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Education

Ph.D., Tepper School of Business, Carnegie Mellon University, 2010.
Major: Operations Research
Minors: Operations Management, Economics
Dissertation: Ad Slotting & Pricing: New Media Planning Models for New Media

M.S., Tepper School of Business, Carnegie Mellon University, 2006.
Major: Operations Research

B.Math., *Dean's List Graduate (Highest Distinction)*, University of Waterloo, 2004.
Major: Honours Operations Research Co-op
Minor: Computer Science

Academic Positions

Associate Professor, Paul Merage School of Business, UC Irvine (2017-Present).
Assistant Professor, Paul Merage School of Business, UC Irvine (2010-2017).

Research Interests

My research interests include applied optimization, large-scale optimization, revenue management, media management, health care management, and problems that lie at the interface of operations and marketing. The key ingredient that cross-cuts my research is the presence of problem-specific structures which can be exploited to deliver insights or computationally efficient algorithms. In one research stream, my focus is on planning and scheduling online advertising; my papers in this stream (1) develop a method for placing ads within the 3D worlds of console-based video games, (2) introduce a modeling paradigm for a broad class of display advertising called Guaranteed

Targeted Display Advertising, (3) develop an efficient duality-based algorithm for planning Guaranteed Targeted Display Advertising, (4) develop a pattern-based model and algorithm for planning and scheduling a new form of guaranteed contract called the Reach & Frequency-based contract, (5) introduce the concept of using the Gini coefficient as a measure of impression spread, (6) develop an efficient algorithm for solving ad-quality optimization problems based on minimizing scaled Gini coefficients, and (7) solve other important operational-level advertising problems using large-scale optimization techniques. In another stream, my papers employ analytics and specialized methods to (1) help retailers choose third-party shippers for long-term transportation contracts while balancing diesel price risk, (2) help the government of Korea to determine which hospitals to designate as Level I trauma centers to maximize coverage given a fixed resource budget, and (3) help travel search engines understand what factors contribute to consumers evaluating more/less options and purchasing with higher/lower likelihood.

Professional Memberships

RM&P - INFORMS Revenue Management & Pricing Section
MSOM - INFORMS Manufacturing and Service Operations Management Society
INFORMS - Institute for Operations Research and the Management Sciences
POMS - Production and Operations Management Society
CDT - UC Irvine Center for Digital Transformation

Awards and Honors

Excellence in Teaching in the Masters of Science in Business Analytics Program,
UC Irvine. (June 2020).

This award reads, “presented by the students of Class 2020 of the Master of Science in Business Analytics (MSBA) Program for Excellence in Teaching, Genuine Interest in Students, and Sincere Concern for Their Individual Development and Learning.” One award is conferred annually for the top teaching performance (as chosen by the students) in a MSBA core class.

Excellence in Teaching in the Masters of Science in Business Analytics Program,
UC Irvine. (June 2019).

This award reads, “presented by the students of Class 2019 of the Master of Science in Business Analytics (MSBA) Program for Excellence in Teaching, Genuine Interest in Students, and Sincere Concern for Their Individual

Development and Learning.” One award is conferred annually for the top teaching performance (as chosen by the students) in a MSBA core class.

Junior Faculty Research Award for 2016-17, UC Irvine. (May 2017).

This award is conferred to the junior (untenured) faculty member in the Paul Merage School of business who demonstrated the highest level of research excellence / productivity that year. Selection is by the faculty of the Paul Merage School of Business.

Dean's Honoree for Teaching Excellence, UC Irvine. (May 7, 2015).

In recognition for excellence in undergraduate teaching, presented by the Dean of the Paul Merage School of Business.

William Pierskalla Best Paper Award in Health Care Management Science, INFORMS. (2014).

The Health Applications Society of INFORMS sponsors an annual competition for the Pierskalla Award, which recognizes research excellence in the field of health care management science. I received this award for my work and related paper that studies the design of a trauma care system in Korea, and uses a method we developed called Shifting Quadratic Envelopes to outperform several benchmarks by up to 20%.

Yahoo Labs Faculty Research and Engagement Program (FREP) Scholar. (2012).

I was one of 28 faculty from top schools around the world given this award. As described by Yahoo!'s press briefing, “The [FREP] program is designed to produce the highest quality scientific collaborations and outcomes by engaging with faculty and students conducting research in areas of mutual interest. The FREP funds help academics across the globe collaborate with Yahoo! research scientists on new, exciting internet research studies and experiments.”

Lave-Weil Prize, Tepper School of Business, Carnegie Mellon University. (2012).

Prior to winning the Pierskalla Award, my work in planning a trauma care system in Korea was awarded the 2012 Lave-Weil Prize for the best (at the time) unpublished paper on problem solving co-authored at Carnegie Mellon's Tepper School of Business (my coauthor is at CMU).

George B. Dantzig Dissertation Award, INFORMS. (Nov 13, 2011).

