

Ramandeep S. Randhawa

Contact

BRI 401A
Marshall School of Business
University of Southern California
Los Angeles, CA 90089

Phone: (213) 740-1042
Fax: (213) 740-7313
Email: ramandeep.randhawa@marshall.usc.edu
Web: <http://www.randhawa.us>

Research Interests

Service operations, revenue management, operations management, stochastic models, flexibility in service and retail systems, business analytics, machine learning, deep learning.

Education

- **Stanford University, CA, USA**
 - Ph.D., *Business - Operations, Information, and Technology*, August 2006
 - M.S., *Statistics*, June 2005
- **Indian Institute of Technology Delhi, New Delhi, India**
 - B.Tech., *Manufacturing Science and Engineering*, May 2001, *President's Gold Medalist*

Academic Positions

Vice Dean for Undergraduate Programs	July 2020 - Current
Department Chair	July 2018 – June 2020
<i>Professor</i>	Nov 2018 – Current
<i>Associate Professor</i>	Apr 2012 – Nov 2018
<i>Assistant Professor</i>	Jun 2009 – Apr 2012
Marshall School of Business University of Southern California	Los Angeles, CA, USA
<i>Assistant Professor</i>	Aug 2006 – May 2009
McCombs School of Business The University of Texas at Austin	Austin, TX, USA

Peer-Reviewed Journal Publications

1. A. Bassamboo, R. S. Randhawa, C. Wu, "Optimally Scheduling Heterogeneous Impatient Customers." To appear in *Manufacturing and Service Operations Management*.
2. K. Drakopoulos and R. S. Randhawa, "Why Perfect Tests May Not be Worth Waiting For: Information as a Commodity," *Management Science (Fast Track)* vol. 67, no. 11, 6678-6693, 2021. (In a nutshell: <https://youtu.be/w4tYE-21xHg>)
3. W. Huang, R. S. Randhawa, P. Jain, K. A. Iczkowski, R. Hu, S. Hubbard, J. Eickhoff, H. Basu, R. Roy, "Development and Validation of an Artificial Intelligence–Powered Platform for Prostate Cancer Grading and Quantification", *JAMA Network Open*, 4(11):e2132554, 2021

4. K. Drakopoulos, S. Jain, and R. S. Randhawa, "Persuading Customers to Buy Early: The Value of Personalized Information Provisioning," *Management Science*, vol 67, no. 2, 828-853, 2020. (In a nutshell: <https://youtu.be/I29DYBICOGY>)
5. N. Golrezaei, H. Nazerzadeh and R. S. Randhawa, "Dynamic Pricing for Heterogeneous Time-Sensitive Customers," *Manufacturing and Service Operations Management*, 22(3):562-581, 2020.
6. J. Kim, R. S. Randhawa, and A. R. Ward, "Dynamic Scheduling in a Many-Server Multi-Class System: The Role of Customer Impatience in Large Systems," *Manufacturing and Service Operations Management*, vol 20, no. 2, 285-301, 2018.
7. H. Nazerzadeh and R. S. Randhawa, "Near-Optimality of Coarse Service Grades for Customer Differentiation in Queueing Systems," *Production and Operations Management*, vol. 27, no. 3, 578-595, 2018.
8. Corona and R. S. Randhawa, "The Value of Confession: Admitting Mistakes to Build Reputation," *The Accounting Review*, vol. 93, no. 3, 133-161, 2017
9. J. Kim and R. S. Randhawa, "The Value of Dynamic Pricing in Large Queueing Systems," *Operations Research*, vol. 66, no. 2, 409-425, 2017
10. R. S. Randhawa, "The Optimality Gap of Asymptotically-derived Prescriptions with Applications to Queueing Systems," *Queueing Systems: Theory and Applications*, vol. 83, 131-155, 2016.
11. A. Bassamboo and R. S. Randhawa, "Scheduling Homogeneous Impatient Customers," *Management Science*, vol. 62, no. 7, 2129-2147, 2016.
12. M. Haviv and R. S. Randhawa, "Pricing in Queues without Demand Information," *Manufacturing and Service Operations Management*, vol. 16, no. 3, 401-411, 2014.
13. S. Gilbert, R. S. Randhawa, H. Sun, "Optimal Per-Use Rentals and Sales of Durable Products and Their Distinct Roles in Price Discrimination." *Production and Operations Management*, vol. 23, no. 3, 393-404, 2014.
14. A. Bassamboo, L. Y. Chu, and R. S. Randhawa, "Designing Flexible Systems Using a New Notion of Supermodularity." *Operations Research Letters*, vol. 41, no. 1, 107-111, 2013.
15. R. S. Randhawa, "Accuracy of Fluid Approximations for Queueing Systems with Congestion-Sensitive Demand and Implications for Capacity Sizing." *Operations Research Letters*, vol. 41, no. 1, 27-31, 2013.
16. A. Bassamboo, R. S. Randhawa, and J. Van Mieghem, "A Little Flexibility is All You Need: On the Value of Flexible Resources in Queueing Systems." *Operations Research*, vol. 60, no. 6, 1423-1435, 2012.
17. A. Bassamboo, R. S. Randhawa, and A. Zeevi, "Capacity Sizing under Parameter Uncertainty: Safety Staffing Principles Revisited." *Management Science*, vol. 56, no. 10, 1668-1686, 2010.
18. A. Bassamboo and R. S. Randhawa, "On the Accuracy of Fluid Models for Capacity Sizing in Queueing Systems with Impatient Customers." *Operations Research*, vol. 58, no. 5, 1398-1413, 2010. Third place, 2010 INFORMS JFIG Competition.
19. A. Bassamboo, R. S. Randhawa, and J. Van Mieghem, "Optimal Flexibility Configurations in Newsvendor Networks: Going beyond Chaining and Pairing." *Management Science*, vol. 56, no. 8, 1285-1303, 2010.
20. C. Corona and R. S. Randhawa, "The Auditors Slippery Slope: An Analysis of Reputational Incentives." *Management Science*, vol. 56, no. 6, 924-937, 2010.
21. S. Kumar and R. S. Randhawa, "Exploiting Market Size in Service Systems." *Manufacturing and Service Operations Management*, vol. 12, no. 3, 511-526, 2010.
22. A. Bassamboo, S. Kumar, and R. S. Randhawa, "Dynamics of New Product Introduction in Closed Rental Systems." *Operations Research*, vol. 57, no. 6, pp. 1347-1359, 2009.
23. R. S. Randhawa and S. Kumar, "Multi-Server Loss Systems with Subscribers." *Mathematics of Operations Research*, vol. 34, no. 1, pp. 142-179, 2009.

