De Liu

Professor, Information and Decision Sciences
Xian Dong Eric Jing Professorship for Business Teaching
Academic Director, Master of Science in Business Analytics
Carlson School of Management
University of Minnesota

321 19th Avenue South, 3-418   Phone: (612)626-4480
Minneapolis, MN 55455   Email: deliu@umn.edu

ACADEMIC APPOINTMENTS

2020 - present	Professor & Xian Dong Eric Jing Professorship for Business Teaching, University of Minnesota
2017 - 2020	Associate Professor & 3M Fellow in Business Analytics, University of Minnesota
2014 - 2016	Associate Professor, University of Minnesota
2013 - 2014	Alan F. and Irene Bloomfield Associate Professor, University of Kentucky
2010 - 2013	Associate Professor, University of Kentucky
2004 - 2010	Assistant Professor, University of Kentucky
2004	Assistant Instructor, University of Texas at Austin

EDUCATION

2000 - 2004	Ph.D. in Management Sci and Info Systems, University of Texas at Austin
1998 - 2000	M.S. in Management Science and Engineering, Tsinghua University
1994 - 1998	B.E. in Management Information Systems, Tsinghua University

RESEARCH INTERESTS

Auctions and Mechanism Design, Gamification, Crowdfunding, AI and Augmented Intelligence, Social Media and Social Commerce.

JOURNAL PUBLICATIONS

1. Zhihong Ke, De Liu, and Daniel J. Brass. Magnify Cascades of eWOM on Social Networks: The Roles of User, Product, and Relationship Characteristics. *Accepted at Production and Operations Management*, 2024

2. Yumei He, Xincheng Xu, Ni Huang, Yili Hong, and De Liu. Enhancing User Privacy Through Ephemeral Sharing Design: Experimental Evidence from Online Dating. *Information Systems Research*, 2024

3. Tao Li, Sean Xu, De Liu, and Yufang Wang. Should E-learning be Interleaved? Theory and Evidence from a Field Experiment. *MIS Quarterly*, 2023

4. Yiting Guo, Yilin Li, De Liu, and Xin (Sean) Xu. Measuring Service Quality Based on Customer Emotion: An Explainable AI Approach. *Decision Support Systems*, 2023

5. Zhigang Cai, Jason Chan, Zihong Huang, and De Liu. Better to Give than to Receive? Impact of Donation Option on Reward-based Crowdfunding Campaigns. *Forthcoming in Information Systems Research*, 2023

6. Yash Babar, Shawn P. Curley, Zhihong Ke, De Liu, and Zachary J. Sheffler. The Effects of Digitally Delivered Nudges in a Corporate Wellness Program. *Journal of Association of Information Systems*, 24(1):136–160, 2023

7. Dongyu Chen, Chengchen Huang, De Liu, and Fujun Lai. The Role of Expertise in Herding Behaviors: Evidence from a Crowdfunding Market. *Electronic Commerce Research*, May 2022

8. He Huang, Zhipeng Li, De Liu, and Hongyan Xu. Auctioning IT Contracts with Renegotiable Scope. *Management Science*, 68(8):6003–6023, 2022

9. Zachary J. Sheffler, De Liu, and Shawn P Curley. Ingredients for successful badges: evidence from a field experiment in bike commuting. *European Journal of Information Systems*, 29(6):688–703, 2020

10. Zhihong Ke, De Liu, and Daniel J. Brass. Do Online Friends Bring Out the Best in Us? The Effect of Friend Contributions on Online Review Provision. *Information Systems Research*, 31(4):1322–1336, 2020

11. Liang Chen, Pei Xu, and De Liu. The Effect of Crowd Voting on Participation in Crowdsourcing Contests. *Journal of Management Inforamtion Systems*, 37(2):510–535, 2020

12. Juneyoung Park, De Liu, Mun Y. Yi, and Radhika Santhanam. GAMESIT: A Gamified System for Information Technology Training. *Computers and Education*, 142(December):1–19, 2019

13. Zhihong Ke, De Liu, Alok Gupta, and Daniel Joseph Brass. Assimilate or Differentiate? Contributors' Choice of Subjects in User-Generated Content. *Decision Sciences*, 51(5):1265–1287, 2019 (**Decision Science Best Paper Finalist**)

14. De Liu and Adib Bagh. Preserving Bidder Privacy in Assignment Auctions: Design and Measurement. *Management Science*, 66(7):3162–3182, July 2020

15. Hong Guo, Xuying Zhao, Lin Hao, and De Liu. Economic Analysis of Reward Advertising. *Production and Operations Management*, 28(10):2413–2430, 2019

16. Pei Xu and De Liu. Product engagement and identity signaling: The role of likes in social commerce for fashion products. *Information and Management*, 56(2):143–154, 2019

17. Gordon Burtch, Yili Hong, and De Liu. The Role of Provision Points in Online Crowdfunding. *Journal of Management Information Systems*, 35(1):117–144, 2018

18. De Liu, Radhika Santhanam, and Jane Webster. Toward Meaningful Engagement: a Framework for Design and Research of Gamified Information Systems. *MIS Quarterly*, 41(4):1011–1034, 2017. Publisher: Working Paper

19. Huaxia Rui, De Liu, and Andrew Whinston. Allocation and Pricing of Substitutable Goods: Theory and Algorithm. *Production and Operations Management*, 26(5):767–783, 2017. Place: San Diego, CA

20. Liang Chen, Zihong Huang, and De Liu. Pure and hybrid crowds in crowdfunding markets. *Financial Innovation*, 2(1):1–19, 2016

21. Radhika Santhanam, De Liu, and Wei Cheng Milton Shen. Gamification of Technology-Mediated Training: Not All Competitions Are the Same. *Information Systems Research*, 27(23):453–465, 2016

22. De Liu, Daniel J. Brass, Yong Lu, and Dongyu Chen. Friendships in Online Peer-to-Peer Lending: Pipes, Prisms, and Relational Herding. *MIS Quarterly*, 39(3):729–742, 2015. arXiv: 1011.1669v3 Publisher: SSRN Working Paper ISBN: 9788578110796

23. De Liu and Siva Viswanathan. Information Asymmetry and Hybrid Advertising. *Journal of Marketing Research*, 51(5):609–624, 2014

24. Jun Li, De Liu, and Shulin Liu. Optimal keyword auctions for optimal user experiences. *Decision Support Systems*, 56(2013):450–461, 2013

