

Dawei (David) Zhang

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Email: daz215@lehigh.edu

ACADEMIC EXPERIENCE

February 2022 – Present	Director, Master of Science in Business Analytics (MSBA) College of Business, Lehigh University
August 2021 – Present	Associate Professor with tenure; Thomas J. Campbell 80' Professorship (2025 – Present) College of Business, Lehigh University
August 2015 – July 2021	Assistant Professor College of Business and Economics, Lehigh University
August 2013 – July 2015	Assistant Professor Kania School of Management, University of Scranton
September 2007 – June 2013	Instructor, Research/Teaching Assistant Haskayne School of Business, University of Calgary, Canada

EDUCATION

Ph.D. Management Information Systems, 2013

Haskayne School of Business, The University of Calgary, Canada

Thesis: “Studies in IT: Capacity Utilization and Option Market Information”

Supervisor: Dr. Barrie R. Nault

M.S. Economics, 2006

The Hong Kong University of Science and Technology, Hong Kong

B.S. Computer Science, 2005

Sun Yat-sen University, China

Minor: French

RESEARCH INTERESTS

- Economics of Information Systems
- Value of IT/IS as reflected in
 - Substitution/complementarity with other production inputs such as labor
 - The financial markets
 - Improving healthcare outcomes
 - E-commerce business models

Ph.D. STUDENT SUPERVISION

- Qiaodan (Jordan) He, Co-Supervisor, 2020 – 2025. Placement: George Mason University.

REFEREED JOURNAL ARTICLES

- [R1] Wang, K., Mai. Fe., Shang. Z., Zhang. D., X. Peng (2025), “Analyzing Professional Ethics of Physicians Using Online Patient Reviews: A Machine Learning Approach,” *Production and Operations Management*, 0(0).
- [R2] Zhang. D., Peng. G., Yao. Y., T. R. Browning (2024), “Is a College Education Still Enough? The IT-Labor Relationship with Education Level, Task Routineness, and Artificial Intelligence,” *Information Systems Research*, 35(3): 992-1010.
- [R3] Wei. J., Wei. X., Zhang. D., J. Liu (2023), “First-party Content and Market Concentration on a B2B E-Commerce Platform: Analytical and Empirical Evidence,” *Decision Support Systems*, 170, 113958.
- [R4] Mai. F., Ko. D., Shan. Zhe., D. Zhang (2023), “The Impact of Accelerated Digitization on Patient Portal Use by Underprivileged Racial Minority Groups During COVID-19: Longitudinal Study,” *Journal of Medical Internet Research*, 25:e44981.
- [R5] Zhang, D., Lyle, M. & Nault, B.R (2023), “Trading volume and open interest from options markets as measures of the effect of IT announcements,” *Information Technology and Management*, 25, 113-123.
- [R6] Zhang, D., Nault, B. R., X. Wei (2019), “The Strategic Value of IT in Setting Productive Capacity,” *Information Systems Research*, 30(4), 1124-1144.
- [R7] Ko. D., Mai. F., Shan., Z., D. Zhang (2019), “Operational Efficiency and Patient-Centered Healthcare: A View from Online Physician Reviews,” *Journal of Operations Management*, 65(4), 353-379.
- [R8] Zhang. D., B. R. Nault (2019), "Measuring Risk from IT Initiatives Using Implied Volatility," *Journal of the Association for Information Systems*, 20(11), 1566-1588.
- [R9] Peng, G., D. Zhang (2019), “Does Information Technology Substitute for or Complement Human Labor? A Dynamic Stratified Analysis on European Countries,” *Decision Sciences*, 51(3), 720-754.
- [R10] Lin, X., Zhang, D., Y. Li (2016), “Delineating the Dimensions of Social Support on Social Networking Sites and Their Effects: A Comparative Model,” *Computers in Human Behavior*, 58, 421-430.
- [R11] Zhang, D., Cheng, Z., Mohammad, H. Q., B. R. Nault (2015), “Information Technology Substitution Revisited,” *Information Systems Research*, 26(3), 480–495.