24. R. S. Randhawa and S. Kumar, "Usage Restriction and Subscription Services: Operational Benefits with Rational Users." *Manufacturing and Service Operations Management*, vol. 10, no. 3, pp. 429-447, 2008.
25. R. S. Randhawa and S. Juneja, "Combining Importance Sampling and Temporal Difference Control Variates to Simulate Markov Chains," *ACM TOMACS*, vol. 14, no. 1, pp. 1-30, 2004.

Peer-Reviewed Conference Proceedings

26. R. S. Randhawa, A. Modi, P. Jain, and P. Warier, "Improving Boundary Classification for Brain Tumor Segmentation and Longitudinal Disease Progression," In: Crimi A., Menze B., Maier O., Reyes M., Winzeck S., Handels H. (eds) *Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain Injuries. BrainLes 2016. Lecture Notes in Computer Science*, vol. 10154. Springer, 2016.
27. R. Garg, R. S. Randhawa, H. Saran and M. Singh, "A SLA Framework for QoS Provisioning and Dynamic Capacity Allocation," *Proceedings of Tenth IEEE International Workshop on Quality of Service, (IWQoS 2002)*, 129-137, Miami, May 2002.
28. R. S. Randhawa and S. Juneja, "Simulating Rare Events by Combining Temporal Difference Methods and Importance Sampling," *Proceedings of ReSim/COP 2002*, Madrid, Spain, April 2002.

Working Papers and Works in Progress

29. J. Mulvany and R. S. Randhawa, "Fair Scheduling of Heterogeneous Customer Populations" under revision for *Management Science*.
30. N. Bakshi, R. S. Randhawa, S. Gupta and A. Sidana, "Reducing Judicial Delay in Resource-Constrained Settings: A Data-Driven Queueing Approach." Submitted to *Manufacturing and Service Operations Management*.
31. A. Bassamboo, A. Ghosh and R. S. Randhawa, "The Value of Simple Menus with Price and Delay Sensitive Customers."
32. K. Drakopoulos and R. S. Randhawa, "Group Experimentation: Role of Information Leaders."
33. R. S. Randhawa, P. Jain, and G. Madan, "Topic Modeling Using Distributed Word Embeddings," arxiv 2016.

Invited Book Chapters

34. R. S. Randhawa, "Retail Analytics," *Essentials of Business Analytics: An Introduction to the Methodology and its Applications*, Eds B. Pochiraju and S. Seshadri, Springer, 599-621, 2019.

Invited Conference Proceedings

35. R. S. Randhawa and S. Kumar, "Stocking and Pricing Reusable Products for Subscribers," *Proceedings of the Allerton Conference*, 2004.