25. De Liu, Xun Li, and Radhika Santhanam. Digital Games and Beyond: What Happens When Players Compete? *MIS Quarterly*, 37(1):111–124, 2013

26. Liu Shulin, Jun Li, and De Liu. Multi-attribute Procurement Auctions with Risk Averse Suppliers. *Economics Letters*, 115(3):408–411, 2012

27. De Liu, Jianqing Chen, and Andrew B. Whinston. Ex Ante Information and the Design of Keyword Auctions. *Information Systems Research*, 21(1):133–153, 2010

28. De Liu, Gautam Ray, and Andrew B. Whinston. The interaction between knowledge codification and knowledge-sharing networks. *Information Systems Research*, 21(4):892–906, 2010. ISBN: 10477047

29. Jianqing Chen, De Liu, and Andrew B Whinston. Auctioning Keywords in Online Search. *Journal of Marketing*, 73(4):125–141, 2009

30. Jiming Wu and De Liu. The Effects of Trust and Enjoyment on Intention to Play Online Games. *Journal of Electronic Commerce Research*, 8(2):128–140, 2007. ISBN: 1526-6133

31. De Liu, Xianjun Geng, and Andrew B Whinston. Optimal Design of Consumer Contests. *Journal of Marketing*, 71(4):140–155, 2007. ISBN: 0022-2429

32. De Liu and Jianqing Chen. Designing online auctions with past performance information. *Decision Support Systems*, 42(3):1307–1320, 2006

33. Guoqing Chen, Qiang Wei, De Liu, and Geert Wets. Simple association rules (SAR) and the SAR-based rule discovery. *Computers and Industrial Engineering*, 43(4):721–733, 2002

WORKING PAPERS

1. Zihong Huang and De Liu. Economics of Social Media Fake Accounts. *Minor Revision at Management Science*, 2024

2. Yiting Guo, Ximing Yin, De Liu, and Sean Xin Xu. Does Voicebot Gender Matter? Theory and Evidence from Debt-Collection Voicebots. *Under revision for 3rd Resubmission at MIS Quarterly*, 2024

3. Yi Gao, Dengpan Liu, Hong Guo, Xuying Zhao, and De Liu. Tackling Present Bias with Microtasking Design: Implications for Self-Improvement Apps. *Under revision at MIS Quarterly*, 2022

4. Lingli Wang, Yumei He, Ni Huang, De Liu, Xunhua Guo, and Guoqing Chen. The Role of AI Assistants in Livestream Selling: Evidence from A Randomized Field Experiment. *Under revision for 2nd resubmission at Information Systems Research*

5. Pei Xu, Yiting Guo, and De Liu. What Products Can Benefit from Augmented Reality? Empirical Evidence from Amazon. *Under review at Journal of Management Information Systems*, 2024. Place: Philadelphia, PA

6. Jingzhao An, De Liu, Radhika Santhnam, and Xi Zhao. Bragging on Digital Platforms to Enhance Player Engagement: Insights from a Mobile Game. *In Preparation for Submission*, 2024

7. Zhihong Ke, De Liu, and Gediminas Adomavicius. Towards a Measure of Online Review Quality. *Under Review at Marketing Science*, 2024

8. Zhihong Ke, Huaxia Rui, De Liu, and Alok Gupta. Catch Me if You Can: Thwarting Strategic Manipulation of Online Review Ratings. *In Preparation for Submission*

9. Xinxue Qu, Hong Guo, Xuying Zhao, and De Liu. Push vs Pull: The Choice of Advertising Formats for Mobile Apps. *Working paper*, 2020

10. Tao Li, De Liu, and Sean Xin Xu. Design Challenge Levels in E-Learning? Insights from a Large-Scale Field Experiment. *Working Paper*, 2020

11. He Huang, De Liu, Yu Tang, and Hongyan Xu. Competing in the Era of Supply Chain Transparency: A Tale of Information Disclosure and Supplier Switching. *In Preparation for Submission*, 2022

12. Zach Sheffler, Shawn Curley, and De Liu. From starting to keeping active: Using badge design to motivate different users. *Working paper*, 2024

BOOK CHAPTERS

1. De Liu, Jianqing Chen, and Andrew B. Whinston. Current Issues in Keyword Auctions. In Gediminas Admomavicius and Alok Gupta, editors, *Handbook of Information Systems: Business Computing*, pages 69–96. Emerald Group Publishing Limited, Bingley, UK, 2009

2. De Liu, Xianjun Geng, and Andrew B. Whinston. Status Seeking and the Design of Online Entertainment Communities. In Apte Uday and Uday Karmarkar, editors, *Managing in the Information Economy: Current Research Issues*, pages 281–304. Springer, 2007

3. Anjana Susarla, De Liu, and Andrew B. Whinston. Peer-to-peer knowledge management. In Clyde W. Holsapple, editor, *Handbook on Knowledge Management*, volume 2, pages 129–139. Springer, Berlin, 2003

CONFERENCE PAPERS & PRESENTATIONS

1. Ramin Zandvakili, Kuruzovich, Jason, and De Liu. Onboarding Players via Bots? A Field Experiment in a Team-based Competitive Multiplayer Game. In *2024 POMS Annual Conference*, Minneapolis, MN, 2024

2. Zihong Huang, Yi Gao, and De Liu. Social Media Impersonation and Verification. In *2024 POMS Annual Conference*, Minneapolis, MN, 2024

3. Ramin Zandvakili, De Liu, Andy Tao Li, Radhika Santhanam, and Scott Schanke. Design and Evaluation of A Gamified Generative AI Chatbot for Canvas LMS Courses. In *HCI International 2024*, 2024

4. Zihong Huang and De Liu. Economics of Social Media Fake Accounts. In *Theory of Economics in Information Systems (TEIS) Workshop*, 2023

5. Lingli Wang, Yumei He, Ding Ding, Nina Huang, Yili Hong, Xunhua Guo, De Liu, and Guoqing Chen. The Role of AI Assistants in Online Shopping Platforms: Evidence from Livestream Selling. In *INFORMS Annual Meetings*, 2023 (**Best Paper Runner-up** - INFORMS ISS Cluster)

6. Yumei He, Xincheng Xu, Ni Huang, Yili Hong, and De Liu. Enhancing User Privacy Through Ephemeral Sharing Design: Experimental Evidence from Online Dating. In *BU Platform Strategy Symposium*, Boston, MA, 2023

