

Guihua Wang

Naveen Jindal School of Management
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EMPLOYMENT

Naveen Jindal School of Management, University of Texas, Dallas, 2019 – Present

Assistant Professor of Operations Management

United Parcel Service (UPS) Asia Group, Singapore, 2010 – 2013

Supervisor of Industrial Engineering

EDUCATION

Stephen M. Ross School of Business, University of Michigan, Ann Arbor, 2019

PhD in Business Administration

Georgia Tech – NUS Double Masters Program, 2010

MSc in Industrial Engineering from Georgia Institute of Technology

MSc in Supply Chain Management from National University of Singapore

Faculty of Engineering, National University of Singapore, 2008

BEng (with honors) in Biomedical Engineering with Minor in Mathematics

Faculty of Applied Science, University of British Columbia, 2007

Visiting Student at University of British Columbia

RESEARCH INTERESTS

- Econometrics and machine learning
- Healthcare operations management

PUBLISHED PAPERS

- Hopp, W., J. Li, S. Sagharian, G. Wang. 2020. Analytics Powered Employee Health Plans. *Management and Business Review*. Forthcoming.
- Brescia, A., M. Paulsen, T. Watt, L. Rosenbloom, A. Wisniewski, J. Li, G. Wang, D. Likosky, W. Hopp, S. Bolling. 2020. Economic Analysis and Long-Term Follow-Up of Distant Referral for Degenerative Mitral Valve Repair. *The Annals of Thoracic Surgery*. Forthcoming.

- Zayas-Caban, G., S. Jasin, G. Wang. 2019. An Asymptotically Optimal Heuristic for General Non-Stationary Finite-Horizon Restless Multi-Armed Multi-Action Bandits. *Advances in Applied Probability* 51(3): 745-772.
- Wang, G., J. Li, W. Hopp, F. Fazzalari, S. Bolling. 2018. Using Patient-Specific Quality Information to Unlock Hidden Health Care Capabilities. *Manufacturing & Service Operations Management* 21(3): 582-610.
 - Finalist, MSOM Student Paper Competition, 2016
 - Finalist, INFORMS Service Section Student Paper Competition, 2016
 - Selected talks: INFORMS (2015, 2016), INFORMS Healthcare (2015), MSOM (2015), POMS (2015, 2016)
- Hopp, W., J. Li, G. Wang. 2018. Big Data and the Precision Medicine Revolution. *Production and Operations Management* 27(9): 1647-1664.
- Lee, D., J. Li, G. Wang, K. Croome, J. Burns, D. Perry, J. Nguyen, W. Hopp, B. Taner. 2017. Looking Inward: Impact of Operative Time on Patient Outcomes. *Surgery* 162(4): 937-949.
- Wang, G., Y. Zhong, C.P. Teo, Q. Liu. 2015. Flow-Based Accessibility Measurement: The Place Rank Approach. *Transportation Research Part C: Emerging Technologies* 56: 335-345.
- Wang, G. 2014. Service Parts Logistics Network Model Selection for Different Industries in Asia, *International Journal of Logistics Systems and Management* 18(4): 572-588.

WORKING PAPERS

- Wang, G., R. Zheng, T. Dai. 2020. Does Transportation Mean Transplantation? Impact of New Airline Routes on Sharing of Cadaveric Kidneys. *Major Revision*.
 - Featured in Nobel laureate Al Roth's Market Design blog
 - Featured by Associated Press, Austin' NPR Station – KUT, Houston Chronicle, National Interest, Public Radio International, Simple Flying, The Conversation, Yahoo! News
- Wang, G., J. Li, W. Hopp. 2020. An Instrumental Variable Tree Approach for Detecting Heterogeneous Treatment Effects in Observational Studies. *Major Revision*.
 - Selected talk: MSOM (2018), INFORMS (2017)
- Wang, G. 2020. The Effect of Medicaid Expansion on Patient Flow in the Emergency Department. *Major Revision*.
- Wang, G. 2020. Using Mobile Device Data to Understand the Effect of Stay-at-Home Orders on Residents' Mobility. *Major Revision*.
- Wang, G. 2020. Stay at Home to Stay Safe: Effectiveness of Stay-at-Home Orders in Containing the COVID-19 Pandemic. *Under Review*.
- Wang, G., T. Dai. 2020. The Spillover Effect of Suspending Non-essential Surgery: Evidence from Kidney Transplantation. *Under Review*.

