Y.-M. Kao & K. Shang (2020), forthcoming, *Management Science*.
10. Dynamic learning and market making in spread betting markets with informed bettors, with J. Birge, Y. Feng, & A. Schultz (2020), forthcoming, *Operations Research*.
 - Preliminary version in proceedings of the 2019 ACM Conference on Economics and Computation (EC '19).
 - Featured in *Chicago Booth Review*.
11. Data-driven dynamic pricing and ordering with perishable inventory in a changing environment, with Y. Li & J. Song (2020), forthcoming, *Management Science*.

Papers Under Review or Revision

12. Dynamic pricing with demand learning and reference effects, with A. den Boer (2017).
13. Selling quality-differentiated products in a Markovian market with unknown transition probabilities, with M. Li (2020).
14. Markdown policies for demand learning with forward-looking customers, with J. Birge & H. Chen (2019).
15. Data-driven clustering and feature-based retail electricity pricing with smart meters, with Y. Li & N. Sunar (2020).
 - Winner, INFORMS Data Mining Best Paper Competition, 2020.
16. A geotemporal clustering model for COVID-19 projection, with X. Min & J. Song (2020).
17. Bayesian dynamic pricing and subscription period selection with unknown customer utility, with Y.-M. Kao & K. Shang (2020).
18. Optimal dynamic pricing with demand model uncertainty: A squared-coefficient-of-variation rule for learning and earning (2016).

Working Papers

19. Learning and earning for congestion-prone service systems, with P. Afèche (2020).
20. Data-driven inventory management with demand shifts, with X. Min & J. Song (2020).
21. To interfere or not to interfere: Information revelation and price-setting incentives in multi-agent learning environments, with J. Birge, H. Chen, & A. Ward (2020).

Invited Research Talks (in alphabetical order)

Amazon Research, 2019
Bilkent University, Department of Industrial Engineering, 2014
Boğaziçi University, Department of Industrial Engineering, 2019
Boğaziçi University, Department of Management, 2020
Columbia University, Graduate School of Business, 2012
Cornell University, Johnson Graduate School of Management, 2019
Cornell University, School of Operations Research and Information Engineering, 2012
Cornell University, School of Operations Research and Information Engineering, 2014
Duke University, Fuqua School of Business, 2012
Duke University, Fuqua School of Business, 2015
Duke University, Fuqua School of Business, 2019
Johns Hopkins University, Carey Business School, 2019
London Business School, 2016
McGill University, Bensadoun School of Retail Management, 2021
McGill University, Desautels Faculty of Management, 2014
MIT, Data Science Lab, 2020
MIT, Sloan School of Management, 2012
MIT, Sloan School of Management, 2014
Northwestern University, Kellogg Graduate School of Management, 2011
Northwestern University, Kellogg Graduate School of Management, 2012
NYU, Stern School of Business, 2012
Queen's University, Smith School of Business, 2017
Stanford University, Graduate School of Business, 2011
University of Chicago, Booth School of Business, 2012
University of Chicago, Booth School of Business, 2015
University of Chicago, Harris School of Public Policy, 2015
University of Illinois at Chicago, College of Business Administration, 2018
University of Illinois at Urbana-Champaign, Gies College of Business, 2014
UNC-Chapel Hill, Kenan-Flagler Business School, 2013
UNC-Chapel Hill, Department of Statistics and Operations Research, 2014
University of Southern California, Marshall School of Business, 2016
University of Texas at Austin, McCombs School of Business, 2020
University of Toronto, Rotman School of Management, 2015
University of Twente, Department of Stochastic Operations Research, 2015
VU Amsterdam, Stochastics Department, 2015
Washington University in St. Louis, Olin Business School, 2019

Invited Research Conferences (in alphabetical order)

EURO-INFORMS Joint International Meeting: 2013
EURO StochMod PhD Summer School: 2021
INFORMS Annual Meeting: 2009–2020
INFORMS Applied Probability Society Conference: 2013, 2015, 2017
INFORMS Data Mining & Decision Analytics Workshop: 2020
INFORMS Data Science Workshop: 2020

INFORMS Revenue Management and Pricing Section Conference: 2010–2019
M&SOM Conference: 2013, 2015, 2017
M&SOM Interface of Finance, Operations, and Risk Management (iFORM) SIG Workshop: 2018
M&SOM Service Management SIG Workshop: 2011
Marketplace Innovation Workshop: 2017, 2019
POMS Annual Conference: 2016, 2019