7. Yiting Guo, Ximing Yin, De Liu, and Sean Xin Xu. How does AI chatbot Gender Affect Customer Repayment Intention. In *2022 POMS International Conference*, Xi'an, China, 2022

8. Yuanyuan Liu, Jason Kuruzovich, and De Liu. Onboarding Players via Bots? A Field Experiment in a Team-based Competitive Multiplayer Game. In *2022 Conference on Artificial Intelligence, Machine Learning, and Business Analytics*, Boston, MA, 2022

9. Yi Gao, Dengpan Liu, Hong Guo, Xuying Zhao, and De Liu. Microtasking Design for Self-Improvement Apps: A Present Bias Perspective. In *Workshop on Economics of Information Systems (WISE)*, Copenhagen, Denmark, 2022

10. Yi Gao, Dengpan Liu, Hong Guo, Xuying Zhao, and De Liu. Microtasking Design for Self-Improvement Apps: A Present Bias Perspective. In *Conference on Information Systems and Technology (CIST)*, Indianapolis, IN, 2022

11. Yi Gao, Dengpan Liu, Hong Guo, Xuying Zhao, and De Liu. Present Bias and Microtasking. In *Theory of Economics in Information Systems (TEIS) Workshop*, San Francisco, CA, 2022

12. De Liu, Lowry Paul, Landers Richard, Nah Fiona, and Santhanam Radhika. Developing Gamification Research in Information Systems. In *AMCIS 2022 TREOs*, Minneapolis, MN, 2022

13. Lingli Wang, Yumei He, Ding Ding, Nina Huang, Yili Hong, Xunhua Guo, De Liu, and Guoqing Chen. Effectiveness of AI Assistance in Live Streaming: A Randomized Field Experiment. In *ICIS 2021 Proceedings*, Austin, Tx, December 2021

14. He Huang, De Liu, Yu Tang, and Hongyan Xu. Competing in the Era of Supply Chain Transparency: A Tale of Information Disclosure and Supplier Switching. In *Production and Operations Management Society (POMS) Annual Conference*, Virtual, 2021

15. Yumei He, Xincheng Xu, Ni Huang, Yili Hong, and De Liu. Preserving User Privacy Through Ephemeral Sharing Design: A Large-Scale Randomized Field Experiment in the Online Dating Context. In *China Summer Workshop on Information Management (CSWIM)*, Virtual, 2021

16. Yumei He, Xincheng Xu, Ni Huang, Yili Hong, and De Liu. Preserving User Privacy Through Ephemeral Sharing Design: A Large-Scale Randomized Field Experiment in the Online Dating Context. In *International Conference on Information Systems (ICIS)*, Austin, TX, 2021 (**Best Paper In Track** - IS Design, Development, and Project Management)

17. Yi Gao, Dengpan Liu, Hong Guo, Xuying Zhao, and De Liu. Present Bias and Microtasking. In *International Conference on Information Systems (ICIS)*, Austin, TX, 2021

18. Yiting Guo, Ximing Yin, De Liu, and Sean Xin Xu. Effect of AI Chatbots´ Gender in the Business Context: Empirical Evidence from Debt Collection. In *Academy of Management Conference (AOM)*, Virtual, 2021

19. Yiting Guo, Ximing Yin, De Liu, and Sean Xin Xu. Effect of AI Chatbots´ Gender in the Business Context: Empirical Evidence from Debt Collection. In *Conference on Information Systems and Technology (CIST)*, Virtual, 2021

20. Xinxue Qu, Xuying Zhao, Hong Guo, and De Liu. Economic Analysis of Advertising Mechanisms in Mobile Apps Design. In *POMS Annual Conference*, Minneapolis, MN, 2020

21. Zihong Huang, Xuan Bi, and De Liu. AI-empowered Venture Capital (VC): The Impact of AI Adoption on VC Firms' Success. In *Conference on Information Systems and Technology (CIST)*, Virtual, 2021

22. Zihong Huang and De Liu. Economics of Social Media Fake Accounts. In *Workshop on Information Systems and Economics (WISE)*, 2020. (**Best Student Paper nomination**)

5

23. Yumei He, Xincheng Xu, Ni Huang, Yili Hong, and De Liu. Preserving User Privacy Through Ephemeral Sharing Design: A Large-Scale Randomized Field Experiment in the Online Dating Context. In *Workshop on Information Systems and Economics (WISE)*, 2020

24. Yumei He, Xincheng Xu, Ni Huang, Yili Hong, and De Liu. Ephemeral Sharing in Online Dating: A Randomized Field Experiment. In *Conference on Digital Experimentation (CODE)*, 2020

25. Zihong Huang, Xuan Bi, and De Liu. AI-empowered Venture Capital (VC): The Impact of AI Adoption on VC Firms' Success. In *Workshop on E-Business (WeB)*, 2020

26. Agnes Yang, De Liu, and Radhika Santhnam. The Impact of Role Coordination on Virtual Team Performance and Player Retention in Esports. In *19th Workshop on e-Business (WeB)*, 2020. (**Best Student Paper nomination**)

27. Yiting Guo, Ximing Yin, De Liu, and Sean Xin Xu. "She is not just a computer": Gender Role of AI Chatbots in Debt Collection. In *International Conference in Information Systems (ICIS)*, India, 2020

28. Tao Li, De Liu, and Sean Xin Xu. Design Challenge Levels in E-Learning? Insights from a Large-Scale Field Experiment. In *International Conference in Information Systems (ICIS)*, India (Best Paper, 2020. (**Best Student Paper in Track** - Digital Learning Environments and Future IS Curricula)

29. Zihong Huang and De Liu. Economics of Social Media Fake Accounts. In *2nd China Workshop on Economis of Information Systems Theory (CWEIST)*, Chongqing, 2020

30. He Huang, De Liu, Yu Tang, and Hongyan Xu. Competing in the Era of Supply Chain Transparency: A Tale of Information Disclosure and Supplier Switching. In *Theory of Economics in Information Systems (TEIS) Workshop*, Newport Beach, California, 2020

31. He Huang, De Liu, Sammi Tang, and Hongyan Xu. Competing in the Era of Supply Chain Transparency: Information Disclosure and Supplier Switching. In *POMS Annual Conference*, Minneapolis, MN, 2020