The George B. Dantzig Award is awarded by INFORMS for the best dissertation in any area of operations research and the management sciences that is innovative and relevant to practice. This is the top award that INFORMS, our main professional society, confers to young researchers. Two papers that came out of my dissertation are "Scheduling of Dynamic In-Game Advertising" and "The Planning of Guaranteed Targeted Display Advertising", both now-published in ***Operations Research***.

RESEARCH

Publications

Journal Articles, Peer Reviewed

- **[11]** Lejeune, M., Turner, J. (2019). Planning Online Advertising Using Gini Indices. ***Operations Research***, 67(5), 1222-1245.
- **[10]** Hojjat, A., Turner, J. G., Cetintas, S., Yang, J. (2017). A Unified Framework for the Scheduling of Guaranteed Targeted Display Advertising under Reach and Frequency Requirements. ***Operations Research***, 65(2), 289-313.
- **[9]** Choudhary, V., Currim, I. S., Dewan, S., Jeliaskov, I., Mintz, O., Turner, J. G. (2016). Evaluation Set Size and Purchase: Evidence from a Product Search Engine. ***Journal of Interactive Marketing***, 37, 16-31.
- **[7]** Drezner, Z., Scott, C. H., Turner, J. G. (2016). Mixed Planar and Network Single-Facility Location Problems. ***Networks***, 68(4), 271-282.
- **[6]** Cho, S.-H., Jang, H., Lee, T., Turner, J. G. (2014). Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning. ***Operations Research***, 62(4), 751-771. **Awarded the 2014 INFORMS William Pierskalla Best Paper Award & the 2012 Carnegie-Mellon University Lave-Weil Prize.**
- **[3]** Turner, J. G., Peterson, B., Cho, S.-H., Kekre, S., Scheller-Wolf, A. (2012). A Large U.S. Retailer Selects Transportation Carriers Under Diesel Price Uncertainty. ***Interfaces***, 42(4), 365-379.
- **[2]** Turner, J. G. (2012). Planning of Guaranteed Targeted Display Advertising. ***Operations Research***, 60(1), 18-33. **Recognized by the 2011 INFORMS Dantzig Dissertation Award.**
- **[1]** Turner, J. G., Scheller-Wolf, A., Tayur, S. (2011). Scheduling of Dynamic In-Game Advertising. ***Operations Research***, 59(1), 1-16. **Recognized by the 2011 INFORMS Dantzig Dissertation Award.**

Conference Proceedings, Peer Reviewed

- [8] Arkhipov, D., Turner, J. G., Dillencourt, M., Torres, P., Regan, A. (2016). Yield Optimization with Binding Latency Constraints. ***Proceedings of the 3rd International Conference on Soft Computing and Machine Intelligence (ISCFMI)***, pp. 5-12.
- [5] Hojjat, A., Turner, J. G., Cetintas, S., Yang, J. (2014). Delivering Guaranteed Display Ads under Reach and Frequency Requirements. ***Proceedings of the 28th AAAI Conference on Artificial Intelligence***, pp. 2278-2284. **This is the #1-ranked computer science conference in artificial intelligence.**
- [4] Lee, T., Jang, H., Cho, S.-H., Turner, J. G. (2012). A Simulation-Based Iterative Method for a Trauma Center - Air Ambulance Location Problem. ***Proceedings of the 2012 IEEE Winter Simulation Conference***, pp. 955-966.

Working Papers

- [W12] Nourbakhsh, V., Turner, J. Dynamized Routing Policies for Minimizing Expected Waiting Time in a Multi-Class Multi-Server System. (Revise & Resubmit, ***Computers & Operations Research***).
- [W13] Kalshani, A., Hosseini, M., Turner, J. How to Conclude a Suspended Sports League? (Reject & Resubmit, ***Manufacturing & Services Operations Management***)
- [W14] Hojjat, A., Turner, J. Controlling the Exposure Frequency Distribution of Online Advertising: A Discrete-Time Markov Chain Approach. (Reject & Resubmit, ***Manufacturing & Services Operations Management***).
- [W15] Robinson, A., Turner, J. Modeling Hotel Demand Forecasting Under Varying Arrival Rates. (Preparing for initial submission)
- [W16] Hosseini, M., Turner, J. Deepest Cuts for Benders Decomposition (Preparing for initial submission).

Work in Progress

- **[P17]** Kalshani, A. H., Gui, L., Turner, J. Analysis of Pricing Mechanisms in a Resource Exchange Economy.
- **[P18]** Hojjat, A., Turner, J. Markov Chain Models for Serving Online Ads with Reach and Frequency Requirements on a Moving Time Window.
- **[P19]** Hosseini, M., Turner, J. Accelerating Benders Decomposition via Predictive Cuts.

Contracts, Grants and Sponsored Research

Council on Research, Computing & Library Resources Award, UCI. (Jan 25, 2019).

Received \$2550 award to support my research in (a) optimizing online advertisement selection and (b) optimizing pricing and allocation for resource exchanges.

Council on Research, Computing & Library Resources Award, UCI. (Dec 20, 2017).

