

Phone: 615-343-5889 Owen Graduate School of Management E-mail: Kejia.Hu@owen.vanderbilt.edu 401 21st Ave S, Nashville, TN, 37203

ACADEMIC POSITION

2017 - Present Owen Graduate School of Management, Vanderbilt University, Nashville, TN

Assistant Professor of Operations Management

2019 Awarded as Brownlee O. Currey Jr. Dean's Faculty Fellow

EDUCATION

Ph.D. Operations Management, Kellogg School of Management, Northwestern University (2017)

 Empirical Operations Management (Committee: Jan A. Van Mieghem, Achal Bassamboo, Sunil Chopra, Gad Allon)

M.S. Statistics, Department of Statistics, University of California, Davis (2013)

- Prediction with Generalized Linear Mixed Model using Lasso (Advisor: Jiming Jiang)

B.S. Statistics, School of Management, Fudan University, China (2011)

RESEARCH INTERESTS

Topic Expertise: Service System Design, Forecasting & Artificial Intelligence, Business Analytics Methodology Expertise: Structural Modeling, Causal Inference, Statistical Forecasting, Machine Learning, Text Mining and Stochastic Modeling

PUBLICATIONS

Research Method: * Structural Modeling, ** Causal Inference, *** Forecasting, Statistics & Machine Learning

Appeared/Forthcoming

Service System Design

1. Analytics Applications and Strategies in the Restaurant Industry

with Xiande Zhao and Morgan Swink

Production and Operations Management o Accepted

 Understanding Customers' Retrial in Call Centers: Preferences of Service Speed and Service Quality with Gad Allon and Achal Bassamboo

Manufacturing & Service Operations Management ○ 2021 *

3. The Effect of Tightening Standards on Automakers' Non-compliance

with Sunil Chopra, and Yuche Chen

Production and Operations Management ○ 2021 **

 Caring for an Aging Population in a Post-Pandemic World: Emerging Trends in the U.S. Older Adult Care Industry

with Lu Kong and Matthew Walsman

Service Science • 2021 ***

 Fostering Older Adult Care Experiences to Maximize Well-Being Outcomes: A Conceptual Framework

with Sertan Kabadayi, Yuna S.H. Lee, Lydia Hanks, Matthew Walsman, and David Dobrzykowski **Journal of Service Management** \circ 2020

 Equilibrium Fuel Supply and Carbon Credit Pricing under Market Competition and Environmental Regulations

with Yuche Chen

Applied Energy 0 2019

 Technological Growth of Fuel Efficiency in European Automobile Market 1975–2015 with Yuche Chen

Energy Policy ○ 2016 ***

8. A Dynamic Programming Approach for Modeling Low-carbon Fuel Technology Adoption Considering Learning-by-doing Effect

with Yuche Chen, Yunteng Zhang, Yueyue Fan, and Jianyou Zhao

Applied Energy ○ 2017

 Strategic Choice of Open and Closed Platforms: Game Theory Analysis of Downstream Vendors' Behavior based on Demand and Cost Advantages

with Guangzhen Guo and Yulan Zhang

China Industrial Economics o 2017

Forecasting & Artificial Intelligence

10. Forecasting Product Life Cycle Curves: Practical Approach and Empirical Analysis with Jason Acimovic, Francisco Erize, Douglas J. Thomas, and Jan A. Van Mieghem Manufacturing & Service Operations Management ○ 2018 ***

- Finalist in the 2017 M&SOM Practice-based Competition.
- 11. Product Life Cycle Data Set: Raw and Cleaned Data of Weekly Orders for Personal Computers with Jason Acimovic, Francisco Erize, Douglas J. Thomas, and Jan A. Van Mieghem Manufacturing & Service Operations Management 2018 ***
- 12. Best Predictive Generalized Linear Mixed Model with Predictive Lasso for High-speed Network Data Analysis

with Jaesik Choi, Alex Sim, and Jiming Jiang

International Journal of Statistics and Probability o 2015 ***

 Estimating and Forecasting Network Traffic Performance based on Statistical Patterns Observed in SNMP Data

with Alex Sim, Demetris Antoniades, and Constantine Dovrolis

Proceedings of International Workshop on Machine Learning and Data Mining in Pattern Recognition \circ 2013 ***