32. Xinxue Qu, Xuying Zhao, Hong Guo, and De Liu. Economic Analysis of Advertising Mechanisms in Mobile Apps Design. In *POMS Annual Conference*, Minneapolis, MN, 2020

33. Tao Li, De Liu, and Xin (Sean) Xu. The Role of Optimal Challenge in Adaptive E-learning: Evidence from Field Experiments with Middle School Students. In *Conference on Design and Analysis of Experiment*, Knoxville, TN, 2019

34. Tao Li, De Liu, and Xin (Sean) Xu. Re-engaging underachievers: toward a participation internalization approach to gamified online learning design. In *Winter Conference on Business Analytics*, Snowbird, Utah, 2020

35. Yiting Guo, Yilin Li, De Liu, and Xin (Sean) Xu. Infer Service Quality Problems from Sequential Patterns of Customer Emotions. In *Winter Conference on Business Analytics*, Snowbird, Utah, 2020

36. Tao Li, De Liu, and Sean Xu. Does it Pay to Manage Challenge Levels in E-Learning? Insights from Designing and Analyzing a Large-Scale Field Experiment. In *Winter Conference on Business Analytics*, Snowbird, Utah, 2020

37. Tao Li, De Liu, and Xin Xu. Re-engaging underachievers: toward a participation internalization approach to gamified online learning design. In *ICIS 2019 Proceedings*, Munich, Germany, 2019

38. Zachary J Sheffler, Shawn Curley, and De Liu. Do We Need Different Levels of Badges for Users with Different Participation Levels? A Field Experiment from a Bicycle Commuting Program. In *ICIS 2019 Proceedings*, Munich, Germany, 2019

39. He Huang, De Liu, Yu Tang, and Hongyan Xu. Competing in the Era of Supply Chain Transparency: A Tale of Information Disclosure and Supplier Switching. In *China Workshop on Economics of Information Systems Theory (CWEIST)*, Xi'an, China, 2019

40. Zhihong Ke, De Liu, and Gediminas Adomavicius. Are "Helpful" Online Reviews High Quality? An Examination of Online Review Quality and Its Relationship with Helpfulness Votes. In *China Summer Workshop on Information Management*, Shenzhen, China, 2019

41. Pei Xu and De Liu. Mobile Augmented Reality, Product Sales and Online Consumer Reviews: Evidence from a Natural Experiment. In *China Summer Workshop on Information Management*, Shenzhen, China, 2019

42. Yiting Guo, Yilin Li, De Liu, and Xin Xu. Are Callers in a Mode? An Emotion Detection Approach to Call Center Service Quality. In *Winter Conference on Business Analytics*, Snowbird, Utah, 2019

43. Tao Li, Xun Xin, De Liu, and Yufang Wang. Interleaved Learning: A Design Science Approach and Field Experiment. In *ICIS 2018 Proceedings*, San Francisco, CA, 2018

44. Hong Guo, Xuying Zhao, Lin Hao, and De Liu. Economic Analysis of Reward Advertising. In *Smart Data Pricing Workshop*, Minneapolis, MN, 2018

45. De Liu, Liang Chen, and Pei Xu. Why Crowd Pick Different Winners from Experts. In *Data Science for Business and Economics Conference*, West Lafayette, IN, 2018

46. Pei Xu, De Liu, and Joonghee Lee. Mobile Augmented Reality, Product Sales, and Consumer Evaluations: Evidence from a Natural Experiment. In *ICIS 2018 Proceedings*, San Francisco, CA, 2018

47. Huaxia Rui, De Liu, and Andrew Whinston. Allocation and Pricing of Substitutable Goods: Theory and Algorithms. In *Theory of Economics in Information Systems (TEIS) Workshop*, San Diego, CA, 2018

48. Hong Guo, Xuying Zhao, Lin Hao, and De Liu. Economic Analysis of Reward Advertising. *Workshop on Economics of Information Systems (WISE)*, 28(10):2413–2430, 2019. Place: Seoul, South Korea

49. Zhigang Cai, Jason Chan, and De Liu. Better to Give Than to Receive: Impacts of Donation-Based Contribution Schemes on Crowdfunding Outcomes. In *Workshop on Economics of Information Systems (WISE)*, Seoul, South Korea, 2017

50. Zhigang Cai, Jason Cha, and De Liu. Better to Give Than to Receive: Impacts of Donation-Based Contribution Schemes on Crowdfunding Outcomes. In *China Summer Workshop on Information Management (CSWIM)*, Nanjing, China, 2017

51. Yumei He, Xunhua Guo, and De Liu. Is Beauty Helpful? Reviewer Attractiveness And Review Helpfulness. In *Americas Conference on Information Systems*, Boston, MA, 2017

52. Zhihong Ke, De Liu, and Alok Gupta. Peer Effects and the Production of Online Reviews. In *Conference on Information Systems and Technology (CIST)*, Nashville, TN, 2016

53. Zhihong Ke, De Liu, and Alok Gupta. The Ebb and Flow of Online Word of Mouth. In *International Conference on Information Systems (ICIS)*, Dublin, Ireland, 2016

54. De Liu and Adib Bagh. New Privacy-Preserving Ascending Auction for Assignment Problems. In *Workshop of Information Technologies and Systems (WITS)*, Dallas, TX, 2015 (**Best Paper Award Nomination**)

55. Pei Xu and De Liu. Product Popularity and Identity Signaling on Social Shopping Platforms. In *INFORMS Annual Meetings*, Philadelphia, PA, 2015

56. Zhihong Ke and De Liu. Peer Effects and the Production of Online Reviews: A Message Level Analysis. In *ICIS 2015 Proceeding*, Dallas, TX, 2015

57. Liang Chen, Pei Xu, and De Liu. Experts versus the Crowd : A Comparison of Selection Mechanisms in Crowdsourcing Contests. In *Workshop on Information System Economics*, Auckland, Austrilia, 2014

58. Juan Ling, Ajay Mehra, Dan Brass, De Liu, and Steve Borgatti. Coalitions of the mind: Gender, social networks and knowledge production. In *Southern Management Association Meeting*, Savannah, Georgia, 2014 (**Best Paper in Track**)

59. Liang Chen, Pei Xu, and De Liu. Experts versus the Crowd : A Comparison of Selection Mechanisms in Crowdsourcing Contests. In *Workshop on Information System Economics*, Auckland, Austrilia, 2014