Received \$2500 award to support my research in (a) optimizing call center staffing and (b) optimizing online advertisement selection.

Council on Research, Computing & Library Resources Award, UCI. (Feb 24, 2017).

Received \$1000 award to license optimization software to support research in developing efficient methods to route jobs in a multi-class multi-server system.

Yahoo! Faculty Research and Engagement Award, Yahoo! Inc. (October 23, 2012).

Received \$40,000 award to support my research in online advertising optimization.

Council on Research, Computing & Library Resources Award, UCI. (Jan 12, 2011).

Received \$3500 award to conduct research in social network ad optimization.

Presentations Given

Invited Talks at Research Institutions

- 11/19/2019 "Planning Online Advertising Using Gini Indices", **Turner, J. (Presenter & Author)**. Invited Talk, College of Engineering, Korea Advanced Institute of Science and Technology, Daejeon, Korea. With Lejeune, M. (Author).
- 11/18/2019 "Planning Online Advertising Using Gini Indices", **Turner, J. (Presenter & Author)**. Invited Talk, College of Business, Korea Advanced Institute of Science and Technology, Seoul, Korea. With Lejeune, M. (Author).
- 11/28/2018 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Invited Talk, Graduate School of Business, Stanford University, Stanford, CA. With Lejeune, M. (Author).
- 4/20/2018 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Invited Talk, School of Business, University of Miami, Miami, FL. With Lejeune, M. (Author).
- 3/10/2017 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Invited Talk, College of Business, University of Illinois at Chicago, Chicago, IL. With Lejeune, M. (Author).
- 3/9/2017 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Invited Talk, Booth School of Business, University of Chicago, Chicago, IL. With Lejeune, M. (Author).
- 1/20/2017 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Invited Talk, Leavey School of Business, Santa Clara University, Santa Clara, CA. With Lejeune, M. (Author).
- 10/14/2016 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Invited Talk, Foster School of Business, University of Washington, Seattle, WA. With Lejeune, M. (Author).
- 3/18/2016 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Invited Talk, Rady School of Management, University of California, San Diego. With Lejeune, M. (Author).
- 3/6/2015 "Delivering Guaranteed Display Advertising under Reach and Frequency Requirements", **Turner, J. (Presenter & Author)**. Invited Talk, Darden School of Business, University of Virginia, Charlottesville, VA. With Hojjat, A. (Author), Cetintas, S. (Author), Yang, J. (Author).
- 2/6/2015 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**. Invited Talk, Robert H. Smith School of Business, University of Maryland,

- College Park, MD. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 9/5/2014 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**. Invited Talk, Carroll School of Management, Boston College, Boston, MA. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 7/8/2014 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**. Invited Talk, London Business School, London, UK. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 4/11/2014 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**. Invited Talk, Leavey School of Business, Santa Clara University, Santa Clara, CA. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 2/22/2013 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**. Invited Talk, University of Miami School of Business Administration, Coral Gables, FL. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 1/29/2013 "Planning of Guaranteed Targeted Display Advertising", **Turner, J. (Presenter & Author)**. Invited Talk, Yahoo!, Inc., Sunnyvale, CA.
- 11/9/2012 "Planning of Guaranteed Targeted Display Advertising", **Turner, J. (Presenter & Author)**. Invited Talk, University of California, Berkeley, Haas School of Business, Berkeley, CA.
- 10/26/2012 "Planning of Guaranteed Targeted Display Advertising", **Turner, J. (Presenter & Author)**. Invited Talk, Georgia Tech Scheller College of Business, Atlanta, GA.
- 3/25/2011 "Planning of Guaranteed Targeted Display Advertising", **Turner, J. (Presenter & Author)**. Invited Talk, George Washington University School of Business, Washington, DC.

