Tianshu Sun

Contact Information

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Academic Position

• 2021 - : Robert R. Dockson Associate Professor (with Tenure), Department of Data Sciences and Operations, Marshall School of Business, USC

Associate Professor of Computer Science (Courtesy), Viterbi School of Engineering, USC

- 2019 : Robert R. Dockson Named Professorship, University of Southern California
- 2020 : Visiting Faculty Scholar, MIT Sloan School of Management
- 2016 2020: Assistant Professor of Information Systems, Department of Data Sciences and Operations, Marshall School of Business, USC.

Education

• 2011 - 2016 : Ph.D. (Information Systems and Economics), Smith School of Business, University of Maryland.

Dissertation: "Engineering Digital Sharing Platforms to Create Social Contagion: Evidence from Three Large Scale Randomized Field Experiments", Members: Siva Viswanathan, Gordon Gao, Ginger Jin, Dave Godes, Il-Horn Hann

Minor in Economics (15 Courses in Game Theory, Micro/IO, and Econometrics)

- 2009 2011 : Master of Science (Physics), University of Maryland. (Pass all PhD Qualify Exams in 2009, GPA 4.0/4.0, Flagship Fellowship 2009-11)
- 2005 2009 : Bachelor of Science (Physics), Nanjing University.
 (Nobel Laureate Chen-Ning Yang Scholarship, National Scholarship of China for top 1%)

Research Interests

- Large-scale Digital Experimentation with Tech Industry (Strategy and Method)
- Digital Platform Mediated Social Sharing (Message, Incentive & Algorithm Design)
- Digital Platform Enabled Online-Offline Integration (Mobile & Internet-of-Things)
- Value of Personal Data & the Privacy Regulation on Digital Platforms
- **Methodology**: Randomized Field Experiments, in conjunction with Econometrics, Machine/Deep Learning, Structural Model, Lab Experiment, and Network Analysis
- Industry Collaborations: Facebook, Alibaba, Adobe, LivingSocial (Groupon), NetEase, Collage, Zhima, Shanbay, Practo, and a variety of firms in US and Asia

Research

- Published/Accepted Journal Papers
- 1. Brian Han, Tianshu Sun, Leon Chu and Lixia Wu (2021) "COVID-19 and Ecommerce Operations: Evidence from Alibaba", *Accepted, Manufacturing & Service Operations Management*
- 2. Tianshu Sun, Zhe Yuan, Chunxiao Li, Kaifu Zhang and Jun Xu. (2021) "The Value of Personal Data in Internet Commerce: A High-stake Field Experiment on Data Regulation Policy", *Forthcoming, Management Science*

-- Presented at Harvard, MIT, Chicago Booth, CMU, UMN, UT Austin, UCLA, BU, Purdue, UBC etc. See a brief summary of results in a <u>Review Paper</u> with leading Economists and Nobel Laureates on Data Value, Data Privacy and Data Regulation.

- 3. Tianshu Sun, Yanhao Max Wei, Joseph Golden (2021) "Geographical Pattern of Online Word-of-Mouth: How Offline Environment Affects Online Sharing", *Forthcoming*, *Information Systems Research*
- 4. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2021) "Creating Social Contagion through Firm Mediated Message Design: Evidence from a Randomized Field Experiment", *Management Science*, *67(2)*, *808-827*.

-- Best Dissertation Proposal (Runner-up), WITS 2015; Best Paper (Finalist), CSWIM 2015; Best Student Paper (3rd Place), INFORMS Service Science Society 2014;

 Tianshu Sun and Sean Taylor (2020) "Displaying Things in Common to Encourage Friendship Formation: A Large Randomized Field Experiment", *Quantitative Marketing and Economics*, 18, 237–271

-- Winner of QME <u>Wittink Prize</u> (Best Published Paper in 2020), Invited Talks at Facebook, LinkedIn, Snap, Wharton, CMU, Proceeding of ACM EC 2019,

- 6. Angela Choi, Heeseung Lee, Tianshu Sun, Wonseok Oh (2021) "Reviewing Before Reading? An Empirical Investigation of Book Consumption Patterns and Their Effects on Reviews and Sales", *Forthcoming*, *Information Systems Research*
- 7. Tianshu Sun, Siva Viswanathan, Ni Huang and Elena Zheleva (2020) "Designing Promotional Incentive to Embrace Social Sharing: Evidence from Field and Online Experiments", *MIS Quarterly*, 45(2), 789-820
- 8. Edward McFowland III, Sandeep Gangarapu, Ravi Bapna and Tianshu Sun (2020) "Optimal Utilization of Heterogeneous Treatment Effects: A Prescriptive Analytics Approach", *Forthcoming*, *MIS Quarterly*
- 9. Ni Huang, Probal Mojumder, Tianshu Sun, Jinchi Lv, Joseph Golden (*All contribute Equally*) "Not Registered? Please Sign-up First: A Randomized Field Experiment on the Ex-ante Registration Request", *Information Systems Research*, 32(3), 914-931
- 10. JaeHwuen Jung, Ravi Bapna, Joseph Golden and Tianshu Sun (2020) (All contribute equally) "Words Matter! Towards Pro-social Call-to-Action for Online Referral:

Evidence from Two Field Experiments", Information Systems Research, 31(1), 16-36

-- Knowledge@Wharton; Best Paper Finalist & Best Paper in E-Business, ICIS 2016

 Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2019), "Mobile Messaging for Offline Group Formation in Prosocial Activities: A Large Field Experiment", NBER Working Paper #21704, *Management Science*, 65(6), 2445-2945.

-- Best Paper, CIST 2015; Best Paper (Honorable Mentions), INFORMS Doing Good with Good OR 2015; Best Student Paper (Finalist), WHITE 2015

- 12. Tianshu Sun, Lanfei Shi, Siva Viswanathan and Elena Zheleva (2019) "Motivating Effective Mobile App Adoption: Evidence from a Large-Scale Randomized Field Experiment", *Information Systems Research*, 30(2), 523-539.
- 13. Ni Huang, Tianshu Sun, Pei-yu Chen and Joseph Golden (2019) "Word-of-Mouth System Implementation and Customer Conversion: A Randomized Field Experiment", *Information Systems Research*, 30(3), 805-818.