- Wang, G., B. Pourghannad. 2020. Matching Surgeons with Patients: Heterogeneous Effects of Surgical Volume on Surgery Duration. *Under Review*.
- Wang, G., W. Hopp, M. Zhang, M. Mathis. 2020. A Multivariate Forest Approach for Analyzing the Heterogeneous Effects of Team Familiarity.
- Wang, G., J. Li, W. Hopp. 2018. Personalized Health Care Outcome Analysis of Cardiovascular Surgical Procedures. *Under Revision*.
 - Winner, Health Care Applications Society Student Paper Competition, 2017
 - Finalist, MSOM Student Paper Competition, 2017
 - Honorable Mention, INFORMS Service Science Best Cluster Paper Award, 2017
 - Selected talk: MSOM SIG (2017), POMS (2017), INFORMS (2016)
- Wang, G., J. Li, W. Hopp, F. Fazzalari, S. Bolling, D. Likosky. 2017. Cost-Effectiveness of Referring Patients to Centers of Excellence for Mitral Valve Surgery. *Under Revision*.
 - Media attention: National Affair (2016), Crain's Detroit (2015), Medical Xpress (2015), University of Michigan News (2015)
 - Selected talk: University of Michigan Cardiovascular Center (2015)

WORK IN PROGRESS

- Wang, G., J. Li, W. Hopp, B. Taner, D. Lee. 2018. Impact of Hospital Competition on Patient Waiting Time and Treatment Outcomes.
 - Selected talk: POMS (2017)

HONORS AND AWARDS

- Nominee, ProQuest Distinguished Dissertation Award, 2019
- Finalist, INFORMS Service Section Best Student Paper Competition, 2018
- Spivey-Hall Award for Academic Excellence, Ross School of Business, 2018
 - School-level award to a student with academic excellence across a range of areas
- Winner, Health Care Applications Society Student Paper Competition, 2017
- Finalist, MSOM Student Paper Competition, 2017
- Honorable Mention, Service Science Best Cluster Paper Award, 2017
- Rackham Pre-Doctoral Fellowship Award, University of Michigan, 2017-2018
 - University-level most prestigious award for academic achievement
- Finalist, MSOM Student Paper Competition, 2016
- Finalist, INFORMS Service Section Best Student Paper Competition, 2016
- Finalist (final four), INFORMS Bonder Scholarship for Applied Operations Research in Health Services, 2016
- Neary Award for Academic Excellence, Ross School of Business, 2016
 - School-level award to a student with excellent academic progress

- T&O Department Award for Research Excellence, Ross School of Business, 2016 – 2018
- Ross School of Business Research Grant, 2016
- Award for Early Candidacy, Ross School of Business 2015
- Rackham Travel Grant, University of Michigan, 2015 – 2018
- Ross School of Business Travel Grant, 2015 – 2018
- Ross School of Business Fellowship, 2013 – 2018

MEDIA COVERAGE

- How human organs are flown for transplants, Simple Flying, Sep 29, 2020
- How the airline industry recovers from COVID-19 could determine who gets organ transplants, The Conversation, Sep 28, 2020
 - Republished by Associated Press, Austin' NPR Station – KUT, Houston Chronicle, National Interest, Public Radio International, Simple Flying, Yahoo! News
- Michigan Ross PhD Candidates Are Raking in the Wins for Their Innovative Research, Ross News Blog, Nov 14, 2017
- Profile featured by Ross Marketing, 2017
- Sharing the care, National Affairs, Jan 11, 2016
- Study: “Centers of excellence” hospitals best for certain surgeries, Crain’s Detroit, Aug 3-9, 2015
- When data is the best medicine, Medical Xpress, Jun 1, 2015
- Cost-benefit analysis shows data may be the best medicine, The University Record, May 29, 2015
- When data is the best medicine, University of Michigan News, May 29, 2015