Talks Given at UC Irvine

- 1/19/2018 "Waterfall Yield Optimization for Online Advertising", **Turner, J. (Presenter & Author)**. UCI Center for Digital Transformation Research Colloquium, UC Irvine, Irvine, CA. With Arkhipov, D. (Author), Dillencourt, M. (Author), Regan, A. (Author).
- 10/16/2017 "Dynamic Advertising within Video Games and Beyond", **Turner, J. (Presenter & Author)**. UCI Marketing Association Seminar, UC Irvine, Irvine, CA. With Lejeune, M. (Author).
- 2/15/2017 "Waterfall Yield Optimization for Online Advertising", **Turner, J. (Presenter & Author)**. Paul Merage School of Business Assistant Professor Colloquium, UC Irvine, Irvine, CA. With Arkhipov, D. (Author), Dillencourt, M. (Author), Regan, A. (Author).
- 1/20/2016 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Paul Merage School of Business Assistant Professor Colloquium, UC Irvine, Irvine, CA. With Lejeune, M. (Author).
- 2/18/2015 "Learning, Revising, and Forgetting Multidimensional Contextual Features to Optimize Online Ad Selection", **Turner, J. (Presenter & Author)**. Paul Merage School of Business Assistant Professor Colloquium, UC Irvine, Irvine, CA. With Xu, T. (Author), Regan, A. (Author), Yu, Y. (Author).
- 10/24/2014 "Data-Driven Optimization", **Turner, J. (Presenter & Author)**. Big Data Kickoff, UC Irvine, Irvine, CA.
- 1/15/2014 "Foundations of Social Network Ad Optimization", **Turner, J. (Presenter & Author)**. Paul Merage School of Business Assistant Professor Colloquium, UC Irvine, Irvine, CA. With Peterson, B. (Author), Cho, S.-H. (Author), Kekre, S. (Author), Scheller-Wolf, A. (Author).
- 3/18/2013 "Advertising Planning in Video Games and Beyond", **Turner, J. (Presenter & Author)**. Artificial Intelligence & Machine Learning Seminar, UC Irvine, Irvine, CA.
- 2/13/2013 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**. Paul Merage School of Business Assistant Professor Colloquium, UC Irvine, Irvine, CA. With Cho, S.-H. (Author), Jang, H. (Author), Lee, T. (Author).
- 1/18/2012 "A Large U.S. Retailer Selects Transportation Carriers Under Diesel Price Uncertainty", **Turner, J. (Presenter & Author)**. Paul Merage School of Business Assistant Professor Colloquium, UC Irvine, Irvine, CA. With

Peterson, B. (Author), Cho, S.-H. (Author), Kekre, S. (Author), Scheller-Wolf, A. (Author).

4/20/2011 "Planning of Guaranteed Targeted Display Advertising", **Turner, J. (Presenter & Author)**. Paul Merage School of Business Assistant Professor Colloquium, UC Irvine, Irvine, CA.

1/19/2011 "Scheduling of Dynamic In-Game Advertising", **Turner, J. (Presenter & Author)**. Center for Research on Information Technology and Organizations (CRITO), UC Irvine, Irvine, CA. With Scheller-Wolf, A. (Author), Tayur, S. (Author).

Conference Presentations

11/12/2020 "Serving Online Ads with Reach and Frequency Requirements on a Moving Time Window", **Turner, J. (Presenter & Author)**. INFORMS Annual Conference, Virtual. With Hojjat, A. (Author).

5/3/2019 "Waterfall Yield Optimization for Online Advertising", **Turner, J. (Presenter & Author)**. POMS Annual Conference, Washington, DC. With Arkhipov, D. (Author), Dillencourt, M. (Author), Regan, A. (Author).

11/4/2018 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. INFORMS Annual Meeting 2018, Phoenix, AZ. With Lejeune, M. (Author).

6/29/2017 "Waterfall Yield Optimization for Online Advertising", **Turner, J. (Presenter & Author)**. INFORMS Revenue Management & Pricing Conference, Amsterdam, The Netherlands. Peer Reviewed. With Arkhipov, D. (Author), Dillencourt, M. (Author), Regan, A. (Author).

5/7/2017 "Continuous Learning for Contextual Bandits with Nonstationary Rewards", **Turner, J. (Presenter & Author)**. POMS Annual Meeting 2017, Seattle, WA. With Regan, A. (Author), Xu, T. (Author), Yu, Y. (Author).

11/15/2016 "Continuous Learning for Contextual Bandits with Nonstationary Rewards", **Turner, J. (Presenter & Author)**. INFORMS Annual Meeting 2016, Nashville, TN. With Regan, A. (Author), Xu, T. (Author), Yu, Y. (Author).

11/15/2016 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. INFORMS Annual Meeting 2016, Nashville, TN. With Lejeune, M. (Author).

- 6/16/2016 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. INFORMS Revenue Management & Pricing Conference, New York, NY. Peer Reviewed. With Lejeune, M. (Author).
- 5/31/2016 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. CORS Annual Meeting 2016, Banff, AB, Canada. With Lejeune, M. (Author).
- 5/20/2016 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. Annual Southern California OR/OM Day 2016, Irvine, CA. With Lejeune, M. (Author).
- 5/8/2016 "Evaluation Set Size and Purchase: Evidence from a Product Search Engine", **Turner, J. (Presenter & Author)**. POMS Annual Meeting 2016, Orlando, FL. With Choudhary, V. (Author), Currim, I. (Author), Dewan, S. (Author), Jeliaskov, I. (Author), Mintz, O. (Author).
- 5/8/2016 "Planning Online Advertising Using Lorenz Curves", **Turner, J. (Presenter & Author)**. POMS Annual Meeting 2016, Orlando, FL. With Lejeune, M. (Author).
- 11/3/2015 "Learning, Revising, and Forgetting Multidimensional Contextual Features for Online Ad Selection", **Turner, J. (Presenter & Author)**. INFORMS Annual Meeting 2015, Philadelphia, PA. With Regan, A. (Author), Xu, T. (Author), Yu, Y. (Author).
- 11/3/2015 "Scheduling of Guaranteed Targeted Display Advertising under Reach and Frequency Requirements", **Turner, J. (Author)**. INFORMS Annual Meeting 2015, Philadelphia, PA. With Hojjat, A. (Presenter & Author), Cetintas, S. (Author), Yang, J. (Author).
- 6/28/2015 "Delivering Guaranteed Display Advertising under Reach and Frequency Requirements", **Turner, J. (Presenter & Author)**. Manufacturing & Services Operations Management (MSOM) Conference, Toronto, ON. Peer Reviewed. With Hojjat, A. (Author), Cetintas, S. (Author), Yang, J. (Author).
- 6/6/2015 "Delivering Guaranteed Display Advertising under Reach and Frequency Requirements", **Turner, J. (Author)**. INFORMS Revenue Management & Pricing Conference, New York, NY. Peer Reviewed. With Hojjat, A. (Presenter & Author), Cetintas, S. (Author), Yang, J. (Author).
- 5/22/2015 "Delivering Guaranteed Display Ads under Reach and Frequency Requirements", **Turner, J. (Author)**. Annual Southern California OR/OM Day 2015, Los Angeles, CA. With Hojjat, A. (Presenter & Author), Cetintas, S. (Author), Yang, J. (Author).

