

XINGXING CHEN

Assistant Professor of Analytics & Operations
Robins School of Business
University of Richmond

☎: (804)289-8955 ✉: chen@richmond.edu
🌐: <https://facultystaff.richmond.edu/~bchen>

Education

Ph.D., Washington University in Saint Louis, Missouri, United States
Business Administration (Operations Management)
M.S., Washington University in Saint Louis, Missouri, United States
Business Administration
B.S., Peking University, Beijing, China
Mathematics (Statistics)

Academic Appointment

University of Richmond

Assistant Professor of Analytics & Operations

2018 - present

Publications

- Kouvelis, P., Chen, X., Xia, Y. (2023). Managing material shortages in project supply chains: inventories, time buffers and supplier flexibility. *Production and Operations Management*, 32, 3717-3735.
<https://doi.org/10.1111/poms.14059> | [pdf](#) .
- Chen, X., Feldman, J., Jung, S.H., Kouvelis, P. (2022). Approximation schemes for the joint inventory selection and online resource allocation problem. *Production and Operations Management*, 31, 3143-3159.
<https://doi.org/10.1111/poms.13742> | [pdf](#).
- Chen, X., Kouvelis, P., Biazaran, M. (2018). Value of operational flexibility in co-production systems with yield and demand uncertainty. *International Journal of Production Research*, 56:1-2, 491-507.
<https://doi.org/10.1080/00207543.2017.1402138> | [pdf](#).

Working Papers

- Chen, X., Feldman, J., Huang, Y. Approximation schemes for dynamic pricing with opaque products. [pdf](#).
- Chen, X., Feldman, J., Jung, S.H., Kouvelis, P. An approximate dynamic program approach for the resource allocation and inventory selection problem. [pdf](#).
- Chen, X., Kouvelis, P. Coordination contract for time and material management in project supply chains.
- Eynan, A., Chen, X. Product bundling in the presence of vertical differentiation.

Research Interests

Revenue management, assortment and dynamic pricing, approximation algorithms, project risk management, inventory management, coordination contracts, product bundling, sustainability, and data-drive research.

Teaching Experience

University of Richmond (Teaching load: 3+2)

- Operations Management (MGMT 340)
- IT & Data Analytics (MGMT 225)
- Operation & Supply Chain (MS in Management)

Washington University in St. Louis

- Stochastic Models of Production and Service Systems (Co-teacher with Dr. Kouvelis)

St. Louis University

- Introduction to Management Science and Operations Management

Teaching Assistant

Washington University in St. Louis

- Global Supply Chain Management (EMBA)
- Managing Operations (EMBA)
- Managing the Innovation Process (EMBA, MBA, MS in Supply Chain)
- Operations Management, Project Management (MBA)
- Supply Chain Risk Management (MBA, MS in Supply Chain)
- Supply Chain Certificate Program
- Corporate Education Programs (Anheuser-Busch InBev, Boeing, Express Scripts, Monsanto, etc.)

Work Experience (non-academic)

Sandoz Inc.

2014-2015

Supply Chain Analyst

Princeton, NJ

- Worked with demand planning, customer service and reverse logistics to achieve business goals.
- Provided data support for monthly S&OP meeting with senior management on supply chain KPIs.
- Automated business reporting using Microsoft excel, VBA and Access.
- Developed a forecasting tool to evaluate supply and return risks.

Consulting Projects¹

Boeing Inc.

- Evaluated on-time performance of supplier order delivery for transactional business segment.
- Uncovered key drivers affecting supplier performance by conducting logistic regression analysis.
- Improved forecasting accuracy by using machine learning techniques of Lasso regression and cross validation.

Express Scripts Inc.

- Conducted exploratory data analysis using a large-scale data set(86M sales records).
- Visualized customer order characteristics and distribution cost distributions on a geographic map.
- Optimized drug distribution networks and inventory cost using advanced optimization methods.

BJC Healthcare

- Performed supplier rationalization to leverage procurement cost and supplier complexity.
- Conducted exploratory data analysis to historical procurement data using R.
- Recommended a rationed supplier base to management using stratified ABC analysis.

¹All projects are sponsored by Boeing Center for Supply Chain Innovation([BCSCI](#)), Washington University in St. Louis.

Express Scripts Inc.

- Performed demand analysis and inventory optimization for thousands of SKUs.
- Developed a decision support tool to assist ordering decisions within the network.
- Our model saved over 15% of inventory cost on the sample data.

Belden Inc.

- Built a prediction model to forecast revenue growth for the broadcasting business segment.
- Applied regularized regression to reduce model variance and identify variables with prediction power.
- Conducted cross-validation to achieve better forecasting accuracy.

University Services

University of Richmond

- Disabilities Advocacy Committee (Committee Member) (2022-2025)
- Undergraduate Curriculum Committee (Committee Member) (2021-2024)
- McWick Case Competition (Judge) (2020-2022)
- Undergraduate Student Advising (2019-2024)
- Faculty Search Committee (2019-2020)
- Core Course Work Group (OM) (2018-2024)

Professional Services

- Reviewer (Ad Hoc), *Management Science*
- Reviewer (Ad Hoc), *Manufacturing & Service Operations Management*
- Reviewer (Ad Hoc), *Production and Operations Management*
- Reviewer (Ad Hoc), *Decision Sciences*
- Reviewer (Ad Hoc), *International Journal of Production Economics*
- Reviewer (Ad Hoc), *Omega - The International Journal of Management Science*
- Reviewer (Ad Hoc), *Annals of Operations Research*
- Reviewer (Ad Hoc), *M&SOM SIG Conference, 2023, 2024*
- **Judge**, *CSAMSE Best Paper Competition, 2023* ([link](#))
- **Track Co-chair** (Retail Operations), *POMS Annual Conference, 2023*

Programming Skills

R, Python, Java, Gurobi, Matlab, SQL, Microsoft Office, VBA, L^AT_EX, Crystal Ball.

Research Presentations

- INFORMS Annual Conference**, Phoenix, AZ 2023
 - *Approximation Schemes for the Joint Inventory Selection and Online Resource Allocation Problem*
- POMS International Conference**, Budapest, Hungary 2022
 - *Approximation Schemes for the Joint Inventory Selection and Online Resource Allocation Problem*
 - *Managing Material Shortages in Project Supply Chains: Inventories, Time Buffers and Supplier Flexibility*
- INFORMS Revenue Management and Pricing Conference**, University of Chicago, IL 2022
 - *Approximation Schemes for the Joint Inventory Selection and Online Resource Allocation Problem*
- Brown Bag Seminar**, William and Marry, VA 2022
 - *Managing Material Shortages in Project Supply Chains: Inventories, Time Buffers and Supplier Flexibility*
- INFORMS Revenue Management and Pricing Conference**, Stanford University, CA 2019

- *The Anheuser Busch InBev Trailer Problem: An Application of Online Resource Allocation and Inventory Selection*
POMS Annual Conference, Washington, DC 2019
- *The Anheuser Busch InBev Trailer Problem: An Application of Online Resource Allocation and Inventory Selection*
POMS Annual Conference, Houston, TX 2018
- *Managing Inventory and Time Buffers in a Two-Stage Project Supply Chain*
INFORMS Annual Conference, Houston, TX 2017
- *Project-based Supply Chain: Role of Operational Hedging*
POMS Annual Conference, Seattle, WA 2017
- *Project-based supply chain: inventory and Pareto analysis of wholesale price contract*