-- Best Paper (Finalist), ICIS 2017; Best Paper, ICIS E-Business Track 2017, CIST 2017

 Tianshu Sun, Susan Feng Lu and Ginger Zhe Jin (2016), "Solving Shortage in a Priceless Market: Evidence from Blood Donation", *Journal of Health Economics*, 48:149-165.

-- Featured on Nobel Laureate Al Roth's blog, INET Winning Proposal 2013

• Papers under Revision

- Brian Rongqing Han, Leon Yang Chu, Tianshu Sun, Lixia Wu (2020)
 "Commercializing the Package Flow: Cross-sampling Physical Products Through Ecommerce Warehouses" (WISE 2019 Best Student Paper), *Major Revision, Management Science*
- 16. Xing Lan, Tianshu Sun, Jason Duan (2019) "Uncovering Offline Conversion Funnel with Internet-of-Things: the value of IoT data in Retailing Industry", (Marketing Dynamics 2018, CIST 2018, ISMS 2017, POMS 2019, SCECR 2019), *Major Revision, Information Systems Research*
- Brian Rongqing Han, Tianshu Sun, Leon Yang Chu, Lixia Wu "Connecting Customers and Merchants Offline: Experimental Evidence from Commercialization of Last-Mile Pickup Stations at Alibaba", (CODE/ICIS/WISE/SCECR 2019), *Major Revision, MIS Quarterly*
- Wilson Lin, Susan Feng Lu, Tianshu Sun (2020) "Persuasion, Donor Heterogeneity, and Workload: The Impact of Charitable Workers on Donors' Blood Donation Decisions", *Major Revision, Manufacturing & Service Operations Management*
- Ruomeng Cui, Zhikun Lu, Tianshu Sun, Joseph Golden (2020) "Sooner or Later? Promising Delivery Speed in Online Retail" (INFORMS 2018, ICIS 2021, CIST 2021), *Major Revision, Manufacturing & Service Operations Management*

- JaeHwuen Jung, Tianshu Sun, Ravi Bapna, and Joseph Golden (2021) "Social Learning in Prosumption: Evidence from a Randomized Field Experiment" (SCECR 2017, WISE 2017, ICIS 2018), *Major Revision, Management Science*
- 21. Andrew Heeseung Lee, Angela Choi, Tianshu Sun, Wonseok Oh, "To Split or to Merge?: How Partitioning Affects Consumption and Engagement with Digital Content", *Reject and Resubmit, Information Systems Research*
- 22. Mengxia Zhang, Tianshu Sun and Lan Luo (2020) "Consumer and AI Co-creation: When and Why can human Improve AI Creation?" (CIST 2020), *Under Review*

• Working Papers/Works in Progress

I. Value of Personal Data and AI & Privacy Regulation

- 1. "Algorithm-defined Data Network Effect: A Network Approach", with Yan Leng
- 2. "Personal Data Regulation and Consumer Search under Algorithm: A Field Experiment", with Yuxin Chen and Zhe Yuan
- 3. "How Recommendation Affects Consumer Search: A Field Experiment", with Zhe Yuan, AJ Chen and Yitong Wang

II. Large-scale Digital Experimentation with Tech Industry (Strategy and Method)

- 4. "High-dimensional Social Treatments with Personalized Constraint", with Sean Taylor (CODE 2017, Facebook 2018)
- 5. "IBASE: Adaptive Causal Inference by Integrating Big Data and Small Experiment", with Jinchi Lv (Adobe Data Science Research Award)
- 6. "FIDDLE: flexible treatment effect inference for big data with deep learning", with Yinglei Kong, Hao Wu, Jinchi Lv (WCBA 2019, Manuscript in Preparation)
- 7. "Ensembling Experiments to Optimize Interventions Along Customer Journey: A Reinforcement Learning Approach", with Yicheng Song (Adobe Faculty Research Award 2020, MSI Grant 2020, CIST 2021)

III. How to Use Digital Interventions to Influence Social Interactions

 Aishwarya Deep Shukla, Tianshu Sun, Guodong (Gordon) Gao, Ritu Agarwal, "Speech Is Silver, Silence Is Golden: Evidence from A Field Experiment on Motivational Framing Backfiring" (INFORMS 2019)

IV. How to Integrate Digital and Physical World: Online-to-Offline&Offline-to-Online

- 9. "The Value of Last-Mile Delivery", with Zhikun Lu, Ruomeng Cui and Lixia Wu
- 10. "Optimal Pricing Strategy for User Acquisition and Learning Engagement in Online Education", with Chaofan Zhai and Ravi Bapna

• Papers and Opinion Pieces for Practitioners

1. <u>4 Digital Strategies for Small Businesses Recovering Post-pandemic</u>, Entrepreneur 2021

2. Long Chen, Patrick Bolton, Bengt Holmström, Eric Maskin, Christopher Pissarides, Michael Spence, Tao Sun, Tianshu Sun, Wei Xiong, Liyan Yang ...(2021) "<u>Understanding</u> <u>Big Data: Data Calculus in the Digital Age</u>" (Princeton Data Governance Workshop 2020)

3. Tianshu Sun, Gordon Gao, Ritu Agarwal, "Reshaping Private Health Insurance Industry: Challenge and Opportunities of Health Insurance Exchange", *CHIDS Working Paper 2014*

4. Tianshu Sun, Baizhu Chen, Shantanu Dutta, Lincoln Yue and Jinzhang Jiang (2018) Understanding Music Consumption and Industry Competition in Music Market of China

• Papers in Refereed Conference Proceeding (Top tier IS & Computer Science)

1. Yicheng Song and Tianshu Sun, "Ensembling Experiments to Optimize Customer Journey: A Reinforcement Learning Approach", Conference on Information Systems and Technology (**CIST 2021**)

2. Ruomeng Cui, Zhikun Lu, Tianshu Sun, Joseph Golden (2021) "Sooner or Later? Promising Delivery Speed in Online Retail, Conference on Information Systems and Technology (**CIST 2021**)