60. Zhihong Ke and De Liu. The role of social networks in online reviewing. In *The 18th Pacific Asia Conference on Information Systems*, Chengdu, China, 2014

61. Pei Xu and De Liu. Social Shopping: The Value of Social Endorsement. In *Statistical Challenges in Ecommerce Research (SCECR)*, Tel Aviv, Israel, 2014

62. De Liu, Mun Yi, Janeyoung Park, and Radhika Santhanam. GAMESIT - A Gaming Shell for Information Technology Skill Development – A Design Science Program. In *WITS Prototype*, Milan, Italy, 2013

63. De Liu and Sun Yang. A Truthful Mechanism for Multi-slot Ad Scheduling with Budget Constraints. In *INFORMS Annual Meetings*, Minneapolis, MN, 2013

64. De Liu and Adib Bagh. A Simple Ascending Auction for Assignment Problems. In *INFORMS Annual Meetings*, Minneapolis, MN, 2013

65. Liang Chen, Pei Xu, and De Liu. Experts versus the Crowd: A Comparison of Rating Mechanisms for Crowdsourcing Platforms. In *China Summer Workshop on Information Management (CSWIM)*, Tianjin, China, 2013

66. De Liu, Yong Lu, and Daniel J Brass. The Prism Effects of Friendships in Online Peer-to-Peer Lending. In *The Fifth Symposium on Financial Intelligence and Risk Management and the Sixth International Workshop of Electronic Payment and Electronic Commerce*, Chengdu, China, 2013

67. De Liu and Adib Bagh. A Simple Ascending Auction for Assignment Problems. In *Fall 2012 Midwest Economics Theory Meeting*, St. Louis, MO, 2012

68. De Liu and Siva Viswanathan. Information Asymmetry and Hybrid Advertising. In *INFORMS Annual Meetings*, Phoenix, AZ, 2012

69. Huaxia Rui, De Liu, and Andrew B. Whinston. Optimal Allocation for Display Advertising. In *Informs Annual Meetings*, Phoenix, AZ, 2012

70. De Liu, Yong Lu, Pei Xu, and Zhexiang Sheng. The Value of Friendship Ties in Online Peer-to-Peer Lending. In *Statistical Challenges in Ecommerce Research (SCECR)*, Montreal, Canada, 2012

71. De Liu and Siva Viswanathan. Information Asymmetry and Hybrid Advertising. In *Theory in Economics of Information Systems (TEIS) Workshop*, Laguna Beach, CA, 2012

72. Liang Chen and De Liu. Comparing Strategies for Winning Expert-rated and Crowd-rated Crowdsourcing Contests: An Exploratory Study. In *Americas Conference on Information Systems (AMCIS)*, Seattle, WA, 2012

73. Huaxia Rui, De Liu, and Andy Whinston. Optimal Allocation for Internet Display Advertising. In *1st Midwest Workshop on Control and Game Theory*, Champaign, IL, 2012

74. Huaxia Rui, De Liu, and Andrew B. Whinston. Optimal Allocation for Display Advertising. In *Workshop on Information System Economics*, Shanghai, China, 2011

75. De Liu and Siva Viswanathan. Information Asymmetry and Hybrid Advertising. In *International Workshop on Data Mining and Audience Intelligence for Online Advertising*, volume 51, pages 609–624, San Diego, CA, 2011. Issue: 5

76. Skaggs Bruce, Alfred Boccia, De Liu, and Peter Mills. Comparing Internal Markets and Hierarchy in the Coordination of Knowledge: A Simulation Analysis. In *Academy of Management Meetings*, San Antonio, TX, 2011

77. Jun Li, De Liu, and Shulin Liu. Optimal Keyword Auctions with Costly Positions. In *Midewest Economic Theory Meeting*, Notre Dame, IN, 2011

78. Huaxia Rui, De Liu, and Andrew B. Whinston. Optimal Allocation for Display Advertising. In *International Workshop on Data Mining and Audience Intelligence for Online Advertising*. San Diego, CA, 2011

79. De Liu and Siva Viswanathan. Information Asymmetry and Hybrid Advertising. In *UCLA Algorithmic Game Theory Workshop*, Los Angeles, CA, 2011

80. De Liu and Siva Viswanathan. Information Asymmetry and Payment Schemes In Online Advertising. In *China Summer Workshop on Information Management*, Wuhan, China, 2010 (**Best Paper Award Nomination**)

81. Juan Ling, Ajay Mehra, Dan Brass, De Liu, and Steve Borgatti. The Time-Contingent Value of Social Capital: Structural Holes, Resources Richness, and Knowledge Production. In *Academy of Management Conference*, Chicago, IL, 2009

82. De Liu, Gautam Ray, and Andrew B. Whinston. The Interaction between Knowledge Codification and Knowledge Sharing Networks. In *INFORMS Conference on Information Systems and Technology*, Washington, D.C., 2008

83. De Liu, Jianqing Chen, and Andrew B. Whinston. Competing Keyword Auctions. In *Workshop on Advertising Auctions*, Chicago, IL, 2008

84. De Liu, Jianqing Chen, and Andrew B. Whinston. Competing Keyword Auctions. In *China Summer Workshop on Information Management*, Shanghai, China, 2007

85. De Liu, Xun Li, and Radhika Santhanam. What makes Game Players Want to Play More? A Mathematical and Behavioral Understanding of Online Game Design. In *Human Computer Interface International Conference*, Beijing, China, 2007

86. De Liu and Jianqing Chen. Competing Keyword Auctions. In *Workshop on Information Systems and Economics*, Montreal, Canada, 2007

87. De Liu, Jianqing Chen, and Andrew B. Whinston. Competing Keyword Auctions. In *Conference on Information Systems and Technology (CIST)*, Seattle, WA, 2007 (**Best Paper Award**)

88. Jianqing Chen, De Liu, and Andrew B. Whinston. Resource packaging in keyword auctions. In *Proceedings of the 27th International Conference on Information Systems*, pages 1999–2013, Milwaukee, WI, 2007

89. De Liu, Jianqing Chen, and Andrew B Whinston. Weighted Unit-Price Auctions. In *Workshop on Sponsored Search Auctions*, Ann Arbor, MI, 2006

90. De Liu, Jianqing Chen, and Andrew B. Whinston. Weighted Unit-Price Auctions as Keyword Auctions. In *Workshop on Information Systems and Economics*, Milwaukee, WI, 2006

