JUAN ZHANG

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ACADEMIC EXPERIENCE

Assistant Professor of Management and Marketing College of Business, University of Wisconsin – Eau Claire	2021.6-present
Ph.D., Business Administration University of Missouri – St. Louis	2021
M.S., Supply Chain and Analytics University of Missouri – St. Louis	2021
B.S., Logistics Management Huazhong University of Science and Technology (Wuhan, China)	2015

RESEARCH INTERESTS

- Mathematical Modeling and Optimization of Logistics and Transportation Systems
- Supply Chain Risk Management
- Behavioral Issues in Operations Management
- Energy, Environment, and Sustainability

PUBLICATIONS: Refereed Articles and Book Chapters

- Zhang, J., Campbell, J.F., Sweeney II, D.C., and Hupman, A.C. (2021) "Energy Consumption Models for Delivery Drones: A Comparison and Assessment", *Transportation Research Part D*, 90, 102668.
- Hupman, A. C., and Zhang, J. (2019). Simulating profit loss in behavioral newsvendor problems. In 2019 Winter Simulation Conference (WSC) (pp. 1859-1870). IEEE.
- Rust, D.L., Smith, L.D., Ryan, D.L., and Zhang, J. (2018). "The Other Side of Revenue Management: Managing Airport Infrastructure and Airside Operations". *International Journal of Revenue Management*, 10(3-4), 189-215.
- Smith, L. D., Nauss, R. M., Xu, L., Zhang, J., Ehmke, J. F., and Hellmann, L. (2017). "Information Technologies and Analytical Models for Strategic Design of Transportation Infrastructure". In C. Howard & K Hargiss (Eds.), *Strategic Information Systems and Technologies in Modern Organizations* (pp. 300-321). Hershey: IGI Global.

WORK IN PROCESS

• Hupman, A., Zhang, J., Li, H., Subramaniam, J., Zhu, J., and Guan, S. "Predicting and Mitigating Pharmaceutical Supply Chain Disruptions Before and During the COVID-19 Pandemic", submitted to *Risk Analysis: An International Journal*. October 2022.

- Zhang, J., Campbell, J.F., and Sweeney II, D.C. (2023) "A Continuous Approximation Approach for Integrated Drone Delivery Systems", under review on *Transportation Research Part B*
- Zhang, J., Campbell, J.F., and Sweeney II, D.C. (2023) "Continuous Approximation Approach for Cost Efficient and Environmentally Sustainable Drone Delivery", to be submitted to *Transportation Research Part B*, June 2023
- Zhang, J. and Li, H. "Enhanced Heuristics for Mixed-Integer Nonlinear Programming (MINLP) for the Multi-echelon Multi-Commodity Location-Inventory Network Design Problem", in progress.
- Zhang, J., "Case study Site Select Problem for a Swiss Cable Manufacturer Entering the U.S. Market", in progress.

TECHNICAL REPORTS

- Campbell, J.F., Sweeney II, D.C., Zhang, J., and Pan, D. (2018) "Strategic Design for Delivery with Linked Transportation Assets: Trucks and Drones Final Report", Institute for Transportation, Iowa State University, Ames, IA, January 2018, 40 pp.
- Campbell, J.F., Sweeney II, D.C., and Zhang, J., (2017) "Strategic Design for Delivery with Trucks and Drones", Research Report, April 2017. Available at www.updwg.org/resource-library/all-resources/page/6/, 38 pp.
- Smith, L.D. and Zhang, J., "Maximizing Airside Performance at Nanjing Lukou International Airport: An Application of Discrete Event Simulation in a Staged Queueing Framework for Airside Operations", (in English and Chinese), May 2017, 73 pp.
- Smith, L.D. and Zhang, J., "Strategic Decision Support for Airport Capacity Planning", Report to U.S. Department of Transportation for UTC Study Grant DTRT13-G-UTC37, September 2017, 56 pp.