WORKING PAPERS

- [W1] “Does Pre-Login Search Matter? Evidence from a Mobile Commerce Platform” (with Q. He {PhD student}, L. Zhang and O. Yao). Under second-round review at *Production and Operations Management*.
- [W2] “Operational Efficiency in Telemedicine: A Driver of Subsequent Patient Visits” (with X. Li, H. Zhang, and X. Peng). Under first-round review at *Manufacturing & Service Operations Management*.
- [W3] “An empirical investigation of free medical consultation livestreaming by doctors: Impacts on online and offline service demand” (with S. Ma, Y. Wang, X. Peng, and F. Lai). Under first-round review at *Journal of Management Information Systems*.

- [W4] “To Differentiate or Not to Differentiate: The Visual Display of Product Attributes in Online Retailer Faceted Product-Search Systems” (with Q. He {PhD student}, J. Dearden, Y, Yao). Finishing final version, to be submitted to *Information Systems Research* by June 2026.
- [W5] “Hiring Less, Keep More? A Firm-Level Study of Labor Dynamics in AI-focused Mergers and Acquisitions” (with Y. Ma, Z. Lian, and L. Xue). Finishing first draft, targeting *Information Systems Research*.
- [W6] “Patient-Initiated Follow-Up and 30-Day Inpatient Readmission: Evidence from Asynchronous Telemedicine” (with X. Li, H. Zhang and X. Peng). Finishing first draft, targeting *Manufacturing & Service Operations Management*.
- [W7] “First-party Content as a Strategic Decision for Platform Growth – Evidence from a B2B Platform” (with J. Wei and X. Wei). Finishing final version, to be submitted to *Information Technology and Management* by June 2026.
- [W8] “The Impact of Unions on Technology Investment” (with I. Hwang and D. Mahony). Finishing final version, to be submitted to *Information Technology and Management* by June 2026.
- [W9] “First-party Content as a Strategic Decision for Platform Product Variety – Evidence form a B2B platform” (with J. Wei and X. Wei). Finishing first draft, targeting *Decision Sciences*.
- [W10] “Interdependence of IT Investment in Supply Chains” (with Z. Cheng, B. R. Nault, and F. Gong). Under early-stage development.

BOOK CHAPTERS

- Lin, X., Zhang, D., Y. Li. (2015), “On the Relationship between Online Social Support and Users’ Continuance Intention – Evidence from Social Network Sites”, *Handbook of Research on Integrating Social Media into Strategic Marketing*, pp. 140 – 152, IGI Global, USA.

CONFERENCE & WORKSHOP PRESENTATIONS (Name underlined if presented by a co-author)

- “Hiring Less, Keep More? A Firm-Level Study of Labor Dynamics in AI-focused Mergers and Acquisitions,” with Y. Ma, Z. Lian, and L. Xue. *The 19th China Summer Workshop on Information Management*, Haikou, China, June 28-29, 2026 (Forthcoming)
- “Patient-Initiated Follow-Up and 30-Day Inpatient Readmission: Evidence from Asynchronous Telemedicine,” with X. Li, H. Zhang, and X. Peng. *The 36th Annual POMS Conference*, Reno, NV, May 7-11, 2026.
- “Hiring Less, Keep More? A Firm-Level Study of Labor Dynamics in AI-focused Mergers and Acquisitions,” with Y. Ma, Z. Lian, and L. Xue. *The 2025 DSI conference*, Orlando, FL. November 22-24, 2025.
- “Do Initial and In-Process Waiting Times Shape Subsequent Patient Visits? Evidence from Asynchronous Telemedicine,” with X. Li, X. Peng, and H. Zhang. *The 2025 Conference on Information Systems and Technology (CIST 2025)*, Atlanta, GA, October 25-26, 2025.
- “Operational Efficiency in Telemedicine: A Driver of Subsequent Patient Visits,” with X. Li, X. Peng, and H. Zhang. *The 18th China Summer Workshop on Information Management (CSWIM 2025)*, Xi’an, China, June 28-29, 2025.
- “First-party Content and Third-Party Sellers’ Exclusive Product Variety on a B2B Platform – Theory and Evidence,” with J. Wei, X. Wei, and J. Liu. *The 18th China Summer Workshop on Information Management (CSWIM 2025)*, Xi’an, China, June 28-29, 2025.

