

Jian (Ray) Zhang

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Academic Appointments

Assistant professor, 2017 – 2019 (non-tenure), 2019 – present(tenure-track)

Haskayne School of Business, University of Calgary

Postdoc Fellow, 2013 –2017

COSMO - Stochastic Mine Planning Laboratory, Department of Mining and Materials Engineering, McGill University

Education

Ph.D. of Mechanical and Manufacturing Engineering, University of Calgary, 2013

M.Sc. Management Science - Northeastern University of China, 2007

B.Comm. Management Information Systems - Northeastern University of China, 2005

RESEARCH

Research Grants

- FRQNT and NSERC NOVA Grant: Improving the performance, robustness and resilience of mineral supply chain logistics systems (CI, 225,000 CAD, 2023)
- SSHRC Insight Development Grant (IDG): The Impact of Decentralized Autonomous Organization on Data Economy (PI, 45,422 CAD, 2020)
- Haskayne Big Idea Faculty Grant: The Impact of Blockchain on Intermediary Platforms (CI, 25,000 CAD, 2020)
- SSHRC IDG Enhancement Grant (PI, 3,500 CAD 2019)
- University Research Grant Committee (URGC) SSHRC Explore Faculty Seed Grant: The Impact of Blockchain on Multi-sided platforms (PI, 14,500 CAD, 2019)
- Dean's Publication Award (5,000 CAD 2019), Haskayne School of Business, University of Calgary.
- Dean's Research Excellence Grant (CAD 40,000), Haskayne School of Business, University of Calgary.

Refereed Journal Papers

- Zhang J, Nault BR. Upstream Information Sharing in Platform-Based E-Commerce with Seller Assortment Planning, forthcoming at *Decision Support Systems*.

- Zhang J, Nault BR (2023) Information Sharing in an MTO Supply Chain with Upstream Adjustments. *European Journal of Operational Research*, 308(1): 97-112. (Corresponding author)
- Zhang J, Nault BR, Dimitrakopoulos RG (2019) Optimizing a Mineral Value Chain with Market Uncertainty using Benders Decomposition. *European Journal of Operational Research* 274(1): 227-239. (Corresponding author)
- Zhang J, Dimitrakopoulos RG (2018) Stochastic optimization for a mineral value chain with nonlinear recovery and forward contracts *Journal of the Operational Research Society* 69(6): 864-875. (Corresponding author)
- Zhang J, Dimitrakopoulos RG (2017) A dynamic-material-value-based decomposition method for optimizing a mineral value chain with uncertainty. *European Journal of Operational Research* 258(2): 617-625. (Corresponding author)
- Zhang J, Nault BR, Tu Y (2015) A dynamic pricing strategy for a 3PL provider with heterogeneous customers. *International Journal of Production Economics* 169: 31-43.
- Zhang J, Yang W, Tu Y (2013) Scheduling with compressible and stochastic release dates. *Computers & Operations Research* 40(7): 1758-1765.
- Zhang J, Nault BR, Yang W, Tu Y (2012) Dynamic price quotation in a responsive supply chain for one-of-a-kind production, *International Journal of Production Economics* 139(1): 275-287.
- Zhang J, Tu Y, Liu X (2011) A capacitated production planning problem for closed-loop supply chain with remanufacturing. *The International Journal of Advanced Manufacturing Technology* 54(5): 757-766.
- Liu X, Tu Y, Zhang J. (2008) A genetic algorithm heuristic approach to general outsourcing capacitated production planning problems. *International Journal of Production Research* 46(18): 5059-5074

Working Papers

- Zhang J, Laidlaw E, Patterson R. The Impact of Flexibility-based Discrimination Moderated by Flexibility-Dependent Service, under *Major Revision* for *European Journal of Operational Research*.
- Zhang, J, Nault BR, The Impact of AI Platforms with Third-Party Application Plugins, submitted to the Workshop on Information Technologies and Systems (WITS2023) as a full research paper.
- Zhang, J, Nault BR, Ma J. The competition of Subscription-based Platforms with Proprietary Content Licensing.
- Ma J, Nault BR, Zhang, J. The Impact of Decentralized Autonomous Organizations on Platform Economy for a Business Coalition.

Book Chapter

- Zhang, J. and Dimitrakopoulos, R. (2018). Optimising a Mineral Supply Chain Under Uncertainty with Long-Term Sales Contracts. In: Dimitrakopoulos, R. (eds) *Advances in Applied Strategic Mine Planning*. Springer, Cham. https://doi.org/10.1007/978-3-319-69320-0_45

Refereed Conference Papers & Presentations

- Ma J, Nault BR, Zhang, J. The Impact of Decentralized Autonomous Organizations on Platform Economy for a Business Coalition, CORS/INFORMS International Conference, Vancouver, Canada, 2022
- Zhang, Jian, and Barrie R. Nault. "The Competition Between Edge Providers and the Impact of Analytics Technology", CIST 2019, Seattle, WA, USA, 2019.
- Zhang, Jian, and Barrie R. Nault. "Upstream Information Sharing in a Make-to-Order Supply Chain", CIST 2017, Houston, TX, USA, 2017.
- Zhang, Jian, and R. Dimitrakopoulos. "A Dynamic-ore-price-based Method for Optimizing a Mineral Value Chain with Uncertainty", in proceedings of the *37th International Symposium on the Application of Computers and Operations Research in the Mineral Industry (APCOM 2015)*, Fairbanks, AK, the United States, 2015.
- Zhang, Jian, and R. Dimitrakopoulos. "Optimizing a Mineral Supply Chain with Uncertainty and Non-Linear Operations", in proceedings of *Orebody Modeling and Strategic Mine Planning (SMP) Conference*, Perth, Western Australia, 2014.
- Zhang, Jian, Barrie R. Nault, and Yiliu Tu. "Dynamic and adaptive price quotation in a Make-To-Order company", *Technology Management Conference (ITMC), 2011 IEEE International*. IEEE, 2011.
- Zhang, Jian, and Xiao Liu. "A capacitated production planning problem for closed-loop supply chain." *International Conference in Swarm Intelligence*. Springer, Berlin, Heidelberg, 2010.
- Liu, Xiao, and Jian Zhang. "A capacitated production planning with outsourcing: a general model and its algorithm." *International Conference on Intelligent Computing*. Springer, Berlin, Heidelberg, 2006.