91. Jianqing Chen, De Liu, and Andrew B Whinston. Designing Share Structure in Auctions of Divisible Goods. In *Workshop on Sponsored Search Auctions*, Vancouver, BC, Canada, 2005

92. Andrew B. Whinston, Matt Hämäläinen, De Liu, and Xianjun Geng. Interactive Digital Entertainment: A New Direction for IS research. In *International Conference of Information Systems (ICIS)*, Las Vegas, NV, 2005

93. De Liu, Jianqing Chen, and Andrew B. Whinston. Designing Online Auctions with Past Performance Information. In *Workshop on Information Systems and Economics*, Washington, D.C., 2004

94. De Liu and Andrew B. Whinston. An all-pay auction model of contest promotions and its testing using wireless gaming data. In *Big XII Information Systems Research Symposium*, Stillwater, OK, 2003

95. Guoqing Chen, De Liu, and Jiexun Li. Influence and conditional influence-new interestingness measures in association rule mining. In *2001 IEEE International Fuzzy Systems Conference*, Melbourne, Vic., Australia, 2001

96. De Liu and Guoqing Chen. Association Rule Mining Based on a Simple Rule Set. In *IFIP World Computer Congress*, Beijing, China, 2000

INVITED PRESENTATIONS

Economics of Fake Social Media Accounts. *University of Rochester (2021), Chongqing University (2021), Maryland (2022), UBC (2024)*

Does Voicebot Gender Matter? Theory and Evidence From Debt-collection Voicebots. *Chongqing University (2022), Auburn University (2023)*

Could Social Bragging Enhance User Engagement and Consumption in Games – A Longitudinal Field Study. *University of Science and Technology of China (2022)*

AI, Gamification, and Future of Work. *University of Wisconsin-Milwaukee AI/Analytics Conference, Keynote Speech (2022)*

Towards a Measure of Online Review Quality. *UC Irvine (2022), Chongqing University (2022)*

Is Bragging Motivating? The Effect of Bragging on User Engagement and Consumption in Mobile Gaming. *Chongqing University (2021)*

Re-engage low achievers: Effect of meaningful extrinsic rewards in gamified online learning. *Arizona State University (2020), Erasmus University Rotterdam (2022)*

Mobile Augmented Reality and Product Sales: Evidence from a Natural Experiment. *Temple University (2019)*

Are "Helpful" Online Reviews High Quality? An Examination of Online Review Quality and Its Relationship with Helpfulness Votes: *Tsinghua University (2019)*

Economic Analysis of Reward Advertising: *Chongqing University (2018)*

Better to Give than to Receive: Impact of Donation-Based Contribution Scheme on Crowdfunding Outcomes of Reward-based Campaigns: *Nanyang Technological University (2018), Beijing Insitute of Technology (2018)*

Dynamic Ascending Clock Auction for Privacy-Preserving Assignment: *University of International Business and Economics (2017), Chongqing University (2017), University of Minnesota (Industrial Engineering)*

Experts versus the Crowd: A Comparison of Selection Mechanisms in Crowdsourcing Contests: *McMaster (2015), UT Austin(2015), Renmin University (2016), Beijing University (2017), Emory University (2019)*

Do Online Social Network Friends Make You Write More and Better Reviewers: *Utah (2017), Renmin University (2017),Jiangsu University of Science and Technology (2017), National University of Singapore (2018), Tsinghua University (2018)*

Gamification of Technology-Mediated Training: *KAIST (2013)*

Friendships in Online Peer-to-Peer Lending: Pipes, Prisms, and Relational Herding: *George Washington University (2013), RPI (2013), Indiana University (2013), University of Texas at Dallas (2013), Minnesota (2014), University of Okalahoma (2015), University of Minnesota CS department (2016)*

Allocation and Pricing of Substitutable Goods: Theory and Algorithms: *University of Texas at Austin (2011), Baidu Inc. (2011), Tsinghua University (2011), Shanghai University of Finance and Economics (2011), Purdue University (2012)*

Information Asymmetry and Hybrid Advertising: *University of Texas at Austin (2011), University of Minnesota (2011), University of International Business and Economics (2010), Tsinghua University (2010), Southwestern University of Finance and Economics (2010)*

Auctioning Keywords in Online Search: *Baidu Inc. (2010), University of Texas at Austin (2010), University of Kentucky Economics Seminar (2007), UIUC (2006), University of International Business and Economics (2006), Tsinghua University (2006)*

Ex-ante Information and the Design of Keyword Auctions: *Purdue University (2009), University of Maryland (2009), Baidu Inc.(2008), University of Kentucky Computer Science Seminar (2008)*

Digital games and beyond: what happens when players compete?: *University of New Mexico (2010), KAIST (2013)*

Design Online Auctions with Past Performance Information: *University of Kentucky Economics Seminar (2005), University of International Business and Economics (2005), Tsinghua University (2005)*

The Interaction between Knowledge Codification and Knowledge Sharing Networks: *University of Kentucky Management Seminar (2007), Boston University (2006), Georgia Tech (2006)*

Optimal Design of Consumer Contests: *HKUST (2004), University Of Kentucky (2004)*

TEACHING

University of Minnesota

2022 – 2023	IDSC 4444: (Undergraduate) Descriptive and Predictive Analytics
2022 – present	MSBA 6331: (MSBA) Big Data Analytics
2014 – 2021	MSBA 6330: (MSBA) Big Data Analytics
2016 – present	IDSC 8541: (PhD) Introduction to Economics of Information Systems
2017 – 2020	Business Analytics for Leaders (Exec Ed)
2018	IDSC 3103: Data Modeling and Databases
2016 – 2019	(MSBA) Carlson Analytics Lab Projects, Faculty Advisor
2015	IDSC 6444: (MBA) Business Intelligence
2014 – 2015	MSBA 6320: (MSBA) Data Management, Database, and Data Warehousing

University of Kentucky

2013	MBA 606: (MBA) Management Information Systems
2011	DIS 790: (Ph.D.) Economics of Electronic Commerce
2005 – present	AN 450G: Analytics Technologies
2004 – present	AN 306: Analytics Models and Methods
2008 – present	AN 324: Database Management
2010 – 2012	ACC 324: Accounting Information Systems
2009	AN 320: Information Systems in the Modern Enterprise
2006 – 2007	AN 300: Quantitative Analysis in Operations Management
2005 – present	AN 395: Independent Studies on Decision Science and Information Systems