- 5/8/2015 "Learning, Revising, and Forgetting Multidimensional Contextual Features to Optimize Online Ad Selection", **Turner, J. (Presenter & Author)**. POMS Annual Meeting 2015, Washington, DC. With Xu, T. (Author), Regan, A. (Author), Yu, Y. (Author).
- 7/29/2014 "Delivering Guaranteed Display Ads under Reach and Frequency Requirements", **Turner, J. (Presenter & Author)**. Twenty-Eighth AAAI Conference on Artificial Intelligence, Quebec City, QC. Peer Reviewed. With Hojjat, A. (Author), Cetintas, S. (Author), Yang, J. (Author).
- 7/13/2014 "Foundations of Social Network Ad Optimization", **Turner, J. (Presenter & Author)**. International Federation of Operational Research Societies (IFORS) Triennial Conference 2014, Barcelona, Spain.
- 6/12/2014 "Evaluation Set Sizes: Antecedents and Consequences at an Online Intermediary", **Turner, J. (Author)**. Statistical Challenges in eCommerce Research, Tel Aviv University, Israel. Peer Reviewed. With Choudhary, V. (Author), Currim, I. (Author), Dewan, S. (Presenter & Author), Jeliaskov, I. (Author), Mintz, O. (Author).
- 5/23/2014 "Foundations of Social Network Ad Optimization", **Turner, J. (Presenter & Author)**. Annual Southern California OR/OM Day 2014, Los Angeles, CA. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 5/11/2014 "Foundations of Social Network Ad Optimization", **Turner, J. (Author)**. POMS Annual Meeting 2014, Atlanta, GA.
- 10/6/2013 "Foundations of Social Network Ad Optimization", **Turner, J. (Author)**. INFORMS Annual Meeting 2013, Minneapolis, MN.
- 6/19/2012 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**. INFORMS MSOM (Manufacturing and Service Operations Management) Conference 2012, New York, NY. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 5/4/2012 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**. Annual Southern California OR/OM Day 2012, Los Angeles, CA. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 4/20/2012 "Contract Choice for Targeted Advertising", **Turner, J. (Presenter & Author)**. POMS (Production and Operations Management Society) Conference 2012, Chicago, IL. With Jerath, K. (Author).
- 4/20/2012 "Simultaneous Location of Trauma Centers and Helicopters for Emergency Medical Service Planning", **Turner, J. (Presenter & Author)**.

- POMS (Production and Operations Management Society) Conference 2012, Chicago, IL. With Cho, S.-H. (Author), Lee, T. (Author), Jang, H. (Author).
- 4/16/2012 "A Large U.S. Retailer Selects Transportation Carriers Under Diesel Price Uncertainty", **Turner, J. (Presenter & Author)**. INFORMS Conference on Business Analytics and Operations Research, Huntington Beach, CA. Peer Reviewed. With Peterson, B. (Author), Cho, S.-H. (Author), Kekre, S. (Author), Scheller-Wolf, A. (Author).
- 11/16/2011 "A Location Problem for Trauma Centers and EMS Transportation Resources", **Turner, J. (Author)**. INFORMS Annual Meeting 2011, Charlotte, NC. With Lee, T. (Presenter & Author), Jang, H. (Author), Cho, S.-H. (Author).
- 11/13/2011 "Dantzig Award Finalist Presentation: New Media Planning Models for New Media", **Turner, J. (Presenter & Author)**. INFORMS Annual Meeting 2011, Charlotte, NC.
- 11/13/2011 "Contract Choice for Targeted Advertising", **Turner, J. (Presenter & Author)**. INFORMS Annual Meeting 2011, Charlotte, NC. With Jerath, K. (Author).
- 7/11/2011 "Planning of Guaranteed Targeted Display Advertising - Computational Aggregation", **Turner, J. (Presenter & Author)**. International Federation of Operational Research Societies (IFORS) Triennial Conference 2011, Melbourne, Victoria, Australia.
- 10/11/2010 "Planning of Guaranteed Targeted Display Advertising - Computational Aggregation", **Turner, J. (Presenter & Author)**. INFORMS Annual Meeting 2010, Austin, TX.
- 5/21/2010 "Planning of Guaranteed Targeted Display Advertising", **Turner, J. (Presenter & Author)**. Annual Southern California OR/OM Day 2010, Irvine, CA.