- “Which Products on Top? Online Retailers’ Choice of Display Prominence,” with Q. He, J. Dearden, and Y. Yao. *The 2024 Conference on Information Systems and Technology (CIST 2024)*, Seattle, WA, October 19-20, 2024.
- “The Impact of Labor Unions and AI Productivity and AI Innovation,” with I. Hwang and D. Mahony. *The 2024 Conference on Information Systems and Technology (CIST 2024)*, Seattle, WA, October 19-20, 2024.
- “Strategizing Product Display: Analyzing Depth vs. Width in Online Retail Personalization,” with Q. He, J. Dearden, and Y. Yao. *The 17th China Summer Workshop on Information Management (CSWIM 2024)*, Xiamen, China, June 29-30, 2024.
- “Labor Unions, IT, and Productivity - An Industry-level Analysis,” with I. Hwang, and D. Mahony. *The 2023 DSI Conference, Atlanta, GA, November 12-20, 2023*.
- “Analyzing Professional Ethics of Physicians Using Online Patient Reviews: A Machine Learning Approach,” with K. Wang, F. Mai, Z. Shan, and X. Peng. *The 2023 DSI Conference, Atlanta, GA, November 12-20, 2023*.
- “Analyzing Professional Ethics of Physicians Using Online Patient Reviews: A Machine Learning Approach,” with K. Wang, F. Mai, Z. Shan, and X. Peng. *The 33rd Annual POMS Conference, Orlando, FL, May 21-25, 2023*.
- “How Much Personalization Do You Want? An Analytical Model of Online Product Displays,” with He. Q., Dearden. J., and O. Yao. *The 2023 INFORMS Annual Meeting, Phoenix, AZ, October 15-18, 2023*.
- “Does Pre-Login Search Matter? Evidence from a Mobile Commerce Platform,” with He. Q., L. Zhang., and O. Yao. *The 2023 Hawaii International Conference on System Sciences (HICSS 2023)*, Hawaii, January 3-6, 2023.
- “Does Pre-Login Search Matter? Evidence from a Mobile Commerce Platform,” with He. Q., L. Zhang., and O. Yao. *The 2022 INFORMS Annual Meeting, Indianapolis, IN, October 15-16, 2022*.
- “Does Pre-Login Search Matter? Evidence from a Mobile Commerce Platform,” with He. Q., L. Zhang., and O. Yao. *The 2022 Conference on Information Systems and Technology (CIST 2022)*, Indianapolis, IN, October 15-16, 2022.
- “Is COVID-19 Widening the Racial Digital Divide in Healthcare? Evidence from Patient Portal Usage,” with F. Mai, Z. Shan, and D. Ko. *HITS-Health Information Technology Symposium*, Virtual Conference, December 15, 2020 (Best Paper Award).
- “The Monitoring Role of Online Physician Reviews on Prescription Behavior,” with F. Mai and Z. Shan. *The Conference on Health IT and Analytics (CHITA)*, Virtual Conference, October 8-10, 2020.
- “Determinants of Seller-buyer Trading Patterns on A B2B Trading Platform,” with Wei. J., Liu. J., and X. Wei. *The 2020 INFORMS Annual Meeting*, Virtual Conference. 2020.
- “Substitutive First-party Content as a Strategic Decision for Platform Growth – Evidence from a B2B Platform,” with Wei. J., Liu. J., and X. Wei. *The 2020 Americas Conference on Information Systems (AMCIS)*, Virtual Conference, August 12-16, 2020.
- “The Complementarity between Foreign and Native IT Workers: Evidence from an Industry-Level Analysis” with Peng. G. and D. Zhang. *The 2020 Americas Conference on Information Systems (AMCIS)*, Virtual Conference, August 12-16, 2020.
- “Interdependence of IT Investment in Supply Chains,” with Z Cheng, B. R. Nault and F. Gong. *The 2019 INFORMS Annual Meeting*, Seattle, WA, October 20-23, 2019.
- “Do Foreign IT Workers Substitute for or Complement the Natives?” with G. Peng. *The 2019 Americas Conference on Information Systems (AMCIS)*, Cancun, Mexico, August 15-17, 2019.