INVITED SEMINARS

Krannert School of Management, Purdue University, Apr 2020 (postponed due to COVID-19)

UCL School of Management, University College London, Feb 2019

Imperial College Business School, Imperial College, Feb 2019

Jindal School of Management, University of Texas – Dallas, Feb 2019

School of Public Health, University of Michigan – Ann Arbor, Feb 2019

Weatherhead School of Management, Case Western University, Jan 2019

Kelley School of Business, Indiana University, Jan 2019

Katz Graduate School of Business, University of Pittsburgh, Jan 2019

UConn School of Business, University of Connecticut, Jan 2019

NUS Business School, National University of Singapore, Jan 2019

Faculty of Business and Economics, Hong Kong University, Jan 2019

Fisher College of Business, Ohio State University, Jan 2019

Simon Business School, University of Rochester, Dec 2018

CUHK Business School, Chinese University of Hong Kong, Nov 2018

HKUST Business School, Hong Kong University of Science and Technology, Nov 2018

College of Business, City University of Hong Kong, Nov 2018

CONFERENCE PRESENTATIONS

An Instrumental Variable Tree Approach for Detecting Heterogeneous Treatment Effects in Observational Studies

- INFORMS Healthcare Conference 2019, Boston, MA
- POMS Conference 2019, Washington, DC
- MSOM Conference 2018, Dallas, TX
- INFORMS Conference 2017, Houston, TX

Personalized Healthcare Outcome Analysis of Cardiovascular Surgical Procedures

- INFORMS Healthcare Conference 2019, Boston, MA
- POMS Conference 2019, Washington, DC
- INFORMS Conference 2017, Houston, TX
- MSOM SIG Conference 2017, Chapel Hill, NC

The Impact of Competitive Entry in an Organ Transplant Market

- POMS Conference 2017, Seattle, WA

A Causal Tree Approach for Personalized Health Care Outcome Analysis

- POMS Conference 2017, Seattle, WA
- INFORMS Conference 2016, Nashville, TN

Using Patient-Centric Quality Information to Unlock Hidden Health Care Capabilities

- INFORMS Conference 2016, Nashville, TN

Hospital Quality and Patient Choice: An Empirical Analysis of Mitral Valve Surgery

- POMS Conference 2016, Orlando, FL
- INFORMS Annual Conference 2015, Philadelphia, PA
- INFORMS Healthcare Conference 2015, Nashville, TN
- MSOM Conference 2015, Toronto, CA
- POMS Conference 2015, Washington, DC

Cost-Effectiveness of Referring Patients to Centers of Excellence for Mitral Valve Surgery

- University of Michigan Hospital, 2015

PHD STUDENTS SUPERVISION

Zahra Mobini Dehkordi (committee member)

Abdullah Halit Gokcinar (committee member)

TEACHING EXPERIENCE

Naveen Jindal School of Management

- Instructor: Operations Management (MSc Core), Fall 2019, Spring 2020, Fall 2020
- Instructor: Systems Operations Management (MSc Core), Fall 2019, Spring 2020, Fall 2020

Stephen M. Ross School of Business

- Instructor: Business Analytics and Statistics (BBA Core), Fall 2015
- Teaching Assistant: Introduction to Operations Management (BBA Core), Spring 2015
- Tutor: Business Analytics and Statistics (BBA Core), Fall 2016, Business Statistics (MBA Core), Fall 2017

ACADEMIC SERVICE

Session Chair: POMS (2020, cancelled due to COVID-19), INFORMS (2018), MSOM (2018)

Ad-hoc Reviewer: *Management Science, Operations Research, Manufacturing & Service Operations Management, Production and Operations Management, Naval Research Logistic*