Professional Service

Associate Editor, Journal

Decision Sciences, 2017 – Present

Reviewer, Journal Articles

Operations Research, 2010 – Present

Management Science, 2012 – Present

Manufacturing & Services Operations Management, 2012 – Present

Production and Operations Management, 2013 – Present

Interfaces, 2016 – Present

European Journal of Operational Research, 2008 – Present

INFORMS Journal of Computing, 2018 – Present

Naval Research Logistics, 2014 – Present

Computers & Operations Research, 2013 – Present

Decision Sciences, 2015 – Present

IIE Transactions, 2017 – Present

Journal of Interactive Advertising, 2014 – Present

Journal of Industrial and Management Optimization, 2011 – Present

Journal of Marketing Communications, 2021 – Present

Omega: The International Journal of Management Science, 2014 – Present

Operational Research: An International Journal, 2016 – Present

IEEE Transactions on Knowledge and Data Engineering, 2018 – Present

Reviewer, Refereed Conferences and Competitions

M&SOM (Manufacturing & Services Operations Management), 2012

M&SOM Supply Chain Special Interest Group, 2012, 2017

M&SOM Sustainability Special Interest Group, 2014

M&SOM Student Paper Competition, 2017, 2019

INFORMS Pierskalla Best Paper Award in Health Care Management Science, 2016

POMS (Production and Operations Management Society) College of Healthcare

Operations Management (CHOM) Paper Competition, 2013

POMS Student Paper Competition for College of Supply Chain Management, 2018

DSI Doctoral Dissertation Award, 2019

Direct/Interactive Marketing Research Summit, 2015

Member, Conference Program Committees

INFORMS Revenue Management & Pricing Conference, Stanford, CA. June 6, 2019

11th Ad Auctions Workshop (held in conjunction with the ACM Conference on Economics and Computation), Portland, OR, USA. June 16, 2015

12th Ad Auctions Workshop (held in conjunction with the ACM Conference on Economics and Computation), Maastricht, Netherlands, July 25, 2016

Conference Chair

Southern California OR/OM Day Conference, Irvine, CA, USA. May 20, 2016

Conference Track Chair

POMS (Production and Operations Management Society)

Revenue Management Track Chair, Seattle, WA, USA. May 5-8, 2017

Conference Session Chair

INFORMS (Institute for Operations Research and the Management Sciences)

Anaheim, CA, USA. October 24-27, 2021.

Virtual Session. November 12, 2020.

Seattle, WA, USA. October 20-23, 2019.

Phoenix, AZ, USA. November 4-7, 2018.

Houston, TX, USA. October 22-25, 2017.

Nashville, TN, USA. November 13-16, 2016.

Philadelphia, PA, USA. November 1-4, 2015.

Charlotte, NC, USA. November 13-16, 2011.

POMS (Production and Operations Management Society)

Washington, DC, USA. May 2-6, 2019.

Chicago, IL, USA. April 20-23, 2012.

CORS (Canadian Operational Research Society)

Banff, AB, Canada. May 30 - June 1, 2016.

IFORS (International Federation of Operational Research Societies)

Barcelona, Spain. July 13-18, 2014.

Melbourne, Australia. July 10-15, 2011.

Panelist, Session on Analytics and Decision Analysis

INFORMS Annual Conference, November 3, 2015, Philadelphia, PA.

Abstract: Huge increases in data availability and computing power have transformed quantitative fields and led to a proliferation of tools for analytics. Panelists will discuss how Decision Analysis can strengthen analytics broadly defined, and how analytics can strengthen Decision Analysis.

TEACHING

Teaching Overview

I like to combine analytical problem-solving methods with industry applications that strive to balance supply and demand in their own unique ways. I regularly teach Management Science to MSBA students, Operations Management (in online-offline hybrid format) to MBA students, and Large-Scale Optimization to Ph.D. students. In the past, I have also taught Revenue Management to both undergraduates and MBA's, as well as Management Science to MBA's and undergraduates. When I teach I try to make sure that students of all backgrounds master the foundational concepts, while those that come into a class with prior relevant knowledge can take their understanding of the topic to the next level. When possible, I use examples from my research in online advertising planning and locating trauma centers to drive class discussions.