Honors and Awards

- Recipient of *2019 Service Management SIG Prize Finalist* for the paper "Scheduling Homogeneous Impatient Customers." In 2019, one winner and one finalist were announced.
- Recipient of Finalist Certificate of the 2019 INFORMS Best Service Science Paper Award for "Dynamic Pricing for Heterogeneous Time-Sensitive Customers."
- Recipient of *Dean's Award for Community* at Marshall School of Business, 2018.
- *Certificate of Teaching Excellence* in the Masters of Business Veterans program, 2015.
- *2013 Manufacturing and Service Operations Management Meritorious Service Award (Received Sep 2014)*
- *2013 Management Science Meritorious Service Award*

- *2013 and 2012 Operations Research Meritorious Service Awards*
- Recipient of *Deans Award for Research Excellence* at Marshall School of Business, 2012.
- Received third prize in the Junior Faculty Interest Group paper competition organized by INFORMS in 2010 for the paper “On the Accuracy of Fluid Models for Capacity Sizing in Queueing Systems with Impatient Customers.”
- 2009 *Manufacturing and Service Operations Management* meritorious service award.
- *President of India's Gold Medal* for obtaining the highest GPA among all the graduating undergraduate students (approximately 500) at the IIT Delhi.
- R. Vibhakar Memorial Commemorative Medal and Prize for best student in the Junior year at IIT Delhi.

Invited Seminars

- Kelley School of Business, Indiana University, October 2021
- Indian School of Business, August 2020
- Tepper School of Business, Carnegie Mellon University, March 2019
- London Business School and University College London, November 2018
- Graduate School of Business, Stanford University, May 2018
- Ross School of Business, University of Michigan, March 2018
- Industrial and Systems Engineering, University of Minnesota, February 2017
- Graduate School of Business, Columbia University, December 2016
- Fuqua School of Business, Duke University, April 2016
- Kellogg School, Northwestern University, November 2014
- UC Berkeley Haas School of Business, October 2013
- Mostly OM Workshop, Tsinghua University, Beijing, May 2013
- INSEAD, Fontainebleau, November 2012
- University of Chicago Booth School of Business, November 2012
- London Business School, September 2012
- Tuck School of Management, Dartmouth College, November 2011
- Rady School of Management, UC San Diego, December 2010
- Tata Institute for Fundamental Research, India, January 2010
- Graduate School of Business Columbia University, February 2009
- Stanford University, Management Science and Engineering Department, February 2009
- UCLA Anderson School, January 2009
- Wharton School University of Pennsylvania, January 2009
- Marshall School, University of Southern California, January 2009
- Stern School New York University, October 2008
- Graduate School of Business, Stanford University, October 2008
- Kellogg School of Management, Northwestern University, October 2008
- Johnson School, Cornell University, March 2006
- Industrial and Systems Engineering Department Georgia Tech., March 2006
- McCombs School, UT Austin, February 2006
- Industrial Engineering and Operations Research Department UC Berkeley, February 2006
- University of Chicago Booth School of Business, February 2006
- Stern School, New York University, February 2006
- Marshall School, University of Southern California, February 2006

Service

- **Research Community**

- Area Editor for *Operations Research* (Feb 2022 onwards)
- Associate Editor for *Management Science* (July 2014 onwards)
- Associate Editor for *Operations Research* (Jan 2012 onwards)
- Guest Associate Editor for *Manufacturing and Service Operations Management* (2018 onwards)
- Guest Associate Editor for *Naval Research Logistics* (2016)
- Senior Editor for *Production and Operations Management* (2009-2015)
- *Co-Organizer of MSOM Service SIG Workshop 2015*
- *MSOM Service SIG Track Chair at INFORMS 2012.*
- Referee for *Management Science, Manufacturing and Service Operations Management, Operations Research, Production and Operations Management, QUESTA, ACM TOMACS, Annals of Applied Probability, INFORMS Journal of Computing, The Accounting Review.*

- **USC**

- Vice Dean for Undergraduate Programs, 2020 - Current
- Department Chair, Data Sciences and Operations Department, 2018 – 2020
- Marshall Faculty Council, 2016 – 2018
 - President, 2017 – 2018
- Senator, USC Academic Senate, 2017 – 2018
- Member, Departmental APR committee, 2015 – 2016
- Member, Graduate Instruction Committee, 2012 – 2015
- Dissertation Committees
 - *Advisor:*
 - Justin Mulvany (ongoing)
 - Shobhit Jain, USC Marshall, 2021 (Sr. Data Scientist, Target)
 - Erhun Ozkan, USC Marshall, 2018 (joining Koç University as an Assistant Professor in 2018-19, co-advised)
 - Jeunghyun Kim, USC Marshall, 2016 (currently Assistant Professor at Korea University Business School, first job Moody's Analytics)
 - *Committee Member*
 - Dongyuan Zhan, USC Marshall, 2015 (Assistant Professor, University College London)
 - Guangwen Kong, USC Marshall, 2013 (Assistant Professor, University of Minnesota)
 - Kai Chen, USC Viterbi, 2013
 - Seung Beom Kim, USC Marshall, 2013