- “Artificial Intelligence or Intelligence Augmentation? Unravelling the Debate through an Industry-Level Analysis,” with G. Peng and Y. Yao. *The 2019 Pacific Asia Conference on Information Systems (PACIS)*, Xi’an, China, July 8-12, 2019.
- “The Impact of Union Density on Technology Investment,” with D. Mahony. *POMS 30th Annual Conference*, Washington D. C., May 2-6, 2019.
- “Are Information Technology and Human Labor Substitutes or Complements? A Stratified Analysis on Education Groups,” with G. Peng. *The 12th China Summer Workshop on Information Management (CSWIM 2018)*, Qingdao, China, June 23-24, 2018.
- “Improving Patient Satisfaction: A View from the Patients through User-Generated Online Physician Reviews” *The 29th Production and Operations Management Annual Conference (POMS 2018)*, Houston, TX, May 4-7, 2018.
- “Improving Patient Satisfaction: A View from the Patients through User-Generated Online Physician Reviews,” with D. Ko, F. Mai, and Z. Shan. *The 11th China Summer Workshop on Information Management (CSWIM 2017)*, Nanjing, China, June 24-25, 2017.
- “Do IT Investments Impact Ex-ante Firm Risk? Evidence from the Option Market,” with B. R. Nault. *The 10th China Summer Workshop on Information Management (CSWIM 2016)*, Dalian, China, June 25-26, 2016.
- “Do IT Investments Impact Ex-ante Firm Risk? Evidence from the Option Market,” with B. R. Nault. *Workshop on Information Systems and Economics (WISE)*, Dallas, TX, December 12-13, 2015.
- “The Relationship between Maximum Completion Time and Total Completion Time in Flowshop Production,” with W. Li and H. Dai. *The 43rd SME North American Manufacturing Research Conference (NAMRC)*, Charlotte, NC, June 8-12, 2015.
- “The Dimensions of Online Social Support on Social Networking Sites and Their Effects,” with X. Lin and Y. Li. *The 18th Pacific Asia Conference on Information Systems (PACIS 2014)*, Chengdu, China, June 24-28, 2014.
- “IT and Hospital Performance,” with B. R. Nault and V. Mitchell. *The 2014 INFORMS Annual Meeting*, San Francisco, CA, November 9-12, 2014.
- “Who Reacts to IT Investment Announcements?” with M. Lyle and B. R. Nault. *The 2012 INFORMS Conference on Information Systems and Technology (CIST 2012)*, Phoenix, AZ, October 14-17, 2012.
- “The Impact of IT on Economic Capacity,” with B. R. Nault. *The 2012 INFORMS Annual Meeting*, Phoenix, AZ, October 14-17, 2012.
- “The Impact of IT on Productive Capacity,” with X. Wei and B. R. Nault. *The 2011 INFORMS Conference on Information Systems and Technology (CIST 2011)*, Charlotte, NC, November 12-13, 2011.
- “Who Reacts to IT Investment Announcements?” with M. Lyle and B. R. Nault. *The 2011 INFORMS Annual Meeting*, Charlotte, NC, November 13-16, 2011.
- “Optimal Software Localization Design,” with J. Chen and B. R. Nault. *Doctoral Consortium, International Conference on Information Systems (ICIS)*, Saint Louis, December 12-15, 2010.
- “Optimal Software Localization Design,” with J. Chen and B. R. Nault. *The 2010 INFORMS Annual Meeting*, Austin, TX, November 7-10, 2010.
- “On the Relationship of Information Technology with Other Inputs,” with H. Mohammad, Z. Cheng, and B. R. Nault. *CORS-INFORMS International Meeting*, Toronto, June 14-17, 2009.