PRESENTATIONS

- Zhang, J., Campbell, J.F., and Sweeney II, D.C. "Energy Consumption Models for Drone Delivery", *INFORMS Annual Meeting*, 2022
- Zhang, J. "Drone Delivery How Good Is It From Science Fiction to Reality?", *WomenInTech (Chinese)*, 2021, YouTube, https://youtu.be/jBI2S6a8I1U.
- Zhang, J. "Economic and Environmental Impacts of Drone Delivery", UMSL Missouri S&T Virtual Brown Bag Seminar, 2021, Virtual.
- Zhang, J., Campbell, J.F., and Sweeney II, D.C. "Economic and Environmental Impacts of Drone Delivery", *DSI Annual Meeting*, 2020, Virtual.
- Zhang, J., Campbell, J.F., and Sweeney II, D.C. "A Continuous Approximation Approach for Cost Efficient and Environmentally Sustainable Drone Delivery", *INFORMS Annual Meeting*, 2020, Virtual.
- Zhang, J., Campbell, J.F., and Sweeney II, D.C. "Economic and Environmental Impacts of Drone Delivery", *INFORMS Annual Meeting*, 2019, Seattle, WA.
- Campbell, J. F., Sweeney II, D. C., and Zhang, J. "Strategic Design for Delivery with Trucks and Drones", *Mid-Continent Transportation Research Symposium*, 2017, Ames, IA.
- Zhang, J. "Strategic Design for Delivery with Drones and Trucks", Graduate Research Fair, University of Missouri St. Louis, 2017.

RESEARCH EXPERIENCE

Research Assistant | University of Missouri – St. Louis

- Designing Heuristics to Solve the Mixed-Integer Nonlinear Programming (MINLP) for the Multi-Echelon Multi-Commodity Location-Inventory Network Design Problem for Ameren Corporation, 2020–present. (Funded by Ameren Corporation)
- Using Advanced Analytics for Managing Supply Chain Risks for Express Scripts Inc., 2019–2021. (Funded by Express Scripts Inc.)
- Simulating Economic Consequences of Behavioral Newsvendor Problems, 2018-2019. (Funded by University of Missouri – St. Louis)
- Strategic Design for Delivery with Trucks and Drones, 2016-2017. (Funded by U.S. Department of Transportation and Midwest Transportation Center).
- Integrating Analytical Tools for Strategic Planning at Airports, 2016-2017. (Funded by Nanjing Lukou International Airport)

TEACHING INTERESTS

Logistics and Supply Chain Management, Operations Management, Business Analytics, Mathematical Modeling

TEACHING EXPERIENCE

University of Wisconsin – Eau Claire

- MGMT 343: Supply Chain Management
- MGMT 363: International Logistics and Supply Chain Management

University of Missouri - St. Louis

- SCMA 3301: Introduction to Supply Chain Management (Instructor)
- SCMA 3300: Business Analytics and Statistics (SI Leader)
- SCMA 3300, 3301, 3320 (Teaching Assistance)

SERVICE ACTIVITIES

- College of Business International Business Committee
- Reviewer: Transportation Research Part B, C, D, Transportation Science, European Journal of Operations Research, 40R:A Quarterly Journal of Operations Research
- CSCMP EDGE Annual Conference, 2019, Registration Assistant
- China Marketing International Conference, 2014, Assist attendees and session chairs

CONFERENCES ATTENDED

- INFORMS Annual Meeting 2022, Indianapolis, October 2022
- INFORMS Annual Meeting 2020, Virtual

- DSI Annual Meeting 2019, New Orleans, LA, November 2019.
- INFORMS Annual Meeting 2019, Seattle, WA, October 2019.
- CSCMP Annual Conference 2019, Anaheim, CA, September 2019.
- INFORMS TS&L PhD Workshop: Advances in Operations Research Applied to *Transportation and Logistics*, Loyola University, Chicago, May 2019. Sponsored by National Science Foundation (NSF).
- INFORMS Annual Meeting 2017, Houston, TX, November 2017.
- Mid-Continent Transportation Research Symposium 2017, Ames, IA, August 2017.
- CSCMP Annual Conference 2016, Orlando, FL, September 2016.
- AGIFORS Airline Ops SG Meeting 2016, Seattle, WA, May 2016.

HONORS AND AWARDS

- Selected to attend the 2020 Donald J. Bowersox Doctoral Symposium, September 2020 (limited to 20 excellent doctoral students world-wide).
- Logistics Scholarship, University of Missouri St. Louis, 2019.
- Scholarship to attend the PhD Workshop: *Advances in Operations Research Applied to Transportation and Logistics,* Loyola University, Chicago, May 2019.
- Graduate Recruitment Fellowship, University of Missouri St. Louis, 2015-2019.
- 3rd Place, Graduate Research Fair, University of Missouri St. Louis, 2017.

SKILLS

- Computer: Python, C#, CPLEX, GUROBI, Arena, MATLAB, SAS, SPSS
- Languages: Mandarin (Native), English (Fluent)