3. Brian Han, Tianshu Sun, Leon Chu and Lixia Wu (2020) "COVID-19 and E-commerce Operations: Evidence from Alibaba", International Conference on Information Systems (ICIS 2021)

4. Ruomeng Cui, Zhikun Lu, Tianshu Sun, Joseph Golden (2021) "Sooner or Later? Promising Delivery Speed in Online Retail, International Conference on Information Systems (**ICIS 2021**)

5. Mingxuan Yue, Tianshu Sun, Fan Wu, Lixia Wu, Yinghui Xu and Cyrus Shahabi (2020) "Learning Contextual and Topological Representations of Areas-of-Interest for On-Demand Delivery Application", Proceedings of the 2020 European Conference on Machine Learning (ECML-PKDD 2020), Ghent, Belgium (Best Applied Data Science Paper (Runner-up), ECML 2020)

6. Brian Han, Tianshu Sun, Leon Chu and Lixia Wu (2020) "COVID-19 and E-commerce Operations: Evidence from Alibaba" Conference on Information Systems and Technology (**CIST 2020**)

7. Mengxia Zhang, Tianshu Sun and Lan Luo (2020) "Consumer and AI Co-creation: When and Why Can Humans Improve AI Creation?" Conference on Information Systems and Technology (**CIST 2020**)

8. Brian Rongqing Han, Leon Yang Chu, Tianshu Sun, Lixia Wu (2020) "Commercializing the Package Flow: Cross-sampling Physical Products Through E-commerce Warehouses", International Conference on Information Systems (**ICIS 2020**) (Best Paper Runner-up, ICIS 2020 Kauffmann award on Innovation and Entrepreneurship)

9. Tianshu Sun and Sean Taylor (2019) "Displaying Things in Common to Encourage

Friendship Formation: A Large Randomized Field Experiment", Proceedings of the 2019 ACM Conference on Economics and Computation (ACM EC 2019), Phoenix, AZ

10. Brian Han, Tianshu Sun, Leon Chu, Lixia Wu "Connecting Customers and Merchants Offline: Experimental Evidence from the Commercialization of Last-Mile Pickup Stations at Alibaba", International Conference on Information Systems (**ICIS 2019**), Munich

11. Ni Huang, Probal Mojumder, Tianshu Sun, Jinchi Lv, Joseph Golden "Not Registered? Please Sign-up Now: A Randomized Field Experiment on the Optimal Timing of Registration Request, Conference on Information Systems and Technology (**CIST 2019**)

12. Brian Han, Tianshu Sun, Leon Chu, Lixia Wu "Connecting Customers and Merchants Offline: Experimental Evidence from the Commercialization of Last-Mile Pickup Stations at Alibaba", Conference on Information Systems and Technology (**CIST 2019**), Seattle

13. Tianshu Sun, Siva Viswanathan, Ni Huang and Elena Zheleva (2019) "Designing Promotion Incentive to Embrace Social Sharing: Evidence from Field and Lab Experiments", International Conference on Information Systems (**ICIS 2019**), Munich (Best Conference Paper Finalist, ICIS 2019)

14. Ravi Bapna, Gordon Burtch, Kevin Hong, Tianshu Sun, Jason Thatcher (2018), "Panel Discussion: Lab Experiment and Field Experiment in the Digital Age: Friend or Foe?" International Conference on Information Systems (**ICIS 2018**), San Francisco (Invited Panel Towards All Conference Participants at ICIS 2018)

15. Tianshu Sun, Jaehwuen Jung, Ravi Bapna and Joseph Golden (2018). "The Impact of Social Learning in Prosumption", International Conference on Information Systems (**ICIS 2018**), San Francisco

16. Angela Choi., Heeseung Lee, Tianshu Sun, Wonseok Oh (2018) "Reading Marathon: Understanding the Effect of Binge Reading on User-Generated Content", International Conference on Information Systems (**ICIS 2018**), San Francisco

17. Xing Lan, Tianshu Sun and Jun Duan (2018) "Uncovering Offline Conversion Funnel with Internet-of-Things: The Case of WiFi Tracking in Retail Industry", Conference on Information Systems and Technology (**CIST 2018**), Phoenix

18. Tianshu Sun, Yanhao Wei and Joseph Golden "Geographical Variations of Online Word-of-Mouth: The Role of Offline Environment in Influencing Online Sharing", Conference on Information Systems and Technology (**CIST 2018**), Phoenix

19. Angela Choi, Heeseung Lee, Tianshu Sun, Wonseok Oh (2018) "Is Binge Reading Detrimental to Online Reviews?", Conference on Information Systems and Technology (**CIST 2018**), Phoenix

20. Heeseung Lee, Angela Choi, Tianshu Sun, Wonseok Oh (2018) "Reviewing Before Reading? An Empirical Investigation of Book Consumption Patterns and their Effects on Reviews", Conference on Information Systems and Technology (**CIST 2018**), Phoenix

21. Ni (Nina) Huang, Tianshu Sun, Pei-yu Chen and Joseph Golden (2017). "To Integrate or Not: Social media integration and ecommerce platform performance: A large field experiment", International Conference on Information Systems (**ICIS 2017**), Seoul

(Best Paper Finalist, ICIS 2017; Best Paper, ICIS E-business Track 2017)

22. Ni (Nina) Huang, Tianshu Sun, Pei-yu Chen and Joseph Golden (2017). "To Integrate or Not: Social media integration and ecommerce platform performance: A large field experiment", Conference on Information Systems and Technology (**CIST 2017**), Houston

23. Jaehwuen Jung, Ravi Bapna, Joseph Golden and Tianshu Sun. "Does Care Lead to Share? Evidence from a Randomized Field Experiment on Call for Sharing", International Conference on Information Systems (**ICIS 2016**), Dublin, Ireland (Best Paper Finalist, ICIS 2016; Best Paper, ICIS E-business Track 2016)