INVITED PRESENTATIONS

- “Do Initial and In-Process Waiting Times Shape Subsequent Patient Visits: Evidence from Asynchronous Telemedicine,” *College of Business Research Retreat, Lehigh University*, May, 2026.
- “Operational Efficiency in Telemedicine: A Driver of Subsequent Patient Visits,” *Renmin University*, Beijing, China, December, 2024 (Presented by David Peng).
- “Analyzing Professional Ethics of Physicians Using Online Patient Reviews: A Machine Learning Approach,”
 - *Lanzhou University*, Lanzhou, China, February, 2024.
 - *Beijing Foreign Studies University*, Beijing, China, February, 2024.
 - *Fudan University*, Shanghai, March, 2024.
 - *Sun Yat-sen University*, Guangzhou, March, 2024.
- “Predicting the Effect of Industry Payments on Medicare Prescribing Patterns - A Social Media Perspective” I-DISC Fintech Workshop, *Lehigh University*, February, 2020.
- “Are Information Technology and Human Labor Substitutes or Complements? A Stratified Analysis on Education Groups” *Drexel University*, April, 2018.
- “Substitute or Complement? A Study on the Relationship between IT and Labor,” with G. Peng. *CBE Summer Research Retreat*, Lehigh University, May, 2017.
- “Information Technology as a Production Input – A Substitute or Complement?” *Lehigh Center for Supply Chain Research Spring Symposium*, November, 2017.
- “The Strategic Value of IT in Setting Productive Capacity” *Fudan University*, Shanghai, China, June, 2017.
- “The Impact of IT on Productive Capacity and its Utilization Rate” *University of Connecticut*, April, 2017 (Presented by Barrie Nault).
- “Implied Volatility as a Measure of Risk from IT Initiatives” *Department of Management, College of Business and Economics, Lehigh University*, April, 2017.
- “On the Relationship of Information Technology with Other Inputs,” with J. Cheng, H. Mohammad and B. R. Nault. *CBE Summer Research Retreat*, Lehigh University, May, 2016.
- “Managing Paradoxical Tensions to Improve Patient Satisfaction: A View from the Patients through User-Generated Online Physician Reviews” *Cincinnati Children’s Hospital Medical Center*, Cincinnati, OH, March, 2016 (Presented by Z. Shan and Dong-Gil Ko).
- “The Impact of IT on Productive Capacity and its Utilization Rate” *Dalian University of Technology*, China, July, 2014.

TECHNICAL SKILLS

- Statistics and Econometrics: Stata, MATLAB, R, SPSS, LISREL, Minitab.
- Database: Oracle, SQL Server, MySQL, Microsoft Access.
- Programming: Python, C++, C#, Java, Visual Basic, VB.Net, VBA.
- Business Intelligence: SAS, Weka.

TEACHING INTERESTS

- Systems Analysis & Design
- Tech Consulting
- Business Analytics & AI

TEACHING EXPERIENCE

- Decision Analytics for Managers (MBA core), Fall 2024 – Present, Lehigh University
- Managing Information (MBA core), Fall 2015 – Fall 2023, Lehigh University
- Systems Analysis and Design (BIS Undergraduate core), Fall 2015 – Present, Lehigh University
- Statistics for Business I (Business Core), Fall 2013, 2014, University of Scranton
- Statistics for Business II (Business Core), Spring 2013, 2014, University of Scranton
- Business Database Management Systems (MBA Elective), Fall 2013, 2014, University of Scranton
- Database Management Systems for E-Business (Undergraduate Elective), Fall 2013, 2014, University of Scranton
- Business Information Management (Business Core), Fall 2013, 2014, Spring 2013, 2014 University of Scranton
- Introduction to Management Information Systems (Business Core), Fall 2011, 2012, University of Calgary

TEACHING CERTIFICATES

- Instructional Skills Workshop (certificate) The University of Calgary, Spring 2011.
- University Teaching Certificate The University of Calgary, Spring 2012.

HONORS AND AWARDS

- Thomas J. Campbell 80' Professorship, Lehigh University, 2025 – Present.
- Carl & Ingeborg Beidleman Research Award, Lehigh University, 2021.
- Robert and Christine Staub Faculty Excellence Award, College of Business, Lehigh University, 2021.
- Selected for the Doctoral Consortium at *the International Conference on Information Systems (ICIS)*, Saint Louis, December, 2010.
- Faculty of Graduate Studies Scholarship, University of Calgary, 2010 – 2012.
- Graduate Student Conference Travel Grant, University Research Grants Committee (URGC), University of Calgary, 2010.
- Marion Janet and Ian Stormont Forbes Scholarship, University of Calgary, 2009 – 2010.
- Marion Janet and Ian Stormont Forbes Scholarship, University of Calgary, 2008 – 2009.
- Graduate Research Scholarship, University of Calgary, 2009.
- Postgraduate Scholarship, HKUST, 2005 – 2006.
- Kai Si Scholarship, Sun Yat-sen University, China, 2001.

