1208 University of Oregon, Lillis 483 Eugene, OR 97403-1208 <u>erencil@uoregon.edu</u> +1-541-346-8252

RESEARCH INTERESTS

Service, Retail, and Healthcare Operations Management, Consumer Choice and Behavior, Applied Game Theory, Queueing Theory and Applications.

EDUCATION

Ph.D. Operations Management, Northwestern University, 2010.

M.S. Industrial Engineering, Koç University, Turkey, 2006.

B.S. Industrial Engineering, Middle East Technical University, Turkey, 2004.

WORK EXPERIENCE

Associate Professor, Operations & Business Analytics, University of Oregon, 2017 - Present.

- Academic Director, Oregon MBA, 2022- Present
- Robert J. and Leona M. DeArmond Research Scholar, University of Oregon, 2018 Present

Assistant Professor, Operations & Business Analytics, University of Oregon, 2010 - 2017.

PUBLICATIONS

- 1. Rationing Scarce Healthcare Capacity: A Study of the Ventilator Allocation Guidelines During the Covid-19 Pandemic in the United States, with D. Anderson, T. Aydınlıyım, M. Bjarnadottir, and M. Anderson. *Production & Operations Management*, Forthcoming
- 2. Impact of Ridesharing Platforms on Hospitals' Emergency Department Admissions, with S. Piri, M. Pangburn. *Decision Support Systems*, Forthcoming.
- 3. Pricing and Structuring Product Trials: Separate versus Mixed Wine Tastings, with M. Jalili and M. Pangburn. *European Journal of Operational Research*, Vol: 312, No: 2, 2024.
- 4. Input Material Reduction Incentives versus Scrap Recycling for Closed Loop Supply Chain, with T. Aydınlıyım and N. Murthy. *Production & Operations Management*, Vol: 32, No: 10, 2023.
- 5. Retail Sample Boxes: Counteracting the Adverse Effect of Accelerated Learning via Future Credit, with A. Yazdani-Tabaei and M. Pangburn. *Manufacturing & Service Operations Management*, Vol. 25, No. 5, 2023.
- 6. Managing Service Systems via Disguised Queues: The Role of Customers' Retaliatory Behavior, single author. *Decision Sciences*, Vol: 52, No: 2, 2021.
- 7. What if Hotelling's Firms Offer Mass Customization? with A. Yazdani-Tabaei and M. Pangburn. *Decision Sciences*, Vol: 51, No: 2, 2020.
- 8. Skill Management in Large-scale Service Marketplaces, with G. Allon, and A. Bassamboo. *Production & Operations Management*, Vol. 26, No. 11, 2017
- 9. Mass Customization and Guardrails: 'You Can't Be All Things To All People' with M. Pangburn. *Production & Operations Management*, Vol: 26, No: 9, 2017.

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- 10. Saving Seats for Strategic Customers, with M. A. Lariviere. Operations Research, Vol. 61, No. 6, 2013.
- 11. Large Scale Service Marketplaces: The Role of the Moderating Firm, with G. Allon, and A. Bassamboo. *Management Science*, Vol: 58, No: 10, 2012.
- 12. Dynamic Pricing and Scheduling in a Multi-Class Single-Server Queueing System, with F. Karaesmen, and E.L. Örmeci., *Queueing Systems*, Vol: 67, No: 4, 2011.
- 13. Effects of System Parameters on the Optimal Policy Structure in a Class of Queueing Control Problems, with F. Karaesmen, and E. L. Örmeci, *Queueing Systems*, Vol: 61, No: 4, 2009.
- 14. Structural Results on a Batch Acceptance Problem, with F. Karaesmen, and E. L. Örmeci, *Mathematical Methods of Operations Research*, Vol. 66, No. 2, 2007.

MANUSCRIPTS COMPLETED OR IN PREPARATION

- 15. Economics of Introducing a Mobile Clinic as an Added or Exclusive Modality for Dialysis Service, with M. Jabbari and N. Murthy.
- 16. Design Of Returnless Refunds In Online Retailing, with A. Yazdani-Tabaei, M. Jalili and M. Pangburn.
- 17. A Mathematical Model for a Patient-Centric Dialysis Network, with M. Jabbari and N. Murthy.

TEACHING EXPERIENCE

Sports Analytics, University of Oregon: Spring 2021, Winter 2022, Spring 2022, Winter 2023.

Quantitative Methods for Managers, University of Oregon: Spring 2022, Spring 2023.

Business Analytics 1, University of Oregon: Fall 2018, Fall 2019, Winter 2021, Spring 2021, Winter 2022.

Database Management Systems, University of Oregon: Winter 2019.

Service Operations, University of Oregon: Fall 2015, Fall 2016, Fall 2017.

Business Information Systems, University of Oregon: Between Winter 2011 and Winter 2018 (Over 20 sections, including honor sections).

Non-linear Optimization (PhD level), University of Oregon: Winter 2015

UNIVERSITY SERVICES

Coordinator, Operations & Business Analytics Department Ph.D. Program (2013- 2020, 2021-).

Co-chair, University of Oregon Scholastic Review Committee (2022-2023).

Chair, University of Oregon Academic Requirements Committee (2014-2015, 2016-2017).

Co-chair, PhD Thesis Committee of Alireza Yazdani, University of Oregon (2017-2019).

Member, PhD Thesis Committee of Mona Jabbari, University of Oregon (2019-2021)

Member, University of Oregon Scholastic Review Committee (2020-).

Member, University of Oregon Academic Council (2014- 2015, 2016-2017, 2022-2023).

Member, University of Oregon Academic Requirements Committee (2012- 2018, 2022-).

Member, University of Oregon Scholarship Committee (2011-2013).