24. Tianshu Sun, Lanfei Shi, Siva Viswanathan and Elena Zheleva (2016) "Motivating Mobile App Adoption: Evidence from a Randomized Field Experiment", Conference on Information Systems and Technology (**CIST 2016**), Nashville, US

25. Jaehwuen Jung, Ravi Bapna, Joseph Golden and Tianshu Sun. "Altruism Pays! Towards Optimal Call-to-Action for Online Referral: A Randomized Field Experiment", Conference on Information Systems and Technology (**CIST 2016**), Nashville, US26. Tianshu Sun,

26."Engineering Digital Sharing Platforms to Create Social Contagion: Evidence from Three Large-scale Randomized Field Experiments" Workshop on Information Technologies and Systems (**WITS 2015**), Dallas, US (Best Dissertation Proposal Award Finalist, WITS 2015)

27. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2015) "Monetize Sharing Traffic through Incentive Design: A Randomized Field Experiment". Conference on Information Systems and Technology (**CIST 2015**), Philadelphia, US

28. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Using Mobile Messaging to Leverage Social Connections for the Social Good: Evidence from Large-Scale Randomized Field Experiment". Conference on Information Systems and Technology (CIST 2015), Philadelphia, US

(Best Conference Paper (1st Place), CIST 2015)

29. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2015) "Creating Social Contagion through Message Design: A Randomized Field Experiment". China Summer Workshop on Information Management (**CSWIM 2015**), Hefei, China (Best Paper Award Finalist, CSWIM 2015)

30. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2014) "Understanding the Effects of Message Design on Firm-Mediated Online Social Interactions: A Randomized Field Experiment" International Conference on Information Systems (**ICIS 2014**), Auckland, NZ

31. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2014) "Understanding the Effect of Message Design on Firm-Mediated Online Social Interactions: A Randomized Field Experiment". Conference on Information Systems and Technology (**CIST 2014**), SF, US

32. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2014) "Impact of Message Design on Online Interactions: An Empirical Investigation". International Conference on Electronic Commerce (**ICEC 2014**), Philadelphia, US

Awards and Honors

• Awards and Honors as a Faculty

Robert R. Dockson Professorship of Business Administration, appointed from 2019 (Named Professorship is considered as the highest honor for junior faculty at USC; Only two junior faculty at Marshall are currently appointed as named professors) Golden Apple Teaching Award, USC Marshall School of Business, 2019

(Selected by Students at USC Marshall, Highest Honor for Teaching)

Management Science Distinguish and Meritorious Service Award, 2016-2020 Distinguished Dissertation Award (Nomination), University of Maryland, 2017 Best Dissertation Award, Smith School of Business, University of Maryland, 2017

• Awards and Honors before PhD graduation

Frank Paine Doctoral Award for Academic Achievement, University of Maryland, 2015 (Most prestigious award for PhD Students at the Smith School of Business, 1 per year) Doctoral Consortium Fellow, ICIS (2015), INFORMS Marketing Science (2015),

NBER Economics of Digitization (2015), Workshop on Health IT&Economics (2015),

CMU Structural Modeling Approaches to Research on Technology (SMART 2014) Global Young Scholar, Institute for New Economic Thinking (with grant), 2013 UCLA-China Cross Disciplinary Scholarship in Science and Technology, 2008 National Scholarship of China (by Minister of Education; for top 1% students), 2008 "Chen-Ning Yang" Scholarship (for few distinguish Physics Majors in China), 2007 Champion, Chess Open, Jiangsu, China (National Athlete for Chess), 1996-2004

• Best Papers and Dissertation Awards

Winner of QME <u>Wittink Prize</u> (Best Published Paper in 2020)

INFORMS TIMES Best Dissertation Award Finalist, 2021 (PhD graduate: Brian Han) Best Applied Data Science Paper (Runner-up), European Conference on Machine Learning (ECML-PKDD), 2020

Best Paper Runner-up, ICIS Kauffmann Award on Innovation & Entrepreneurship, 2020 Rising Star Award, Conference on AI Machine Learning and Business Analytics, 2019 Best Paper (Finalist), International Conferences on Information Systems (ICIS), 2019 Best Student Paper, Workshop on Information Systems and Economics (WISE), 2019 INFORMS Nunamaker-Chen Dissertation Award (1st Runner-up), 2017

Best Paper (Finalist), International Conferences on Information Systems (ICIS), 2017 Best Paper (Finalist), International Conferences on Information Systems (ICIS), 2016 Best Paper, ICIS 2016 E-Business Track

Best Paper, Conference on Information Systems and Technology (CIST), 2015 Best Dissertation Proposal (Runner up), Workshop on IT & Systems (WITS), 2015 Best Paper (Finalist), China Summer Workshop on Information Management, 2015 Best Paper (Honorable Mentions), INFORMS Doing Good with Good OR Paper Competition, 2015

Best Student Paper Finalist, Workshop on Health IT and Economics (WHITE), 2015 IBM Best Student Paper (3rd Place), INFORMS Service Science Society, 2014

Grants and Funding

Facebook Faculty Research Award (\$50,000), 2020

Adobe Faculty Research Award (\$20,000, with Yicheng Song), 2020 Marketing Science Institute (MSI) Research Grant (\$5,000), with Yicheng Song, 2021 Net Institute Research Grant (\$3,000), with Zhe Yuan, 2021 USC Institute of Outlier Research in Business Grant (\$16,000, Co-PI), for "Understanding the Commercialization of Digital Entertainment via Investor-Startup Networks" Conference Grant, USC Institute of Outlier Research in Business (\$3,000), 2020-2021 Adobe Data Science Research Award (\$50,000, with Jinchi Lv), 2017-2019 ICCI Research Grant (\$50,000), 2017-2018 Faculty Research Award, USC Greif Center for Entrepreneurial Studies (\$3,000), 2017 Outlier Research Grant, USC Institute of Outlier Research in Business (\$10,000), 2017 Google Cloud Education Grant (\$5,000), Google, 2016 Marketing Science Institute (MSI) Research Competition Award (\$7,500), 2014-2015 CIBER and Department of Education Research Grant (\$4,000), 2015 PhD Travel Award for "Drawing Causal Inference from Big Data" (\$1,250), 2015 All S.T.A.R Fellowship, University of Maryland (\$10,000, 1 in Bschool), 2014-2015 Student Scholarship, Statistical Challenges in eCommerce Research (SCECR), 2015 International Conference Student Support Award, University of Maryland, 2014 Jacob K. Goldhaber Travel Award, University of Maryland (\$600), 2014 University Flagship Fellowship, University of Maryland, 2009-2011 Dean's Fellowship, Smith School of Business, University of Maryland, 2011-2016