Courses Taught

Management Science (UG, MBA, MSBA)
Operations Management (UG, MBA)
Large-Scale Optimization / Convex Programming (PhD)
Revenue Management (UG, MBA)

Special Pedagogical Activities

Case Study

In August 2016, I authored a teaching case (with Alan Scheller-Wolf and Sridhar Tayur of Carnegie Mellon University) titled "Dynamic In-Game Advertising: Managing Complex High-Stakes Operations," based on my 2011 Operations Research paper "Scheduling of Dynamic In-Game Advertising." This case was picked as a finalist in the INFORMS 2016 Case Competition.

Moderator, Panel Session on Teaching Revenue Management

In May 2013, I invited, organized, and moderated a panel of experienced scholars to discuss our experiences with teaching Revenue Management (a class that I introduced at UCI to MBA students in Spring 2012, and to undergrads in Fall 2014). This was held at the POMS Annual Meeting in Denver, CO, May 4, 2013.

Executive Education

Gave the following lectures to Korean exchange students participating in certificate programs offered at the Paul Merage School of Business, UC Irvine:

“Trauma Care System Design in Korea: An Introduction to Optimization & Simulation Modeling” delivered to 45 Suwon University upper-division undergraduates. February 16, 2016.

“The New Age of Analytics in Online Advertising: Revenue Management and Pricing for Digital Media” delivered to 22 KAIST Masters of Information Management students. July 15, 2013.

Doctoral Student Supervision

Graduated Ph.D. Students, Advisor & Chair of Doctoral Committee

Vahid Nourbakhsh, “Routing Dynamics: Optimization, Measurement, and Applications.” Defended thesis November 1, 2018. Placement: Senior Operations Research Scientist, Wayfair Inc., Boston, MA.

Ali Hojjat, “New Models and Mechanisms for the Planning and Allocation of Online Advertising.” Defended thesis July 20, 2016. Placement: Assistant Professor of Decision Sciences, Paul College of Business, University of New Hampshire, Durham, NH.

Graduated Ph.D. Students, Member of Doctoral Committee

Ali Esmaeeli, “Improving Efficacy of Support Groups in Online Environments.” Proposed thesis July 22, 2020. Placement: Software Engineer, Google LLC, Irvine, CA.

Federico Bumbaca, “Distributed Markov Chain Monte Carlo for Bayesian Hierarchical Models.” Defended thesis May 17, 2018. Placement: Assistant Professor of Marketing, Leeds School of Business, University of Colorado Boulder, Boulder, CO.

Dmitri Arkhipov, “Computational Models for Scheduling in Online Advertising.” Defended thesis August 25, 2016. Placement: Post-Doctoral Researcher, Donald Bren School of Computer Science, University of California, Irvine, Irvine, CA.

Neda Masoud, "Multi-Hop Peer-to-Peer Ridesharing." Defended thesis July 13, 2016. Placement: Assistant Professor, Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI.

Tianbing Xu, "Online Advertising: A Large Scale Computing Perspective." Defended thesis November 4, 2013. Placement: Research Scientist, Facebook, Inc., Menlo Park, CA.

James Cao, "Three Essays on Demand Management." Defended thesis May 25, 2012. Placement: Assistant Professor, Edwards School of Business, University of Saskatchewan, SK, Canada.

Graduated Ph.D. Students, Member of Doctoral Candidacy Committee

William Lam, "Combinatorial Optimization for Graphical Models." Proposed thesis November 20, 2013. Placement: Software Engineer, Google Inc., Sunnyvale, CA.

Pedro Camargo, "ReMuLAA – A New Algorithm for the Route Choice Problem." Proposed thesis November 5, 2013. Placement: Transportation Modeler, Marcopa Association of Governments, Phoenix, AZ.

Heidi Tucholski, "Incentivized Decisions in the U.S. Air Force: Stepping Back to Look at the Big Picture." Proposed thesis March 4, 2013. Placement: U.S. Air Force.

Current Ph.D. Students, Advisor & Chair of Doctoral Candidacy Committee

Seyed Mojtaba Hosseini, "Accelerating Benders Decomposition: Theory and Applications." Proposed thesis June 11, 2019.

Ali Hassanzadeh Kalshani, "Analysis of Pricing Mechanisms in Resource Exchange Economy." Proposed thesis June 5, 2019. Co-chair with Assistant Professor Luyi Gui, Paul Merage School of Business

Current Ph.D. Students, Member of Doctoral Candidacy Committee

Zhang, Hanqiao, "Consumer Purchase Model Using Gaussian Copula with Incidental Truncation." Proposed thesis December 7, 2020.

JooHo Kim, "Impact of Quality Certification in a Sharing Economy Platform: Evidence from Airbnb." Proposed thesis March 15, 2019.

Sunghi An, "Modeling for a Continuous-mode Shared Transportation System: Mobility as a Service with Portfolios (MaaS-P)." Proposed thesis January 4, 2019.

Dingtong Tang, "Planning and Operation of a New Urban Freight Logistics System under Shared Economy: Models and Algorithm." Proposed thesis December 17, 2018.

Junkyu Lee, "Generalized Dual Decomposition Bounds for Influence Diagrams." Proposed thesis July 26, 2017.