MEDIA COVERAGE

- “Nurturing Entrepreneurship Through Business Technology,” *Marketing*, Lehigh University, May 2021.
- “Understand the Complicated Relationship Between Labor and Technology,” *Lehigh Research Review*, Lehigh University, May 2020.
- “New minor will open doors for business students,” *The Aquinas*, University of Scranton, February 2015.

ACADEMIC EDITORIAL REVIEW

- Associate Editor for *Decision Sciences Journal*, January 2026 – Present.
- Associate Editor for *Information Technology and Management*, March 2020 – Present.
- Associate Editor for the *2019 International Conference on Information Systems (ICIS)*
- Associate Editor for The 24th European Conference on Information Systems (ECIS), 2016
- Associate Editor for *Business & Information Systems Engineering* Special Issue, 2014
- Referee for *Information Systems Research*, *Management Information Systems Quarterly*, *Production and Operations Management*, *Journal of Operations Management*, *Decision Science Journal*, *Decision Support Systems*, *Information Systems Frontiers*, *Information Technology and Management*, *Information and Management*, *Business & Information Systems Engineering*, *Journal of Systems Science and Systems Engineering*, *International Conference on Information Systems*, *The INFORMS Conference on Information Systems and Technology*, *Workshop on Information Technologies and Systems*, *European Conference on Information Systems*, *The Hawaii International Conference on System Sciences*, *Americas Conference on Information Systems*, *Pacific Asia Conference on Information Systems*, *China Summer Workshop on Information Management*, *International Conference on Exploring Services Science*.

CONFERENCE ADMINISTRATION

- Session Chair, “Transforming Business Decisions: Analytical and Empirical Evidence”, the 56th Annual Conference of the Decision Sciences Institute (DSI 2025)
- Session Chair, “Technology Management and Analytics”, the 54th Annual Conference of the Decision Sciences Institute (DSI 2023)
- Chair for mini-track “Adoption and Impact of Health Information Technology”, The 27th Americas Conference on Information Systems (AMCIS 2020)
- Chair for mini-track “Impact of IT Productivity on Firm Value”, The 26th Americas Conference on Information Systems (AMCIS 2019)
- Program Committee member for CSWIM 2017 - 2026
- Program Committee (PC) member for CIST 2016 - 2026
- Session Chair for the 2018 *China Summer Workshop on Information Management (CSWIM 2018)*
- Session Chair for *INFORMS 2014* Annual Meeting, 2014

UNIVERSITY SERVICES

Lehigh University, Academic Leadership

- Program director, Master in Business Analytics, Spring 2022 – Present (Co-founder of the program)
- Program director, Business Information Systems, Fall 2019 – Winter 2022

Lehigh University, Committee Service

- College of Business Tenure and Promotion Committee, Fall 2023 – Present
- ACIS (Advisory Council for Information Services Committee), Fall 2016 – Present
- Data Governance Executive Committee, Fall 2017 - Present
- Graduate and Research Committee, starting Fall 2026
- University Committee on Discipline & Appeals Committee, Fall 2021 - 2023
- Library & Technology Services Faculty Committee, Fall 2020 – 2023
- Chair, Department Search Committee, 2019, 2022, 2023, 2025
- Member, Department Search Committee, 2016, 2018, 2020, 2021, 2024
- Planning and organizing research seminars for the Management Department, Summer 2017 – 2019
- FFPOC (Faculty Financial Planning & Operations Committee), Fall 2017 – Spring 2019
- Department Review Committees, 2019 (Marketing), 2021 (Economics).

University of Scranton

- Graduate Program Committee, Fall 2013 - Spring 2015
- Strategic Planning Committee, Fall 2013 - Spring 2015
- Passport Program Committee, May 2014 - Spring 2015