Invited Talks

University Talks

MIT Sloan School (Scheduled), 2022 NYU Stern School (Scheduled), 2022 University of California Irvine (Scheduled), 2022 Boston College (Scheduled), 2022 CKGSB, 2021 Shanghai Advanced Institute of Finance (SAIF), 2021 Chinese University of Hong Kong (Shenzhen), 2021 Tsinghua University, 2021 University of British Columbia, 2021

University of Chicago Booth School, 2020 MIT Media Lab & Human Dynamics Lab, 2020 USC China Seminar, 2020 UCLA Anderson, 2020 Temple University, 2020 Boston University, 2020 Purdue University, 2020

Harvard Business School, 2019 Carnegie Mellon University, 2019 University of Minnesota, 2019 Keynote Speaker, Conference on AI Machine Learning and Business Analytics, 2019 University of Texas Austin, 2019 CKGSB Marketing Forum, 2019 Plenary Speaker, China and India Insights Conference, MIT Sloan, 2019 Fudan University, 2019 Shanghai Jiaotong University, 2019 Choice Symposium, 2019 Boston University, 2019

Wharton School, University of Pennsylvania 2018
USC Marshall, Department of Marketing, 2018
USC Annenberg School of Communication, 2018
Arizona State University, 2018
Business Research Applications Needing Data Science (BRANDS) Workshop, 2018
Korea Advanced Institute of Science and Technology (KAIST), 2018
Chinese University of Hong Kong, 2018
Tsinghua University, 2018
Peking University of Hong Kong (Shenzhen) 2018
Shanghai Jiaotong University, 2018
USC China Workshop, 2018
Carnegie Mellon University, Tepper School of Business, 2018

Fudan University, School of Data Science, 2017 Temple University (Center for Big Data in Mobile Analytics), 2017 Shanghai Jiaotong University, 2017 USC Mini-Conference on Big Data in Business and Data Sciences, 2017

NYU Stern, 2016 University of Minnesota, 2016 University of Rochester, 2016 University of California San Diego, 2016 Indiana University, 2016 Hong Kong University of Science and Technology (HKUST), 2016 City University of Hong Kong, 2016 University of Pittsburgh, 2016

Emory University, 2015 University of Southern California, 2015 Temple University, 2015 University of Connecticut, 2015 George Washington University, 2015

Industry Talks

Alibaba, 2021 Tezign, 2021 NABE Tech Economics Conference (TEC) "The Landscape of Tech in Asia", 2020 Facebook (Schedule with Economics, Global Policy and Data Science Team), 2020 Uber (Economics, Policy, Tax and Marketplace Optimization), 2019 Luohan Academy (Alibaba), 2019 Symposium on Big Data: Value and Governance, 2019 China Experimentation Summit (over 100 firms), Keynote Speech, 2019 USC China (400+ Alumni & Prospect Students), 2019 Ant Financial (Alibaba Group, 800+ Audience), 2018 LinkedIn Data Science, 2018 Snapchat (Joint seminar hosted by Snapchat Research & Data Science), 2018 Yunji, 2018 Alibaba, 2018 Facebook Research, 2016 Snapchat Research, 2016 Zhima Tech (Internet of Things Analytics), 2015 Shanbay Inc. (Leading Online Education Company), 2015 LivingSocial, 2013, 2014, 2015 Adobe, 2012

Conference and Workshop Papers and Presentations

60. Brian Han, Leon Yang Chu, Tianshu Sun, and Lixia Wu (2021) "Cross-Sampling Physical Products Through E-Commerce Warehouses: Experimental Evidence from Alibaba", INFORMS 2021

(INFORMS TIMES Best Dissertation Award Finalist 2021, PhD graduate: Brian Han)

59. Brian Han, Tianshu Sun, Leon Chu and Lixia Wu (2020) "COVID-19 and E-commerce Operations: Evidence from Alibaba", Workshop on Information Systems and Economics (WISE 2020)

58. Ruomeng Cui, Tianshu Sun, Zhikun Lu, Joseph Golden (2020) "Sooner or Later? Promising Delivery Speed in Online Retail", Consortium for Operational Excellence in Retailing (COER), 2020

57. Tianshu Sun, Zhe Yuan, Chunxiao Li, and Kaifu Zhang "The Value of Personal Data in the Internet Commerce: A High-stake Experiment on Data Regulation Policy", Accepted at Advances with Field Experiments Conference (AFE 2020), University of Chicago 56. Brian Rongqing Han, Tianshu Sun, Leon Yang Chu and Lixia Wu, "Cross-Sampling Physical Products Through E-Commerce Warehouses: Experimental Evidence from Alibaba", POMS Annual Conference 2020

55. Tianshu Sun, Zhe Yuan, Chunxiao Li, and Kaifu Zhang "The Value of Personal Data in the Internet Commerce: A High-stake Experiment on Data Regulation Policy", Conference on Digital Experimentation (CODE 2019), MIT

54. Brian Rongqing Han, Leon Yang Chu, Tianshu Sun, and Lixia Wu, "Cross-Sampling Physical Products Through E-Commerce Warehouses: Experimental Evidence from Alibaba", Conference on Digital Experimentation (CODE 2019), MIT

53. Brian Rongqing Han, Tianshu Sun, Leon Yang Chu and Lixia Wu, "Cross-Sampling Physical Products Through E-Commerce Warehouses: Experimental Evidence from Alibaba", Workshop on Information Systems and Economics (WISE 2019) (Best Paper Award Finalist, WISE 2019)