Filjor Broka, "Sampling over Search Trees Using Abstractions." Proposed thesis March 15, 2017.

Supervised Experiential Learning / Industry Capstone Projects

Ingram Micro MSBA Capstone Project Advisor, Winter-Spring 2021.

Student Team #1: Site Bai, Kevin Cheung, Mira Daya, Ankit Jain, Yu Hsin

Student Team #2: Yvonne Lu, Viktoriia Pinsker, Kevin Raja, Yuyang Wang, Meng Xu

Ingram Micro MSBA Capstone Project Advisor, Winter-Spring 2020.

Student Team #1: Liqin Lu, Belal Rais, Kathleen Sebastian, Adam Toy, Sijia Wang

Student Team #2: Chavi Singal, Alexander Enriquez, Xiao Tong Liu, Yuan Liu, Vishnu Madan

Ingram Micro MSBA Capstone Project Advisor, Winter-Spring 2019.

Student Team: Ryan Bautista, Joel Dayrit, Geetika Jain, Siying Liu,

Wai Phyo

Eaton Aerospace MSBA Capstone Project Advisor, Winter-Spring 2018.

Student Team: Yizhou Fang, Siqi Sun, Ye Xiao, Ruoyu Zeng, Jingyan Zhu

Edwards Lifesciences MBA Experiential Learning Technical Advisor, Fall 2016.

Student Team: Abenav Natarajan, Ang Zhang, Garima Naswa, Laura Wang, Punya Narayan, Shalom Sunny, Toan Minh Nguyen

Directed Individual/Independent Studies (MBA-299)

April Liu, "A Study of Business Metrics and Data Analysis." Spring 2016.

Amrita Datta, "Competitive Intelligence Report for Social Media." Spring 2016.

Hiroaki Tanaka, "Research and Development Plan for an Online University." Winter 2016.

Christine Kelly, "How Utility Drives Decision Making." Fall 2015.

Anish Sattur, "Streaming the Recruitment Cycle at Madiba Inc." Fall 2015.
Cara Davidoff, "The Ever-Changing Hotel Industry." Spring 2015.
Deepti Nelavelli, "An Exploration of Project Management Trends." Spring 2015.
Natalia Zagorodnyaya, "Westendorp's Price Sensitivity Technique Applied to the Auto Industry." Spring 2015.
Yasu Takamatsu, "Big Data Analysis at Toshiba." Spring 2015.
Jay Simon & Mabel Lin, "A Study of Analytics." Winter 2015.
Jin Kuo, "Online Advertising for Pacific Dental." Fall 2014.
Ken Lee, "SAP Implementation for Spectrum Brands." Fall 2014.
Kevin Teng, "Pricing Negotiation at Niagara Bottling Co." Fall 2014.
Max Snitkovsky, "Streamlining On-Boarding at HireRight, Inc." Fall 2014.
Saradha Ramaswami, "Semiconductor Logistics at GlobalFoundries, Inc." Spring 2014.
Suveer Sharma, "Living Juice: ShopKeep and Expense Models." Spring 2014.
Yi-Ching Huang, "Niagara Bottling Company Customer Service Metrics." Fall 2012.

Undergraduate Research Supervision

Julia Peng, "Forecasting Call Center Demand." Spring 2018.
Meerae Park, "A Tale of Two Rosters: The Relationship Between Salaries and Winning in the National Basketball League." Winter 2014.
Johnson Liu, "Facility Location Research Paper." Spring 2011.

SERVICE

Area Service, Operations & Decision Technologies

Area Coordinator, Spring 2020 & Spring 2021.

Member, Operations Ph.D. Student Admissions Committee, 2010 - Present

Coordinator, Operations and Decision Technologies Research Colloquium,
Winter 2011 - Spring 2014.

School Service, The Paul Merage School of Business

Chair, Masters Program Committee, Spring 2018 - Spring 2019 (excl. Fall 2018)

Member, Masters Program Committee, Fall 2010 - Spring 2013 and Fall 2014 -
Spring 2019 (excl. Fall 2018)

Member, Personnel Committee, Fall 2019 – Spring 2021.

Member, Joint Masters Program Committee, Fall 2015 - Spring 2018.

Member, Search Committee, Dean's Leadership Circle Chair, Winter & Spring 2018.

Member, Faculty Steering Committee for the Digital Strategy Initiative, Spring 2017.

Member, Online Education Committee, Fall 2014 - Spring 2015.

Member, Undergraduate Program Committee, Fall 2013 - Spring 2014.

Member, New Building Information Technology Committee, Winter 2014.

University Service, UC-Irvine

Member, Council on Educational Policy (CEP), Fall 2017 - Present (excl. Fall 2018)

Member, Divisional Senate Assembly, Fall 2019 - Present.

Member, eSports Advisory Board, AY 2017-18.

Member, Council on Faculty Welfare (CFW), Fall 2013 & Winter 2014

Member, Council on Undergraduate Admissions and Relations with Schools
(CUARS), Fall 2012 & Fall 2013