University of Texas at Austin

2004	MIS 304: Business Programming using VB.net

STUDENTS AND ADVISING

Ph.D. Students Supervision

2021 – present	Ramin Zandvakili, Advisor
2020 – 2023	Zihong Huang, Advisor (Texas Tech University, 2023)
2013 – 2019	Zhihong Ke, Advisor (Clemson University, 2019)
2011 – 2014	Pei Xu, Advisor (Auburn University, 2014)

2013 – 2015	Matt Spradling (CS), Committee Member (University of Michigan-Flint, 2015)
2005 – 2006	Dan Davenport, Committee Member (University of Kentucky, 2006)

Visiting Doctoral and Postdoctoral Students

2019 – 2021	Yumei He (Postdoctoral, Tsinghua Univ)
2019 – 2020	Yiting Guo (Tsinghua Univ)
2019 – 2020	Tao Li (Tsinghua Univ)
2016 – 2017	Yumei He (Tsinghua Univ)
2015 – 2016	Zhigang Cai (Shanghai Jiaotong Univ)
2014 – 2015	Dongfeng Liu (University of International Business and Economics)

DBA Student Supervision

2024	Panel Member, DBA Thesis Oral Defense
2023	1 DBA student
2019	2 DBA students
2018	2 DBA students
2017	2 DBA student

Masters & Undergraduates

2019	Haoda Chu, MS in Data Science Capstone Final Examination Committee
2018	Liyao Lu, MS in Data Science Capstone Final Examination Committee
2018	Dhruv M. Dhokalia, MS in Data Science Capstone Final Examination Committee
2017	Wei Chen, MS in Data Science Capstone Final Examination Committee
2017	Rohan Sadale, MS in Data Science Capstone Final Examination Committee
2017	Gaurav Khandelwal, MS in Data Science Capstone Final Examination Committee
2017	Michael Justice, MS in Data Science Capstone Final Examination Committee
2016	Zhiyi Li, MS in Computer Science Final Examination Committee
2014 – 2015	Hannah Stephan, undergraduate honor thesis

SERVICES

Professional Services - Editorial Appointments

Associate Editor	*Information Systems Research*, 2012 – 2021

Associate Editor	*Journal of Organizational Computing and Electronic Commerce*, 2010 – present
Guest Associate Editor	*MIS Quarterly* (2011,2019)
Special Issue Guest Editor	*Decision Support Systems* (2012)

Professional Services - Conferences and Other

2023-2024	Co-chair for 6th China Workshop on Economics of Information Systems Theory (CWEIST)
2023	External Tenure and Promotion Letter Writer (3 Cases)
2022–2023	Track Co-chair, ICIS 2023
2022	Co-chair for China Workshop on Economics of Information Systems Theory (CWEIST)
2022	External Tenure and Promotion Letter Writer (4 Cases)
2022	AMCIS Panel "Developing Gamification Research in Information Systems", Chair
2021	External Tenure and Promotion Letter Writer (3 Cases)
2021	Co-chair for China Workshop on Economics of Information Systems Theory (CWEIST)
2021	Program Co-chair, China Summer Workshop on Information Systems and Management (CSWIM)
2020	External Tenure and Promotion Letter Writer (3 Cases)
2020	Track Co-chair, ICIS 2020
2020	Co-chair China Workshop on Economics of Information Systems Theory (CWEIST)
2019	Co-chair and co-founder of China Workshop on Economics of Information Systems Theory (CWEIST)
2019 – present	Program Committee, WITS (2019, 2020, 2021)
2009 – present	Associate Editor, ICIS (2009, 2011, 2013, . . .)
2008 – present	Program Committee, CIST (2008, 2010, 2011, . . .)
2006 – present	Session Chair, INFORMS Annual Conference (2006, 2008, 2009, 2013)
2005 – present	Ad hoc reviewer, various conferences including ICIS, HICSS, WeB, ACM E-Commerce, AMCIS, CIST, and CSWIM
2007 – present	Program Committee, China Summer Workshop on Information Management
2018	Program Committee, Human Computer Interfaces
2014	Workshop Co-chair, Tenth Ad Auctions Workshop
2014	Track Co-chair, ICEC
2014	Track Co-chair, PACIS
2014	Session Chair, POMS
2009	Program Committee, International Conference on E-Commerce

Institutional Services – University of Minnesota

2024	Attended the Meeting of Analytics Program Directors (MAPD) on behalf of the MSBA program
2024	Attended UTD Academic Summit for Business Analytics (ASBA) and presented "Redesigning Analytics Curriculum in the Age of Generative AI: Ongoing Attempts at Carlson MSBA"
2024	Presented at Launch and Learn on "Using ChatGPT in the Classroom"
2024	TV Interview with PBS North with NOVA regarding data and how our data is collected and how algorithms are programed to be addictive.
2023 – 2024	Member, MSBA Admission Secondary Review Committee
2023 – 2024	Member, MSBA 10 year aniiversary planning committee
2024	Judge, UMN Health Data Competition
2023 – 2024	Online MABA Relaunch Preparation
2023 – present	MSBA Curriculum Review Committee (Chair)
2022 – 2024	CSOM, Promotion and Tenure Appointment Committee (AC) - Chair
2022 – 2023	MSBA Admission Secondary Review Committee
2023	Judge, UMN Health Data Competition
2022 – 2023	CSOM Tenure and Promotion Committee, Committee Member
2022 – 2023	Online MABA Program Research and Proposal Committee, Committee Chair
2022	New UG Curriculum and the Revised BA Minor and MIS Major/Minor Curriculum, Committee Member
2021	Lee Thomas's Job Description Revision and Re-categorization
2021	Departmental Junior Faculty Annual Review Committee (3 Cases)
2021	MSBA Technology Committee
2021	IDSC Faculty Search Committee Chair
2021	Co-Organizer, 2nd University of Minnesota Interdisciplinary Health Data Competition
2020	Co-Organizer, Inaugural University of Minnesota Interdisciplinary Health Data Competition
2020	Panelist, University of Minnesota Industry Series
2019	PhD Brownbag Seminar Speaker
2019	PhD first exam review committee
2019–2020	Organizaing Committee for U of M Healthcare Data Science Challenge
2019–2020	IDSC INFORM Smith Prize Application (Finalist)
2018–2019	MSBA INFORM Smith Prize Application
2019	IDSC PhD Admission Committee
2018–2019	Search committee for Department of Industrial and Systems Engineering