52. Ni Huang, Probal Mojumder, Tianshu Sun, Jinchi Lv, Joseph Golden "Not Registered? Please Sign-up Now: A Randomized Field Experiment on the Optimal Timing of Registration Request, Workshop on Information Systems and Economics (WISE 2019) 51. Xing Lan, Tianshu Sun and Jun Duan (2019) "Uncovering Offline Conversion Funnel with Internet-of-Things: The Case of WiFi Tracking in Retail Industry", Symposium on Statistical Challenges in Ecommerce Research (SCECR 2019), Hong Kong

50. Brian Rongqing Han, Tianshu Sun, Leon Yang Chu, Lixia Wu (2019) "Completing the Online-Offline Circle at the Last Mile: A Large Field Experiment with Alibaba",

Symposium on Statistical Challenges in Ecommerce Research (SCECR 2019), Hong Kong 49. Tianshu Sun, Jaehwuen Jung, Ravi Bapna and Joseph Golden (2019). "Social Learning in Prosumption: Evidence from a Randomized Field Experiment" Symposium on Statistical Challenges in Ecommerce Research (SCECR 2019), Hong Kong

48. Hao Wu, Tianshu Sun and Jinchi Lv (2019) "Adaptive Causal Inference for Big Observational Data: A Deep Learning Approach", Winter Conference on Business Analytics (WCBA 2019), Snowbird, Utah

47. Edward McFowland III, Sandeep Gangarapu, Ravi Bapna and Tianshu Sun (2018) "Prescriptive Analytics using Heterogeneous Treatment Effects", Workshop on Information Systems and Economics (WISE 2018), Stanford University

46. Brian Rongqing Han, Tianshu Sun, Leon Yang Chu, Lixia Wu (2018) "Completing the Online-Offline Circle at the Last Mile: A Large Field Experiment with Alibaba", Workshop on Information Systems and Economics (WISE 2018), Stanford University

45. Brian Rongqing Han, Tianshu Sun, Leon Yang Chu, Lixia Wu (2018) "Completing the Online-Offline Circle at the Last Mile: A Large Field Experiment with Alibaba", Conference on Digital Experimentation (CODE 2018), MIT

44. Probal Mojumder, Ni Huang, Tianshu Sun, Jinchi Lv, Joseph M. Golden (2018) "Not Registered? Please Sign-up Now: A Randomized Field Experiment on the Optimal Timing of Registration Request", Conference on Digital Experimentation (CODE 2018), MIT 43. Tianshu Sun, Jaehwuen Jung, Ravi Bapna and Joseph Golden (2018). "Social Learning in Prosumption: Evidence from a Randomized Field Experiment" Conference on Digital Experimentation (CODE 2018), MIT

42. Rongqing Han, Tianshu Sun, Leon Chu, Lixia Wu (2018) "Completing the Online-Offline Circle at the Last-mile: A Large Randomized Field Experiment", INFORMS Annual Meeting 2018, Phoenix

41. Tianshu Sun, Jaehwuen Jung, Ravi Bapna and Joseph Golden (2018). "Social Learning in Prosumption: Evidence from a Randomized Field Experiment" INFORMS Annual Meeting 2018, Phoenix

40. Ruomeng Cui and Tianshu Sun (2018) "Sooner or Later? Learning from Delivery Speed Information" INFORMS Annual Meeting 2018, Phoenix

39. Tianshu Sun, Siva Viswanathan, Ni Huang and Elena Zheleva (2018) "Monetize Sharing Traffic through Incentive Design: A Large Field Experiment", POMS Annual Conference 2018, Houston, TX

38. Tianshu Sun, Siva Viswanathan, Ni Huang and Elena Zheleva (2018) "Monetize Sharing Traffic through Incentive Design: A Large Field Experiment", Workshop on Experimental and Behavioral Economics in Information Systems (WEBEIS 2018), Arlington, VA

37. Xing Lan, Tianshu Sun and Jun Duan, "Uncovering Offline Conversion Funnel with Big Data: The Case of Mobile Wifi Tracking in Retail industry", Marketing Dynamics Conference 2018, Dallas, TX

36. Sean Taylor and Tianshu Sun (2017) "High-dimensional Social Treatments with Personalized Constraint", Conference on Digital Experimentation (CODE 2017), MIT

35. Ni (Nina) Huang, Tianshu Sun, Pei-yu Chen and Joseph Golden (2017). "To Integrate or Not: Social media integration and ecommerce platform performance: A large field experiment", Conference on Digital Experimentation (CODE 2017), MIT, Boston
34. Tianshu Sun, Jaehwuen Jung, Ravi Bapna and Joseph Golden (2017). Social Learning in Prosumption: Evidence from a Randomized Field Experiment, (WISE 2017), Seoul
33. Tianshu Sun, Jaehwuen Jung, Ravi Bapna and Joseph Golden (2017). Social Learning in Customer Cocreation: a Large Field Experiment. Symposium on Statistical Challenges in Ecommerce Research (SCECR 2017), Ho Chih Minh City.

32. Tianshu Sun, Yanhao Wei and Joseph Golden, "Does Location Still Matter in Online Referrals? Offline Factors in Online Sharing" Symposium on Statistical Challenges in Ecommerce Research (SCECR 2017), Ho Chih Minh City.

31. Xing Lan, Tianshu Sun and Jun Duan, "Uncovering Offline Conversion Funnel with Big Data: The Case of Mobile Wifi Tracking in Retail industry", INFORMS Marketing Science Conference 2017 (ISMS 2017), Los Angeles.

30. Tianshu Sun, Yanhao Wei and Joseph Golden, "Are Online Referrals Local? Offline Factors in Online Sharing", INFORMS Marketing Science Conference (ISMS 2017), LA.
29. Ni (Nina) Huang, Tianshu Sun, Pei-Yu Chen and Joseph Golden (2017). "To Integrate or Not: Social media integration and ecommerce platform performance: A large field experiment", INFORMS Marketing Science Conference 2017 (ISMS 2017), Los Angeles.
28. Tianshu Sun, Lanfei Shi, Siva Viswanathan and Elena Zheleva (2016) "Motivating Effective Mobile App Adoption: Evidence from a Randomized Field Experiment", INFORMS Marketing Science 2017 (ISMS 2017), Los Angeles.