14. Regional Reserves Growth Shows Decline in Annual Rate of Increase

with Gongming Yu and Yijun Wang

Oil & Gas Journal o 2016 ***

Under Review/Revision

Service System Design

15. Delegation with Technology Migration: An Empirical Analysis of Mobile Virtual Network Operators with Fan Zou, Yan Dong, and Sriram Venkataraman

Management Science ○ Major Revision **

16. Service Chains' Operational Strategies: Standardization or Customization? Evidence from the Nursing Home Industry

with Lu Kong and Rohit Verma

Manufacturing & Service Operations Management ○ Minor Revision **

17. How Women Promote Greater Social Responsibility on Social Media

with Li Xiang and Huibin Du

MIS Quarterly ○ Major Revision **

- 2021 INFORMS Social Media Analytics Section Best Student Paper Award Finalist
- Promotional Design for Small Businesses: the Operational Value of Online Deals with Simin Li and Martin Lariviere

Management Science ○ Major Revision *

- Finalist in the 2019 IBM Service Science Section Best Student Paper Competition
- 19. To What Extent Do Workers' Preferences Matter?

with Zhenzhen Jia, Jianqiang Hu, and Vishal Ahuja

Management Science ○ Resubmitted **

- 2020 INFORMS Best Working Paper Award Behavioral OM Runner Up
- 2021 POMS College of Behavior OM Junior Scholar Paper Honorable Mention
- 2021 INFORMS Service Science Best Cluster Paper Award Finalist
- WeStore or AppStore: Customer Behavior Differences in Mobile Apps and Social Commerce with Nil Karacaoglu

Production and Operations Management ○ Major Revision *

2021 INFORMS TIMES Best Working Paper Award Third Place

21. The Psychology of Virtual Queue: When Waiting Becomes Less Like Waiting

with Xun Xu and Leo Ao

Manufacturing & Service Operations Management ○ Under Review **

22. The Cardless and Cashless Future: the Rise of Mobile Payment

with Shuai Ling, and Sriram Venkataraman

Information Systems Research ○ Under Review *

23. More or Less: How Information Richness Affects Our Choice Consistency

with Iris Wang

Management Science ○ Under Review **

24. How Operational Complexity Drives Inventory Record Inaccuracy: Empirical Evidence from Crossborder E-commerce

with Ting Wang, Stanley Lim, Yun Fong Lim, Yugang Yu

Management Science ○ Under Review **

Forecasting & Artificial Intelligence

25. Simultaneous Imputation and Prediction with High-dimensional Data (SIP-HD): A Deep Learning Model for Disease Diagnosis

with Zhenzhen Jia, Jianqiang Hu, Qingchen Wang, and Ning Zhang

Journal of Operations Management ○ Under Review ***

Working Papers

Service System Design

26. The Acquisition Performance of Multi-unit Service Firms: Achieving Operational Synergy through Geographic Clustering

with Susan Lu and Lauren Lu **

- 27. The Good and Evil Inside: From Within-organization Features to the Social-orientation of Innovations with Mark Cohen **
- Inequality reflected in Teaching Evaluations during Covid-19
 with Hao Ding and Ruomeng Cui **

Forecasting & Artificial Intelligence

29. Intermittent Demand Forecasting

with Feng Liu, Teng Lian, and Jiangiang Hu. ***

CASE STUDY

- · Jointown Pharmaceutical Group Co Ltd, China (with Prof. Jiangiang Hu, Fudan University, China)
 - -Awarded as the National Top 100 MBA Case Studies, China, 2011