Non-Refereed Conference Abstracts & Presentations

- Zhang, Jian. "Discussion on "Supply Chain Transparency in the Blockchain Era: An Economic Analysis of Competitive Implications", Xi'an, China, 2019.
- Zhang, Jian, and Roussos G. Dimitrakopoulos. "A Dynamic-Ore-Price Based Approach for Mineral Value Chain Optimization with Uncertainty", presented at CORS/INFORMS International Meeting, Montréal, QC, Canada, 2015.
- Zhang, Jian, and Roussos G. Dimitrakopoulos. "Mine Production Planning in Consideration of Commodity Market Risk", presented at *SME Annual Conference & Expo*, Denver, CO, the United States, 2015.
- Zhang, Jian, and Roussos G. Dimitrakopoulos. "Mineral Supply Chain Planning with Dynamic Recovery Rate and Market Uncertainty", presented at *INFORMS Annual Conference*, Montreal, QC, 2014.
- Zhang, Jian, and Roussos G. Dimitrakopoulos. "Optimizing a Mineral Supply Chain with Uncertainties Integrating Long-term Contract", presented at *IIE Annual Conference & Expo*, Montreal, QC, 2014.
- Zhang, Jian, and Roussos G. Dimitrakopoulos. "Optimize a Mineral Supply Chain with Uncertainties in Ore Supply and Commodity Market", presented at *Optimization Days*, Montreal, QC, 2014.

Ad-Hoc Reviewer

Journals

- Management Science, Information Systems Research, MIS Quarterly, Decision Support Systems, European Journal Operational Research, International Journal of Production Economics, International Transactions in Operational Research, Information Technology and Management, Sustainability, International Journal of Environmental Research and Public Health, Optimization and Engineering

Conferences

- International Conference on Information Systems (ICIS), Conference on Information Systems and Technology (CIST)

Grants and Awards

- Social Sciences and Humanities Research Council of Canada (SSHRC) Insight Grant (IG), Israel Science Foundation (ISF)

Book

- IOP Ebooks

Graduate Student Supervision and Examination

Haskayne School of Business, University of Calgary

- Jun Ma, Postdoc Co-Supervisor, 2021-present
- Saman Teymoorian Motlagh, Field of Study Exam Committee, 2023
- Vaarun Vijairaghavan, Ph.D. Supervisory Committee, 2018- 2021

Teaching

Courses

Haskayne School of Business, University of Calgary

- BTMA631 (MBA, previously 731 and 797.02): Data Management and Business Analytics, Fall 2017 – 2022
- BTMA 331(UG) - Data Management and Business Analytics, Fall 2017-2022
- BTMA 317(UG) - Introduction to Business Technology Management, Fall 2017-2018

Course and Program Development and Coordination

- Course Coordinator (3 sections): BTMA 331 (UG) -Data Management and Business Analytics, Fall 2022
- Course revamp: BTMA 331 (UG) -Data Management and Business Analytics, Fall 2018
- Helped Revamp: BTMA 317 (UG) - Introduction to Business Technology Management, Winter 2018 and 2019

Invited Lectures

Department of Mining Engineering, McGill University

- MIME 631 (Graduate) Advanced Stochastic Optimization in Mine Planning; Fall 2014 & Winter 2015

Teaching Certificates and Professional Development Activities

- Microsoft Certification: 70-778 Analyzing and Visualizing Data with Power BI, 2020
- Microsoft PowerBI Workshop, University IT Services, University of Calgary, 2019
- Lunch & Learn: Shoe Boxes and Newspapers: Activities to Increase Student Engagement 2019
- Lunch & Learn: Students as Partners: Tales from a New 4th Year Course 2019
- Lunch & Learn: Engaging Students in Experiential Exercises 2018
- Lunch & Learn: Engaging Students as Partners in Course Design 2018
- Lunch & Learn: Teaching Squares, Haskayne School of Business, University of Calgary, 2018
- SAS BASE Certification, 2017
- University Teaching Certificate, University of Calgary, 2013
- Instructional Skills Workshop, University of Calgary, 2013

Service

- Organizer, Business Technology Management Research Colloquia, Haskayne School of Business 2022 - Present
- Business Intelligence and Analytics Program Advisory Committee of Continuing Education, University of Calgary, 2022 - Present
- Business Intelligence and Analytics Advisory Committee of Continuing Education, University of Calgary, 2022 - Present
- Business Intelligence and Analytics Advisory Committee of Continuing Education, University of Calgary, 2022 – Present
- Member, Business Technology Management Industry Advisory Council, Haskayne School of Business, 2017- Present
- Member, Ph.D. Recruiting Committee, Haskayne School of Business, 2023
- The MBA Committee of Haskayne School of Business, University of Calgary, 2020 - 2022
- The Master of Management (MMgmt) Committee of Haskayne School of Business, University of Calgary, 2020 – 2021
- Member, New Faculty Recruiting Committee (Assistant), Haskayne School of Business, 2021
- Member, New Faculty Recruiting Committee (Instructor), Haskayne School of Business, 2020
- Member, Ph.D. Recruiting Committee, Haskayne School of Business, 2019