27. Jaehwuen Jung, Ravi Bapna, Joseph Golden and Tianshu Sun. "Altruism Pays! Towards Optimal Call-to-Action for Online Referral: A Randomized Field Experiment" Workshop on Information Systems and Economics (WISE 2016), Dublin

26. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2016) "Mobile Messaging for Offline Social Interactions: A Large Field Experiment", Stanford Digital Marketing Conference, Palo Alto, CA

25. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2016) "Monetize Sharing Traffic through Incentive Design: A Large Field Experiment". INFORMS 2016, Nashville, US
24. Tianshu Sun, Lanfei Shi, Siva Viswanathan and Elena Zheleva (2016) "Motivating Mobile App Adoption: Evidence from a Randomized Field Experiment", INFORMS Annual Meeting 2016, Nashville, US

23. Jaehwuen Jung, Ravi Bapna, Joseph Golden and Tianshu Sun. "Altruism Pays! Towards Optimal Call-to-Action for Online Referral: A Randomized Field Experiment", Conference on Digital Experimentation (CODE 2016), MIT, Boston

22. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2016) "Motivating Group Donation: Evidence from a Large Field Experiment", Advances in Field Experiments Conference (AFE 2016), Chicago, IL

21. Jaehwuen Jung, Ravi Bapna, Joseph Golden and Tianshu Sun. (2016) "Optimal Call to Action for Referral Programs: Evidence from A Randomized Field Experiment",

Symposium on Statistical Challenges in eCommerce Research (SCECR 2016), Greece 20. Tianshu Sun, Lanfei Shi, Siva Viswanathan and Elena Zheleva (2016) "Motivating Mobile App Adoption: Evidence from a Randomized Field Experiment", Symposium on Statistical Challenges in eCommerce Research (SCECR 2016), Greece

19. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Using Mobile

Messaging to Leverage Social Connections for the Social Good: Evidence from Large-Scale Randomized Field Experiment". NYU Conference on Digital Big Data, Smart Device & Mobile Marketing Analytics (Big Data 2015), NYU, New York, US

18. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Motivating Group Donation: Evidence from a Large Field Experiment" Annual Workshop on Health IT and Economics (WHITE 2015), Washington, DC, US

(Best Student Paper Award Finalist, WHITE 2015)

17. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2015) "Monetize Sharing Traffic through Incentive Design: A Randomized Field Experiment". Conference on Digital Experimentation (CODE 2015), MIT, Boston, US

16. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Using Mobile Messaging to Leverage Social Connections for the Social Good: Evidence from Large-Scale Randomized Field Experiment". Conference on Digital Experimentation (CODE 2015), MIT, Boston, US

15. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Motivating Group Donation: Evidence from a Large Field Experiment". Workshop on Information in Networks (WIN 2015), NYU

14. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Optimal Policy Design to Motivate Blood Donation: Evidence from a Randomized Field Experiment and a Structural Model". INFORMS Annual Meeting 2015, Philadelphia, US

(Best Paper Finalist, INFORMS Doing Good with Good OR Paper Competition)

13. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Motivating Group Donation: Evidence from a Large Field Experiment". INFORMS Annual Meeting 2015, Philadelphia, US

12. Lanfei Shi, Tianshu Sun, Siva Viswanathan (2015) "The Diffusion and Business Value of User Generated Content On Social Media: Evidence From Twitter". INFORMS Annual Meeting 2015, Philadelphia, US

11. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2015) "Monetize Sharing Traffic through Incentive Design: A Randomized Field Experiment". INFORMS Annual Meeting 2015, Philadelphia, US

10. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2015) "Monetize Sharing Traffic through Incentive Design: A Randomized Field Experiment". Symposium on Statistical Challenges in eCommerce Research (SCECR 2015), Addis Ababa, Ethiopia

9. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Motivating Group Donation: Evidence from a Large Field Experiment". Symposium on Statistical Challenges in eCommerce Research (SCECR 2015), Addis Ababa, Ethiopia

8. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2015) "Monetize Sharing Traffic through Incentive Design: A Randomized Field Experiment". INFORMS Marketing Science Conference 2015, Baltimore, US

7. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Motivating Group Donation: Evidence from a Large Field Experiment". Graduate Research Interaction Day, University of Maryland (GRID 2015), College Park, MD

6. Tianshu Sun, Susan Feng Lu and Ginger Zhe Jin (2015) "Solving Shortage in Priceless Market: Evidence from Blood Donation". International Industrial Organization Conference (IIOC 2015), Boston, US

5. Tianshu Sun, Guodong (Gordon) Gao and Ginger Zhe Jin (2015) "Motivating Group

Donation: Evidence from a Large Field Experiment". International Industrial Organization Conference (IIOC 2015), Boston, US

4. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2014) "Creating Social Contagion through Message Design: A Randomized Field Experiment". Workshop on Information Systems and Economics (WISE 2014), Auckland, New Zealand

3. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2014) "Antecedences and Consequences of Multichannel Sharing Behaviors" INFORMS Annual Meeting 2014, SF 2. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2014) "Understanding the Effect of Message Design on Firm-Mediated Online Social Interactions: A Randomized Field Experiment". INFORMS Annual Meeting 2014, SF, US (INFORMS Service Science Best Student Paper, 3rd Place)

1. Tianshu Sun, Siva Viswanathan and Elena Zheleva (2014) "An Empirical Investigation of Online Information Sharing Behaviors: Evidence from a Daily Deal Platform". INFORMS Marketing Science Conference 2014, Atlanta, US

Data Science/Business Analytics Skills (for Research and Teaching)

- Work as a data scientist across Tech Startups, Fortune 500 and Government Agency
- Data Infrastructure: Hadoop, MapReduce, Spark
- Analytics: SQL/HiveQL/Presto/BigQuery, Tableau, Google Analytics
- Statistic/Machine Learning Tools: R, Python, Stata, Pajek, WINBUG
- Programming & Scientific Computing: Python/C/Matlab/Mathematica/COMSOL/Origin

