BOXIAO (BERYL) CHEN

CONTACT INFORMATION	Webpage: https://bbchen.people.uic.edu Email: bbchen@uic.edu

ACADEMIC APPOINTMENTS	**UNIVERSITY OF ILLINOIS**, CHICAGO, IL Department of Information and Decision Sciences, College of Business Administration	
	Associate Professor (with tenure)	August 2022 – present
	Assistant Professor	August 2016 – July 2022

EDUCATION	**UNIVERSITY OF MICHIGAN**, ANN ARBOR, MI	
	Ph.D., Industrial and Operations Engineering	2016
	M.S.E., Industrial and Operations Engineering	2012
	SHANDONG UNIVERSITY, JINAN, CHINA	
	B.S., Financial Mathematics	2010

RESEARCH INTERESTS	• Application: Inventory and Supply Chain Management, Pricing and Revenue Management, Retailing • Methodology: Statistical Machine Learning, Stochastic Modeling and Optimization

PUBLISHED AND ACCEPTED JOURNAL PAPERS	1. Chen B, Shi C. 2024. "Tailored Base-Surge Policies in Dual-Sourcing Inventory Systems with Demand Learning". **Operations Research**, to appear.
	2. Boer A, Chen B, Wang Y. 2024. "Pricing and Positioning of Horizontally Differentiated Products with Incomplete Demand Information". **Operations Research**, 72(6):2446-2466.
	3. Chen B, Jiang J, Zhang J, Zhou Z. 2024. "Learning to Order for Inventory Systems with Lost Sales and Uncertain Supplies", **Management Science**, 70(12):8631-8646.
	4. Tang J, Chen B, Shi C. 2023. "Online Learning for Dual Index Policies in Dual Sourcing Systems", **Manufacturing and Service Operations Management**, 26(2):758-774.
	5. Chen B, Wang Y, Zhou Y. 2024. "Optimal Policies for Dynamic Pricing and Inventory Control with Nonparametric Censored Demands", **Management Science**, 70(5): 3362-3380.
	6. Chen B, Simchi-Levi D, Wang Y, Zhou Y. 2022. "Dynamic Pricing and Inventory Control with Fixed Ordering Cost and Incomplete Demand Information", **Management Science**, 68(8), 5684-5703.
	7. Chen B, Chao X, Shi C. 2021. "Nonparametric Learning Algorithms for Joint Pricing and Inventory Control with Lost-Sales and Censored Demand", **Mathematics of Operations Research**, 46(2) 726-756.
	8. Wang Y, Chen B, Simchi-Levi D. 2021. "Multi-Modal Dynamic Pricing", **Management Science**, 67(10), pp.6136-6152.
	9. Chen B. 2021. "Data-Driven Inventory Control with Shifting Demand", **Production and Operations Management**, 30(5) 1365-1385.
	10. Chen B, Chao X, Wang Y. 2020. "Technical Note - Data-Driven Dynamic Pricing and Inventory Control with Limited Price Changes and Censored Demand", **Operations Research**, 68(5) 1445-1456.
	11. Chen B, Chao X. 2020. "Dynamic Inventory Control with Stockout Substitution and Demand Learning", **Management Science**, 66(11) 5108-5127.
	12. Chen B, Chao X, Ahn HS. 2019. "Coordinating Pricing and Inventory Replenishment with Nonparametric Demand Learning", **Operations Research***, 67(4) 1035-1052.
	• **Winner, 2018 CSAMSE Best Paper Competition** • **Finalist, 2015 POMS College of Supply Chain Management Student Paper Competition**

- **Winner, 2015 Wilson Best Paper Prize, University of Michigan**

13. Chen B, Chao X. 2019. "Parametric Demand Learning with Limited Price Explorations in a Backlog Stochastic Inventory System", **IISE Transactions***, 51(6) 605-613.

- **Finalist, 2015 Murty Best Paper Prize, University of Michigan**

14. Chen B, Klampfl E, Strumolo M, Fu Y, Chao X, and Tamor MA. 2017. "Optimal Investment Strategies for Light Duty Vehicle and Electricity Generators in a Carbon Constrained World", **Annals of Operations Research***, 255: 391-420.

15. Chen B, Fu Y, Strumolo M, Chao X, and Tamor MA. 2015. "Potential Natural Gas Impact on Cost Efficient Capacity Planning for Automakers and Electricity Generators in a Carbon Constrained World", **SAE International Journal of Materials and Manufacturing**, 8(2015-01-0466): 653-667.