Teaching Experience

Duke University, Fuqua School of Business

Value Chain Innovation in Business Processes (Daytime MBA and Executive MBA), 2019–2020

– Course Evaluations: 6.41-6.73/7 (across sections and years)

Supply Chain Management (Daytime MBA and Executive MBA), 2015–2019

– Course Evaluations: 6.03-6.75/7 (across sections and years)

Dynamic Pricing and Revenue Management (Ph.D.), 2016, 2018, 2020

Emerging Topics in Operations Management (Ph.D.), 2017

University of Chicago, Booth School of Business

Operations Management: Business Process Fundamentals (MBA), 2013–2015

– Course Evaluations: 4.63-4.76/5 (across sections and years)

Dynamic Pricing and Revenue Management (Ph.D.), 2014

Workshop in Operations/Management Science (Ph.D.), 2013

Stanford University, Graduate School of Business

Fundamentals of Operations, Information, and Technology (Ph.D.), 2009–2010

Professional Activities and Service

Associate Editor

Management Science, 2019–present

Management Science, Special Issue on Data-Driven Prescriptive Analytics

Board Member

INFORMS Revenue Management and Pricing Section, 2014–2016

Cluster Chair

INFORMS Annual Meeting

– M&SOM Service Management cluster, 2018 (organized 34 sessions with 134 talks)

– Revenue Management and Pricing cluster, 2015 (organized 48 sessions with 185 talks)

Program Committee Member

INFORMS Revenue Management and Pricing Section Conference, 2017, 2019

Session Chair

INFORMS Annual Meeting

– Revenue Management and Pricing cluster, 2012–2020

– Applied Probability Society cluster, 2016, 2017, 2020

– Data Mining cluster, 2020

– M&SOM cluster, 2016

– M&SOM Service Management cluster, 2019

– M&SOM Interface of Finance, Operations, and Risk Management (iFORM) cluster, 2018, 2020

INFORMS Applied Probability Society Conference, 2013, 2015, 2017

Reviewer

Management Science, Operations Research, Manufacturing & Service Operations Management, Mathematics of Operations Research, Marketing Science, Production and Operations Management, Decision Analysis, Games and Economic Behavior, Journal of Applied Probability, European Journal of Operational Research, Operations Research Letters, Stochastic Systems, Naval Research Logistics, IISE Transactions

M&SOM Supply Chain SIG Workshop, 2012, 2015, 2016, 2017

M&SOM Service SIG Workshop, 2016–2019

Judge

M&SOM Student Paper Competition, 2015–2020

Seminar/Workshop Organizer

Operations Management Seminars, Duke University, Fuqua School of Business, 2016–2018

Operations Management Workshops, University of Chicago, Booth School of Business, 2012–2013

Ph.D. Program Committee Member

Duke University, Fuqua School of Business, 2016–present

– Reviewed Ph.D. applications and literature survey reports of first-year Ph.D. students

Website Representative

Operations Management area, Duke University, Fuqua School of Business, 2015–2019

Student Supervision

Duke University, Fuqua School of Business

Dissertation Examination Committee Co-chair: Yuan-Mao Kao, Vinh Nguyen

Dissertation Examination Committee Member: Soudipta Chakraborty, Chen Chen, Shuyu Chen, Zhen Lei, Sajad Modaresi, Yan Shang, Chengyu Wu

University of Chicago, Booth School of Business

Dissertation Examination Committee Co-chair: Adam Schultz

Dissertation Examination Committee Member: Hongfan Chen, Yifan Feng, Matt Stern

Other Professional Experience

Nomis Solutions, R&D Intern, 2008

Boğaziçi University Flexible Manufacturing Laboratory, Research Assistant, 2003–2006

Unilever, Production Planning Intern, 2005

Kraft Foods, Supply Chain Intern, 2004

Türk Telekom, IT Intern, 2004

Other Honors and Awards

University of Chicago, Booth School of Business

Neubauer Family Faculty Fellowship, 2013–2014

Stanford University, Graduate School of Business

Donald E. Petersen Fellowship, 2008–2010

Boğaziçi University, Graduated summa cum laude, 2007

Ranked first among approximately 600 engineering and math graduates, 2007

Ranked first among all double-major graduates, 2007

President of the Student Representative Council, 2005–2006

Alper Atalay Fellowship (based on academic excellence), 2003–2007

Istanbul Atatürk High School of Science, Graduated summa cum laude, 2001

National Physics Olympiad Marmara Region First Rank, 1999

National Mathematics Olympiad Silver Medal, 1998