Teaching and Mentoring

- Essentials and Digital Frontiers of Big Data (USC, 2017-21, Course Evaluation: 4.7/5, A new course I designed with 20+ hands-on practices; I was selected by Marshall students to receive the highest teaching honor: Golden Apple Teaching Award)
- Digital Experimentation and Data-driven Organization (USC, 2022-, A new course I designed for Master of Business Analytics student)
- The Business Model of Entertainment Industry: Platform Strategy and Big Data (USC-Shanghai Jiaotong University 2019-2021, Course Evaluation: 4.99/5, A new course I designed for graduates on Platform Ecosystem and Digital Economy)
- Data Warehouse and Data Mining (USC, 2016, Course Evaluation: 4.8/5)
- Modern Database Systems and Data Analytics (University of Maryland, 2014, 2015, Course Evaluation: 4.7/5)
- PhD Student Mentoring and Committee: Wenxuan Zhou (Dissertation Committee, USC Computer Science) Peifeng Wang (Qualifying Exam Committee, USC Computer Science) Jisu Cao (Postdoctoral Scholar Mentor, USC Marshall School of Business) Brian Rongqing Han (Dissertation Committee, USC Marshall School of Business, Placement: Assistant Professor, UIUC Gies School of Business) Mengxia Zhang (Dissertation Committee, USC Marshall, Placement: Assistant

Professor, University of Western Ontario Ivey School of Business) Heeseung Andrew Lee (Dissertation Committee, Korea Advanced Institute of Science and Technology (KAIST)) Wensi Zhang (Dissertation Committee, USC Marshall) Wilson Lin (Qualifying Exam Committee, USC Marshall) Fangfei Shu (Qualifying Exam Committee, USC Marshall) Mingxuan Yue (Qualifying Exam / Dissertation Committee, USC Computer Science) Guangyu Li (PhD Qualification, USC Computer Science) Tian Xie (First Year Research, USC Viterbi) Chaofan Zhai (Master research at USC, now PhD student at University of Minnesota) Xing Lan (Dissertation Committee, University of Texas Austin) Dan Ding (External Reader of PhD Dissertation, National University of Singapore)

- Guest Lectures: Marketing Analytics (MBA) at MIT Sloan, Digital Platforms (MBA) at UC Irvine, PhD Seminar at Arizona State University, Peking University, USC Marshall Business Analytics Competition (Judge), DSO431 Foundation of Digital Business Innovation, DSO621 Research Forums (on Field Experiment), MKT613 Quantitative Marketing Models (on Field Experiment and Social Sharing), BMGT 808 Information Systems Economics (University of Maryland, 2015, on Field Experiments and Social Network Analysis)
- Research Papers are included in PhD Seminar Courses at University of Florida, University of Minnesota, Temple University, Arizona State University, Georgia Institute of Technology, University of Utah, USC Marketing, Peking University

Service

Scholarly Community

- Associate Editor, Information Systems Research (ISR)
- Guest Associate Editor for Management Science, 2021 -
- Guest Associate Editor for MIS Quarterly, 2019 2021
- Associate Editor for MIS Quarterly Special Issue on "Digital Resilience", 2020-2021
- Associate Editor for **Information Systems Research** (ISR) Special Issue on "Humans, Algorithms, and Augmented Intelligence", 2019-2020
- Associate Editor, International Conferences on Information Systems(ICIS), 2018-2021
- Reviewer:

Grants: Invited Reviewer for NSF Career Award, Invited Reviewer for Hong Kong Research Grants Council (RGC)

Journals: Complete 120+ Review Reports across MgtSci, ISR & MISQ from 2015

Management Science (2015-Now, Distinguish and Meritorious Service Award for 5 years), MIS Quarterly (2013-Now), Information Systems Research (2016-Now),

Marketing Science, Journal of Marketing Research (JMR), Manufacturing & Service Operations Management (M&SOM), Production and Operations Management (2016-Now), Journal of Management Information Systems (2016-Now), Journal of the Association for Information Systems (2017-Now), Journal of Economic and Management Strategy (2014-Now)

Conferences: CIST (2014-Now), ICIS (2012-Now), PACIS (2013), WITS (2014)

• Conference Organization:

Conference Co-chair, Conference on Information Systems and Technology (CIST 2021)

Conference Co-chair for Workshop on Experimental and Behavioral Economics in Information Systems (WEBEIS 2019 at UMN & WEBEIS 2021 at USC)

Conference Chair for Symposium on "Big Data: Value and Governance" (Participants including Executives from Tech Firms and Deans from top Business Schools)

WEBEIS Advisory Committee (2019-2020)

- Conference Program and Committee: INFORMS Session Chair (2016, 2017, 2018), CIST Program Committee (2017-Now), CSWIM Program Committee (2017-Now), INFORMS Marketing Science Session Chair 2017
- Discussant: CICF (2021), WEBEIS (2020, 2019), WISE (2017, 2018), IIOC (2015), CSWIM (2015, 2019)
- Expert Judge: 'Huo-Shui' Project Competition, M&SOM Practice-based Competition

School and Department

- Faculty UCAR Committee for Department External Review (IS representative), Department of Data Sciences and Operations, USC Marshall School of Business (2018-2019)
- Coordinator for IS Research Seminars, Department of Data Sciences and Operations, USC Marshall School of Business (2016-Present)
- Faculty Recruiting Committee, Department of Data Sciences and Operations, USC Marshall School of Business (2018-2019)
- Staff Recruiting Committee for DSO Budget Position, Department of Data Sciences and Operations, USC Marshall School of Business (2021-2022)
- Staff Recruiting Committee for DSO Coordinator Position, Department of Data Sciences and Operations, USC Marshall School of Business (2021-2022)
- Faculty Mentor of the Undergrad, USC Marshall School of Business (2021-2022)
- Chair of Faculty Recruiting Committee, Department of Data Sciences and Operations, USC Marshall School of Business (2021-2022)