UNDER REVIEW	16. Chen B, Li M, Simchi-Levi D. 2024. "Dynamic Pricing with Infrequent Inventory Replenishments". Minor Revision at **Management Science**.
	17. Pakiman P, Chen B, Nadarajah S, Jasin S. 2023. "Self-Adapting Robustness in Demand Learning". Under review.
	18. Fan X, Chen B, Zhou Z. 2022. "Sample Complexity of Policy Learning for Inventory Control with Censored Demand". Under review.
	19. Fan X, Chen B, Xiao W, Zhou Z. 2023. "No-Regret Learning in Multi-Retailer Inventory Control". Major Revision at **Management Science**.
	20. Fan X, Chen B, Olsen T, Qin H, Zhou Z. 2024. "Don't Follow RL Blindly: Lower Sample Complexity of Learning Optimal Inventory Control Policies with Fixed Ordering Costs". Major Revision at **Production and Operations Management**.
	21. Wang S, Wang Y, Chen B, Mabry J, Narayanamoorthy S, Zhou Z. 2024. "Adaptive Learning for Joint Pricing and Inventory Control". Under review.
	22. Ban GY, Benbitour MH, Chen B. 2024. "Multi-Item Demand Estimation with Substitution and Complementarity Effects". Under review.
	23. Wang Y, Chen B. 2025. "Tight Regret Bounds in Contextual Pricing with Semi-parametric Demand Learning". Under review.
WORK IN PROGRESS	24. Tang J, Chen B, Shi C, Zhou Y. 2024. "Online learning for inventory control with fairness constraints."
	25. Chen B, Jasin S, Luo Q, Zhang M. 2025. "Online Learning for Lost-Sale Inventory Systems with Product Returns"
	26. Learning with Dynamical Fairness for Sequential Allocation of Multiple Resources.
BOOK CHAPTERS	27. Chao X, Chen B, Zhang H. 2023. "Online Learning for Inventory and Pricing Optimization". Research Handbook on Inventory Management, Edward Elgar Publishing. Edited by Jing-Sheng Jeannette Song.
	28. Chen B. 2022. "Joint Pricing and Inventory Control with Demand Learning". The Elements of Joint Learning and Optimization in Operations Management, Springer. Edited by Xi Chen, Stefanous Jasin, Cong Shi.
CONFERENCE PROCEEDINGS AND TECHNICAL REPORTS	29. Chen B, Nadarajah S, Jasin S. 2019. "Robust Demand Learning", *NeurIPS Workshop on Safety and Robustness in Decision Making*.
	30. Miao S, Fu Y, Strumolo M, Chen B, Chao X, Klampfl E, Tamor MA. 2016. "Pricing of Renewable Gasoline and Its Impact on GHG Emission Reduction Planning for Automakers and Electricity Generators", No. 2016-

01-0295. SAE Technical Paper.

31. Chen B, Chao X, Fu Y, Strumolo M, and Tamor MA. 2015. "Impact of Gasoline and Natural Gas Prices on Capacity Planning for Automakers and Electricity Generators under GHG Emission Constraints", *Proceedings of the ASME 2015 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference,* pp. V02BT03A043.

32. Chen B, Klampfl E, Strumolo M, Tamor MA, Liu Y. 2013. "Investment Strategy and Capacity Planning for Automakers and Electricity Generators in a Carbon Constrained World", Ford Technical Report.