2017–2019	MSBA Undergraduate Pipeline Committee, Coordinator
2018–2019	MSBA Curriculum Review Committee, Coordinator
2018–2019	Faculty Recruiting Committee, U of M Industrial Engineering Department
2019	CSOM Tenure & Promotion Reading Committee (Prof Gaoqing Zhang)
2017	CSOM Tenure & Promotion Reading Committee (2 Cases)
2014	CSOM Tenure & Promotion Reading Committee (1 case)
2020	Departmental Junior Faculty Annual Review Committee (2 Cases)
2019	Departmental Junior Faculty Annual Review Committee (2 Cases)
2018	Departmental Junior Faculty Annual Review Committee (2 Cases)
2017	Departmental Junior Faculty Annual Review Committee (2 Cases)
2014 – 2016	Departmental Junior Faculty Annual Review Committee
2018	School level 4th Year Review Reading Committee (1 Case)
2016	School level 4th Year Review Reading Committee
2016	Recruiting committee for MSBA IT person
2016	Developed IDSC 4110 Data Engineering for Business Analytics syllabus for Business Analytics Minor
2015 – 2017	Organizer of IDS Brownbag Series
2016 – present	MIS Quarterly policy committee
2014 – 2018	PhD Coordinator for Information and Decision Sciences
2016 – 2017	PhD Second Year Paper committee, Scott Schanke & Sandeep Kumar
2015 – 2016	PhD Second Year Paper committee, Yash Babar & Yaqiong Wang
2014 – 2015	PhD Second Year Paper committee, Swanand Deodhar
2015 – present	ICIS doctoral consortium letter writer
2014 – 2018	IDSC Ph.D. Admission Committee

Institutional Services – University of Kentucky

2013	DSIS Qualifying Exam Committee
2012 – 2013	Departmental Faculty Search Committee
2012	Analytics Major Curriculum Redesign Committee
2011 – present	Departmental Merit Review Committee
2011 – present	Gatton College Faculty Council
2009	Gatton College Task Force for the CIO Practicum
2009	Faculty Focus Group for University Information Technology
2007 – 2008	DSIS Undergraduate Curriculum Revision Committee
2006 – 2007	Undergraduate Study Committee
2004 – 2006	Library Committee

PROFESSIONAL MEMBERSHIPS

2004 – present	Association of Information Systems (AIS)
2005 – present	Institute for Operations Research and the Management Sciences (INFORMS)
2011 – 2022	American Economic Association (AEA)

GRANTS

2018 – 2019	Co-Investigator, University of Minnesota NOTIO Grant, **$30,000**
2016 – 2017	Dean's Small Grant on Badges and Motivation Crowding, **$5000**
2016 – 2019	Co-investigator, Natural Science Foundation of China Grant on "Equilibrium Analysis of Keyword Auctions: Advertiser's Perspective", No. 71171052. **$76,700**
2015	PI, SOBACO Micro-grants for "Viral Gamification Design for Mobile Wellness Applications", **$5000**
2011 – 2014	Co-investigator, Natural Science Foundation of China Grant on "Theory and Applications of Keyword Auctions", No. 71171052. **$78,200**
2012	Gatton College Entrepreneurship Research Grant, **$20,000**
2011	Gatton College Entrepreneurship Research Grant, **$10,000**
2005 – 2010	Gatton College Summer Research Grant, University of Kentucky, **$10,000**

AWARDS AND RECOGNITION

2023	**Best Paper Runner-up**, INFORMS ISS Cluster
2021	**Best Paper Finalist**, Decision Science Journal
2021	**Best Paper In Track**, International Conference on Information Systems (ICIS)
2021	**Teacher of the Year**, Master of Applied Business Analytics (MABA)
2020	**Outstanding Research Award**, Carlson School
2020 – present	**Xian Dong Eric Jing Professorship for Business Teaching**, Carlson School
2019	**Outstanding Service Award**, Carlson School
2019	**AHRQ Step Up App Challenge Grand Prize $40,000** (PRISM: PROMIS Reporting Insight System from Minnesota), AHRQ
2017 – 2020	**3M Fellow in Business Analytics**, Carlson School
2015	**Best Paper Nomination**, Workshop on Information Technologies and Systems (WITS)
2019	**Outstanding Service Award**, Carlson School
2018	**Outstanding Teaching Award**, Carlson School

2016	**Teacher of the Year**, Master of Science in Business Analytics
2015	**Teacher of the Year**, Master of Science in Business Analytics
2014	**Associate Editor of the Year** Award by Information Systems Society and Information Systems Research
2014	**Best Paper Award**, Southen Management Association Meeting (SMAM)
2013 – 2014	**Alan F. and Irene Bloomfield Professorship**, University of Kentucky Gatton College of Business
2012	**Professor of the Month**, Alpha Kappa Psi professional business fraternity
2011	**Best Reviewer Award**, Information Systems Research
2010	**Best Paper nomination**, China Summer Workshop on Information Management (CSWIM)
2007	**Best Paper award**, China Summer Workshop on Information Management (CSWIM)
2001 – 2004	**Graduate Research Fellowship**, University of Texas at Austin
2000	**Honored Graduate (top 1%)**, Tsinghua University
1999	**Academy of Science Fellowship**, Tsinghua University
1998	**Outstanding Undergraduate Student Scholarship**, Tsinghua University
1997	**Outstanding Undergraduate Student Scholarship**, Tsinghua University
1996	**HSBC Scholarship**, Tsinghua University
1995	**Jiang Nan-Xiang Scholarship**, Tsinghua University
1994	**Outstanding Freshman Fellowship (1st class)**, Tsinghua University

MEDIA MENTIONS

2024/4	StarTribune, "A redesigned graduate program at the University of Minnesota trains students on AI"
2024/2	Freeman News, "Research suggests 'ephemeral sharing' can break the ice in online dating"
2022/10	Axios, "Digital 'nudges' to workout do work, study says"
2022/12	UMN Research Brief, "Digital nudges encourage more exercise"
2022/11	Technology.org, "Digital nudges encourage more exercise"
2019/3	Star Tribune, McKnight's Long-Term Care News, PR Newswire, Politico (and 18 other outlets)
2019/1	Master in Management Guide
2018/3	MentorStudents.org
2017/7	Star Tribune