

ZHUOWEN “KAREN” CHEN

EDUCATION

Worcester Polytechnic Institute, Business School	Massachusetts
Ph.D. in Operations Management	2021 – 2026
University of Miami, Miami Herbert Business School	Florida
M.S. in Finance	2019 – 2020
Chihlee University of Technology	New Taipei
B.A. in Finance	2015 – 2019

RESEARCH INTERESTS

Topics: Sustainable Supply Chain Management, Circular Economy, Supply Chain Digitalization
Methodologies: Experiment, Data-driven Decision-making

RESEARCH & CREATIVE

Peer-Reviewed Journal Articles

1. **Chen, Z.**, Celik, S., & Sarkis, J. (2025). “A Systematic Review for Blockchain Application in Government and Public Service.” *Journal of Enterprise Information Management*, 1-29.
2. **Chen, Z.**, Sarkis, J., & Yildizbasi, A. (2025). “Digital Transformation for Safer Circular Lithium-ion Battery Supply Chains: A Blockchain Ecosystem-Data Perspective.” *International Journal of Production Research*, 63(5), 1585-1606.
3. **Chen, Z.**, Sarkis, J., & Yildizbasi, A. (2025). “Integrating Generative AI into Circular Supply Chain Safety Management: A Forward-Looking Perspective.” *IEEE Engineering Management Review*.
4. Yildizbasi, A., Celik, S., Arioz, Y., **Chen, Z.**, Sun, L., Ozturk, C. (2025). “Exploring the synergy between circular economy and emerging technologies for transportation infrastructure: A systematic literature review.” *Journal of Cleaner Production*, 486, 144553.
5. Wang, O., **Chen, Z.**, & Ma, X. (2024). “Advancing Sustainable End-of-Life Strategies for Photovoltaic Modules with Silicon Reclamation for Lithium-ion Battery Anodes.” *Green Chemistry*, 26(7), 3688-3697.
6. **Chen, Z.**, Yildizbasi, A., Wang, Y., & Sarkis, J. (2023). “Safety in Lithium-ion Battery Circularity Activities: A Framework and Evaluation Methodology.” *Resources, Conservation and Recycling*, 193, 106962.
7. **Chen, Z.**, Yildizbasi, A., & Sarkis, J. (2023). “How Safe is the Circular Economy?” *Resources, Conservation and Recycling*, 188, 106649.
8. **Chen, Z.**, Yildizbasi, A., Wang, Y., & Sarkis, J. (2022). “Safety Concerns for the Management of End-of-Life Lithium-Ion Batteries.” *Global Challenges*, 6(12), 2200049.

Peer-Reviewed Book Chapters

9. **Chen, Z.** (2025). “Safety Management and the Blockchain.” In *The Palgrave Handbook of Blockchain Technology for Business*. Cham: Springer International Publishing.
10. Öztürk, C., **Chen, Z.**, and Yildizbasi, A. (2023). “The Lithium-ion Battery Supply Chain.” In *The Palgrave Handbook of Supply Chain Management*. Cham: Springer International Publishing.

Working Papers

11. “Closed-loop Supply Chain Safety: Stakeholder Salience and Voice for Blockchain Supported Social Sustainability.” with Joseph Sarkis and Abdullah Yildizbasi.

12. “Blockchain-based Safety Management in Lithium-ion Battery Circular Supply Chain: A Design Science Research.” with Ravi Sree Kashyap Kompella, Joseph Sarkis, and Abdullah Yildizbasi.
13. “Media Coverage about Biodiversity Investment: An Agenda-setting Perspective.” with Lihua Sun and Joseph Sarkis.
14. “Circular Supply Chain Safety Management through Blockchain Technology Governance.” with Yanji Duan and Joseph Sarkis.

TEACHING

Teaching Interests

- Data Analytics, Data Science, Operations and Supply Chain Management, Sustainability in Supply Chains, Supply Chain Digitalization

Worcester Polytechnic Institute

Instructor

- Materials Management in Supply Chains D-term 2026

Co-Instructor/Teaching Assistant

- Sustainable Supply Chain and Operations Management – Graduate Spring 2025/2024/2023
- Supply Chain Analysis and Design – Graduate Fall 2025/2024/2023
- Operations and Supply Chain Consulting Project – Graduate Spring 2024

Guest Lectures

- Operations Management – Multi-Criteria Decision-Making Spring 2024
- Business Application of Blockchain Technology Spring 2024
- Data Analysis for Decision Making Fall 2024
- Off-Campus Interactive Qualifying Project (IQP): Hangzhou Fall 2023

University of Alabama in Huntsville

- Operations Management – Multi-Criteria Decision-Making Fall 2025

Development & Certification

- Fundamentals of Scientific Teaching and Pedagogy by Worcester Polytechnic Institute Morgan Teaching & Learning Center

HONORS & SERVICE

Honors & Awards

- Best Student Paper Finalist – Academy of Management (AOM) Annual Meeting 2023
- Supply Chain and Logistics Management Best Student Research Winner – Centre for Research in Sustainable Supply Chain Analytics 2023
- Program Fellow – National Science Foundation (NSF) Circular Economy and Data Analytics Engineer Research for Sustainability Program 2021 – 2026

Service & Activities

- Mentor – Women’s Research and Mentorship Program 2022
- Assurance of Learning Judge – WPI Undergraduate Research Project Showcase 2022 – 2023
- Ph.D. Student Representative – The Association to Advance Collegiate Schools of Business Peer Review Team 2023
- WPI Three Minute Thesis Competition 2023
- Volunteer – Annual Production and Operations Management Society (POMS) Conference 2025
- Doctoral Consortium – AOM Annual Meeting 2023 / Annual POMS Conference 2024&2025 / Decision Sciences Institute (DSI) Annual Conference 2023&2024

- Reviewer – Transportation Research Part E: Logistics and Transportation Review / International Journal of Production Research / IEEE Transactions on Engineering Management / Resources, Conservation & Recycling / AOM Annual Meeting 2024 / DSI Annual Conference 2024 / IEEE Technology and Engineering Management Society Conference

CONFERENCE & SEMINAR PRESENTATION

• WPI Ph.D. Seminar	2022/2023/2024/2025
• DSI Annual Conference	2023/2024/2025
• Annual POMS Conference	2023/2024/2025
• INFORMS Annual Meeting	2024
• AOM Annual Meeting	2023
• Northeast DSI Annual Conference	2023

PROFESSIONAL ASSOCIATIONS

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- Production and Operations Management Society (POMS)
 - Decision Sciences Institute (DSI)
 - Academy of Management (AOM)
 - Institute for Operations Research and the Management Sciences (INFORMS)

SKILLS & MISCELLANEA

Programming/Software: Python, R, Excel VBA, SPSS, Sawtooth, Oxygen XML Editor, Bloomberg

Language: English (Fluent), Chinese (Native)

Certifications: Ministry of Economic Affairs Certified Intangible Asset Valuator (Taiwan), Tri-Star Survey and Research Analyst, Certificate of Proficiency for Skill Subjects in Fundamentals of Enterprise Resource Planning (ERP), e-Enterprise Assistant Planner Certification, Fundamentals of e-Commerce (Professional-level)

Hobbies: Fishing, Travel