INVITED AND CONFERENCE TALKS	"Dynamic Pricing with Infrequent Inventory Replenishments" • INFORMS Annual Meeting, Seattle, WA, October 20, 2024 "Optimal Policies for Dynamic Pricing and Inventory Control with Nonparametric Censored Demands" • University of Iowa, Tippie College of Business, Jan 24, 2025 • University of Alberta, School of Business, March 3, 2023 • CMU, Tepper School of Business, October 28, 2022 • INFORMS Annual Meeting, Indianapolis, IN, October 18, 2022 • University of Washington, Michael G. Foster School of Business, May 20, 2022 • Purdue University, Krannert School of Management, Feb 18, 2022 • Nanjing University, School of Management and Engineering, Dec 2, 2021 "Tailored Base-Surge Policies in Dual-Sourcing Inventory Systems with Demand Learning" • CSAMSE Annual Meeting, Online, July 31, 2021 • POMS Annual Meeting, Online, May 2, 2021 • INFORMS Annual Meeting, Online, Nov 13, 2020 • MIT, Institute for Data, Systems and Society, Seminar Series, 2019 • UIUC, Department of Industrial and Enterprise Systems Engineering, Seminar Series, 2019 • INFORMS Annual Meeting, Seattle, WA, 2019 "Data-Driven Inventory and Pricing Optimization" (**1.5 hour tutorial**) • POMS Annual Meeting, Washington, D.C., 2019 "Nonparametric Algorithms for Joint Pricing and Inventory Control with Lost-Sales and Censored Demand" • Revenue Management & Pricing Conference, Palo Alto, CA, 2019 "Dynamic Inventory Control with Stockout Substitution and Demand Learning" • INFORMS Annual Meeting, Seattle, WA, 2019 • The Chinese University of Hong Kong, Business School, Seminar Series, 2018 • International Symposium on Mathematical Programming (ISMP), Bordeaux, France, 2018 • INFORMS Annual Meeting, Houston, TX, 2017 • INFORMS Applied Probability Society (APS) Conference, Chicago, IL, 2017 • POMS Annual Meeting, Seattle, WA, 2017 "Data-driven Algorithm for Multiple Products" • POMS Annual Meeting, Houston, TX, 2018 "Dynamic Pricing and Inventory Control for Multiple Products with Substitution and Demand Learning" • Cornell University, Operations Research and Information Engineering, Seminar Series, 2017 "Nonparametric Algorithms for Joint Pricing and Inventory Control with Lost-Sales and Censored Demand Information" • POMS Annual Meeting, Houston, TX, 2018 • INFORMS Annual Meeting, Nashville, TN, 2016 • Carnegie Mellon University, Tepper School of Business, 2016 • University of Pittsburgh, Department of Industrial Engineering, 2016 • University of Illinois at Chicago, College of Business Administration, 2016 • Cornell University, Operations Research and Information Engineering, 2016

- Georgia Institute of Technology, H. Milton Stewart School of Industrial and Systems Engineering, 2016
- INFORMS Annual Meeting, Philadelphia, PA, 2015

"Data-Driven Dynamic Pricing and Inventory Control with Limited Price Changes"
- INFORMS Annual Meeting, Nashville, TN, 2016

"Joint Pricing and Inventory Management with Demand Learning"
- MIT, Department of Civil and Environmental Engineering, Seminar Series, 2015

"Coordinating Pricing and Inventory Replenishment with Nonparametric Demand Learning"
- CSAMSE Annual Conference, Ningbo, China, 2018
- POMS Annual Meeting, Washington, D.C., 2015
- INFORMS Annual Meeting, San Francisco, CA, 2014

"Investment Strategy for Automakers and Electricity Generators in a Carbon Constrained World"
- INFORMS Annual Meeting, Minneapolis, MN, 2013
- Ford Research, Dearborn, MI, 2012

"Dynamic Pricing with Strategic Customers under Price Adjustment Policy"
- INFORMS Annual Meeting, Phoenix, AZ, 2012
- Engineering Graduate Symposium, University of Michigan, 2012

OTHER PROFESSIONAL EXPERIENCES	
FORD MOTOR COMPANY, DEARBORN, MI	
Corporate Analytics Consultant	September 2012 to April 2015
Corporate Analytics Summer Intern	May to August 2012, June to August 2013

- Worked on projects related to energy consumption and capacity expansion with greenhouse gas reduction targets.

GAP INC., SAN FRANCISCO, CA

Corporate Strategy Summer Intern   June to August 2014
- Designed inventory thresholds for the "Reserve in Store" online shopping program.

GRANTS		
Ford Motor Company University Research Program, $100,000		2012-2015
University of Michigan MCubed Research Grant, $50,000		2013

DEPARTMENTAL AND OTHER SERVICES

Department advisory committee, 2023 - 2024
Department Tenure Track Faculty search committee, 2016 - present
Department Non-Tenure Track Faculty search committee, 2019
Department seminar committee, 2018 - 2021
UIC business diversity committee, 2019 - 2020
UIC business scholar mentor, 2017 - 2018
Reviewer for UIC Discovery Partners Institute (DPI) seed funding proposals, 2019

Management Science Meritorious Service Award, 2019, 2020, 2021, 2023

Senior Editor for
    Production and Operations Management
Associate Editor for
    Operations Research Letters
    Electronic Commerce Research
Reviewer for
    Management Science
    Operations Research
    Production and Operations Management
    Mathematics of Operations Research
    Manufacturing & Service Operations Management

Naval Research Logistics
Operations Research Letters

Conference session chair
- INFORMS Annual Meeting, Indianapolis, 2022
- CSAMSE Annual Meeting, online, 2021
- INFORMS Annual Meeting, online, 2020
- INFORMS Annual Meeting, Seattle, WA, 2019
- INFORMS Annual Meeting, Phoenix, AZ, 2018
- ISMP, Bordeaux, France, 2018
- POMS Annual Meeting, Houston, TX, 2018