HONORS, AWARDS & CERTIFICATES

- Management Science Distinguished Service Award recipients for the 2020
- · Vanderbilt Strong Faculty Grant, 2020
- · Business of VU (Vanderbilt University) Certificate, 2020
- MIT Sloan + CSAIL Artificial Intelligence Certificate, 2020
- M&SOM Meritorious Service Award, 2020
- · Brownlee O. Currey Jr. Dean's Faculty Fellow, 2019
- · SEC Faculty Travel Grant, 2019
- Vanderbilt Junior Faculty Teaching Fellowship, 2018
- Graduate School Fellowship, Kellogg School of Management, Northwestern University, 2013 2017
- Graduate School Fellowship, University of California, Davis, 2011 2013
- · Junzheng Scholarship, Junzheng Foundation, 2010
- · Wangdao Scholar Fellowship, Fudan University, 2010

INVITED INSTITUTIONAL TALKS

Academia

- 1. Singapore Management University, Singapore, 2021
- 2. Michigan State University, U.S., 2021
- 3. University of Toronto, Canada, 2021
- 4. IIASA, Austria, 2021
- 5. Purdue University, U.S., 2020
- 6. University of California, Davis, U.S., 2019
- 7. University of Pennsylvania, Wharton School, Empirical Workshop, U.S., 2019
- 8. Cornell University, Thought Leadership Forum, U.S., 2019
- 9. Zhejiang University, Empirical Workshop, China 2019
- 10. Ohio State University, Fisher School of Management, U.S., 2019
- 11. Fudan University, School of Management, China 2018
- 12. Texas A&M University, Mays Business School, U.S., 2018
- 13. Zhejiang University, School of Management, China, 2018
- 14. Tianjin University, College of Business Administration, China, 2018
- 15. CEIBS, China, 2018
- 16. London Business School, United Kingdom, 2017
- 17. Southern Methodist University, Cox School of Business, U.S., 2017

- 18. Oxford University, Said Business School, United Kingdom, 2017
- 19. Nanyang Technological University, Nanyang Business School, Singapore, 2017
- 20. Emory University, Goizueta Business School, U.S., 2017
- 21. Cornell University, SC Johnson College of Business, U.S., 2016
- 22. Peking University, Guanghua School of Management, China, 2016
- 23. HKUST Business School, China, 2016
- 24. Vanderbilt University, Owen Graduate School of Management, U.S., 2016
- 25. University of Hong Kong, Business School, China, 2016
- 26. Fudan University, School of Management, China, 2016
- 27. University of Notre Dame, Mendoza College of Business, U.S., 2016
- 28. University of Illinois Urbana-Champaign, Gies College of Business, U.S., 2016
- 29. City University of Hong Kong, College of Business, China, 2016
- 30. West Virginia University, College of Business and Economics, U.S., 2016
- 31. Oregon State University, College of Business, U.S., 2016

Industry

Marriott International: Multi-Channel Customer Relationship Management, U.S., 2017

MEDIA COVERAGE

- 1. "Research Snapshot: COVID-19 is the disruptive moment the older adult care industry has been waiting for" Vanderbilt News 2021. <u>Link</u>
- 2. "New Research Identifies Service Frameworks to Improve Customer Service without Breaking the Bank" Vanderbilt News 2021. Link
- 3. "Tightening Vehicle Emissions Standards Resulted in Higher Rates of Automaker Non-Compliance" Vanderbilt News 2021. Link
- 4. "Launching New Tech? How Do You Make Data-driven Decisions Without Any Sales Data?" Vanderbilt News 2018. Link
- 5. "What Volkswagen's Emissions Scandal Can Teach Us about Why Companies Cheat" Kellogg Insights 2017. Link
- 6. "How to Predict Demand for Your New Product" Kellogg Insights 2017. Link
- 7. "Empiricist Brings Skills with Big Data to Service Operations Research" Vanderbilt Faculty Spotlight 2017. Link

TEACHING EXPERIENCE

Assistant Professor, Owen School of Management, Vanderbilt University

- Management of Service Operations (MBA 2018-2021 Spring)
- Operations Management (Undergraduate 2019-2021 Spring)