Institutional Representative, PhD Thesis Committee of Bo Phillipa, University of Oregon (2023).

Institutional Representative, PhD Thesis Committee of Dan Raies, University of Oregon (2019).

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PROFESSIONAL SERVICES

Track Chair, Service Systems and Operations, 2022 DSI Annual Meeting.

Track Chair, Marketing & OM Interface, 2016 POMS Annual Meeting.

Session Chair, INFORMS Annual Conference, 2013 & 2015 & 2017.

Session Chair, POMS Annual Conference, 2013 & 2015 & 2018.

Editorial Review Board, Production & Operations Management (2015-Present).

Editorial Review Board, Decision Sciences (2020-Present).

Reviewer, Management Science, Operations Research, Manufacturing & Service Operations Management, Production & Operations Management, Naval Research Logistics, Decision Sciences Journal, IIE Transactions.

RECENT CONFERENCE PRESENTATIONS

"Impact of Ridesharing Platforms on Hospitals' Emergency Department Admissions,"

POMS Annual Meeting 2022 (Virtual).

"Rationing Scarce Healthcare Capacity: A Study of the Ventilator Allocation Guidelines During the Covid-19 Pandemic in the United States,"

- INFORMS Annual Meeting 2022 (Indianapolis, IN).

"Input Material Reduction Incentives Vs. Scrap Recycling for Closed Loop Supply Chain,"

- INFORMS Annual Meeting 2022 (Indianapolis, IN).

"Design Of Returnless Refunds In Online Retailing,"

- POMS Annual Meeting 2022 (Virtual).

GRANTS

Collaborating Faculty with Principal Investigator, Nagesh N. Murthy on "Jobs and Innovation Accelerator Challenge (JIAC-I) Grant" for Clean-Tech Cluster in Oregon, Federal Granting Agency: Economic Development Agency, \$178,000, 2011.

HONORS AND AWARDS

M&SOM Journal Meritorious Service Award, 2015.

INFORMS Future Academician Colloquium, 2009 (San Diego, CA).

Kellogg School of Management Graduate Fellowship, 2006-2010.

TÜBİTAK (Turkish Scientific and Technical Research Association) Graduate Fellowship, 2005-2006.

Koç University Graduate Fellowship, 2004-2006.

COMMUNITY SERVICE

Guest Lecturer, Summer Academy To Inspire Learning (SAIL), University of Oregon. July 2014.

MISCELLANEOUS

Citizenship: Republic of Türkiye and U.S.A

Marital Status: Married (with one daughter of 91/2 years old)

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ABSTRACTS OF UNPUBLISHED PAPERS

1. Economics of Introducing a Mobile Clinic as an Added or Exclusive Modality for Dialysis Service (with M. Jabbari and N. Murthy)

This research aims to investigate the feasibility of a novel dialysis service modality, the mobile dialysis clinic, which can reduce the travel burden for patients with end-stage renal disease (ESRD). The reduction in travel time can subsequently decrease hospitalization costs, resulting in cost savings for Medicare. To evaluate the strategic interaction between Medicare and dialysis service providers, we present a framework for analyzing the potential benefits of a shared-savings payment policy. Under this policy, providers receive a bonus payment in the form of a reward rate, which is a percentage of hospitalization cost savings from using the mobile dialysis clinic. Our analysis indicates that as the reward rate increases, providers offer the new modality to more patients, leading to a decrease in hospitalization costs for Medicare. However, since Medicare faces a trade-off between hospitalization cost and shared cost-savings with providers, the compensation offered to providers may not always be sufficient to motivate the adoption of the new modality. Nonetheless, we identify specific conditions under which it is optimal for Medicare to increase the reward rate, even when this results in a significant improvement in provider profit with only a marginal reduction in Medicare's cost. Our findings provide insights for policymakers to design effective policies that encourage dialysis service providers to adopt innovative methods of providing dialysis to ESRD patients.

2. Design Of Returnless Refunds In Online Retailing (with A. Yazdani-Tabaei, M. Jalili and M. Pangburn) Returnless refunds (RR) are a recent trend in the retail industry, allowing customers to receive a full refund for a product without having to return it. This type of refund policy is becoming more popular among online retailers as it saves on the cost of return shipping and restocking. Additionally, consumers benefit by avoiding the inconvenience (and potentially some cost) associated with product repackaging, label printing, and otherwise facilitating return shipping. However, caution must be exercised while offering RR to prevent customers' potential opportunistic behavior that occurs when customers initiate a return without the intention of returning the product, but instead to take advantage of the RR option. To investigate the described tradeoffs associated with RR, we study a profit-maximizing firm that sells a single product. The firm determines both the price of its product and the proportion of return requests to be granted a RR. Consumers have uncertain valuations for the product prior to purchase, and only a fraction of them will find the product a good fit for their needs after purchase. All customers have the option of initiating a product return, but the seller may choose to grant RR to a select group of customers. If a customer is not granted RR, they can then decide to either keep or return the product. We show that a sufficiently high price hinders the opportunistic behavior (of initiating a return and keeping the product) in all customers, regardless of the product fit. On the contrary, a sufficiently low price encourages both high- and low-value customers to exhibit the opportunistic behavior. We establish that neither of these extreme pricing strategies are optimal for the firm. Furthermore, when the firm's or consumers' cost of return is high, we find that the firm optimally grants no RR, and no customer initiates a product return. Otherwise, the firm optimally maintains a positive RR proportion. When both the firm's and consumers' cost of return are moderate, both high- and low-value consumers initiate a return, but high-value consumers keep the product upon being refused an RR. Finally, when both costs are low, only low-value customers initiate a product return.

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