Teaching Assistant, Kellogg School of Management, Northwestern University

- Supply Chain Management (MBA 2014 Fall, 2015 Spring/Fall, 2016 Spring/Fall; EMBA Spring 2015)
- Operations Management (MBA 2015 Winter, 2015 Summer)
- Operations Strategy (MBA 2016 Spring)
- Foundations of Operations Management (Ph.D. 2015 Winter)
- Stochastic Foundations (Ph.D. 2015 Spring)

Discussion Lecturer, University of California, Davis

- Statistical Computing (Graduate 2013 Winter; Undergraduate 2012 Fall)
- Statistical Methods for Research with SAS (Graduate 2012-2013 Spring)
- · Applied Statistics for Business and Economics (Senior Undergraduate 2012 Winter)
- Applied Statistics Methods: Nonparametric Statistics (Senior Undergraduate 2013 Winter)
- · Applied Statistics Methods: Analysis of Variance (Junior Undergraduate 2012 Fall)

PROFESSIONAL SERVICES

Academic Field

- · 2021-Present, Board Member, INFORMS Service Science Section
- · 2021-Present, Member Engagement Committee at POMS College of Service Operations
- 2017-Present, Reviewer for Journals (including Management Science, Operations Research,

Manufacturing & Service Operations Management, Production and Operations Management, Naval Research Logistics, Journal of Operations Management, Service Science)

- · 2019, Session Chair of Policy Intervention to Firms' Sustainability Actions, INFORMS
- 2019, Session Chair of Service Design in Platform Economy, INFORMS
- 2019, Panelist on Academic Job Search Panel, INFORMS
- 2019, Session Chair of Management Issues for Online Platforms, POMS
- 2019, Session Chair of Emerging Topics in Operations Management, POMS
- · 2019, Session Chair of Multi-Channel Management, POMS
- 2019, Track Chair of Service Operations, POMS, managed 21 sessions
- 2018, Session Chair of Empirical Research for New Service Business, INFORMS
- 2018, Session Chair of Empirical Research in Sustainability, INFORMS
- 2018, Session Chair of Empirical Research in Service Operations, POMS
- 2018, Session Chair of Supply Chain Analytics, POMS
- 2017, Session Chair of Environmental Operations Management, POMS
- 2015, Session Chair of Green Manufacturing, INFORMS

University

Vanderbilt University

- 2018 2020, Faculty Member of Provost's WAVE Council Family Friendly Policies Subcommittee
- 2019, Faculty Representative for Board of Trust Strategic Session on Faculty Growth and Development
- 2018, Faculty Representative for "Lunch and Learn" with Chancellor Zeppos

School

Owen Graduate School of Management, Vanderbilt University

- · 2020 Present, Student Achievement Committee
- · 2018 Present, Faculty Advisor, Great Chinese Business Club
- 2019, Member of Student Achievement Committee
- 2019, Member of Faculty Hiring Committee of Operations Management and Quantitative Methods
- 2018, Member of Faculty Hiring Committee of Operations Management and Quantitative Methods

Kellogg School of Management, Northwestern University

- 2014-2015, Marketing VP, Chinese Business Club
- 2014, Finance VP, Great China Business Conference

Industry

- · 2020 Present, Academic Scholars, L'Oreal, China
- 2017 Present, Academic Scholars, Cornell Institute for Healthy Futures, U.S.
- 2012-2013, Researcher, Scientific Data Management, Lawrence Berkeley National Lab, Berkeley, U.S.
 - Project: Algorithm for Improving Efficiency of Data Transfer on High-speed Network
- 2012, Financial Trainee, Morgan Stanley, Sacramento, CA, U.S.
 - Project: Optimal Timing Policy for Asset Trading and Allocation
- 2011, Supply Chain Investigator, Yiwu County Government World's Largest Wholesale Market for Small Commodities, China,
 - Project: Evaluation of Supply Chain Management of Yiwu Wholesale Market in Global Trading
- 2010, Research Intern in Supply Chain Management, Jointown Pharmaceutical Co Ltd, China
 - Project: A Case Study on Jointown Pharmaceutical Group Co Ltd. Inventory Management System