SAHIKA SAHAN KONUR

Information Systems & Analytics McCoy College of Business, Texas State University

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ACADEMIC EXPERIENCE

Assistant Professor in Information Systems & Analytics, Texas State University

09/2023-Present

EDUCATION

• Ph.D. in Supply Chain, Operations, and Technology, Olin Business School, Washington University in St. Louis

08/2018-Present

Ph.D. in Mathematics, Department of Mathematics & Statistics, Missouri University of Science and Technology

07/2017

• M.S. (non-thesis) in Applied Mathematics, Missouri University of Science and Technology

12/2014

RESEARCH

Research Interests:

- *Topics:* Assortment Optimization, Revenue Management, Inventory Control, Operations Management, Supply Chain Management, Customer Choice Modeling
- Methodologies: Dynamic Programming, Operations Research, Stochastic Optimization, Machine Learning

Working Papers:

- Sahika Sahan, Jacob Feldman. Pricing and Assortment Optimization Under a Model with Bulk Returns
- Sahika Sahan, Jacob Feldman. Assortment Decisions with Free Shipping and Bulk Returns
- Sahika Sahan. Optimal Assortment and Free Shipping Strategies

Publications:

*Authors are ordered alphabetically based on American Mathematical Society guidelines.

- W. J. Charatonik, S. Sahan (2021). *Menger Curve as Inverse Limits*, Topology and Its Applications 304 (December), 107788. https://doi.org/10.1016/j.topol.2021.107788
- W. J. Charatonik, S. Sahan (2019). Zero-Dimensional Spaces Homeomorphic to Their Cartesian Squares, Houston Journal of Mathematics 45(2), pp. 601-608. https://www.math.uh.edu/~hjm/Vol45-2.html
- W. J. Charatonik, S. Sahan (2016). *Inverse Limits with Bonding Functions Whose Graphs Are Connected*, Topology and Its Applications 210 (September), pp. 16-21. https://doi.org/10.1016/j.topol.2016.05.019
- W. J. Charatonik, S. Sahan (2016). *Limits of Inverse Limits, A Counterexample*, Questions and Answers in General Topology 34(1), pp. 37-38. http://qagt.org/v34n1.html
- A. C. Guler, S. Sahan (2014). Unification of Π Generalized Closed Sets by Hereditary Classes In Generalized Topological Spaces, Acta Universitatis Apulensis 38, pp. 45–53. http://auajournal.uab.ro/upload/63 1032 ACGSS.pdf

Conference/Seminar Presentations:

- Pricing and Assortment Decision Under a Model with Bulk Returns (invited), INFORMS Annual Meeting October 2023, Phoenix, AZ, USA.
- Pricing and Assortment Decision Under a Model with Bulk Returns (invited), ISEN Seminar at Dept. of Industrial & Systems Engineering at Texas A&M September 2023, College Station, TX, USA.
- Assortment Decisions with All-At-Once Returns and Heterogeneous Customers (invited), INFORMS Annual Meeting October 2022, Indianapolis, IN, USA.
- Assortment Decisions with All-At-Once Returns and Heterogeneous Customers, INFORMS Revenue Management and Pricing Section Conference June 2022 (virtual).

- Assortment Decisions with All-At-Once Returns and Heterogeneous Customers, POMS Annual Meeting April 2022 (virtual).
- Assortment Decisions with All-At-Once Returns and Heterogeneous Customers, INFORMS Annual Meeting October 2021 (virtual).
- All-at-Once Product Returns: Algorithms for Assortment and Pricing Decisions (invited), INFORMS Annual Meeting November 2020 (virtual).
- Zero-dimensional spaces homeomorphic to their Cartesian squares, Spring Topology and Dynamics Conference March 2016, Waco, TX, USA.
- Zero-dimensional spaces homeomorphic to their hyperspace $F_n(X)$, 3rd Workshop of Association for Turkish Women in Maths May 2016, Izmir, TURKEY.
- Inverse limits with bonding functions whose graphs are connected, Spring Topology and Dynamics Conference May 2015, Bowling Green, OH, USA.
- Inverse limits with bonding functions whose graphs are connected, Missouri Section of MAA March 2015, Rolla, MO, USA.

TEACHING

Teaching at McCoy College of Business, Texas State University:

• Instructor for:

- o QMST 5335.251 Forecasting & Simulation: Spring 2024
- QMST 5335.253 Forecasting & Simulation: Spring 2024
- QMST 5332.001 Optimization for Business Analytics: Fall 2023
- o QMST 5332.003 Optimization for Business Analytics: Fall 2023

Teaching at Olin Business School, Washington University in St. Louis:

• Instructor for:

o DAT 500N - Prescriptive Analytics (graduate): Fall 2022 (3 sections)

• Teaching Assistant for:

- o DAT 301E Data Analytics in Phyton (undergraduate): Fall 2019, Fall 2020, Fall 2021, Fall 2022
- o DAT 561 Introduction to Phyton and Data Science (graduate): Fall 2019, Fall 2020, Fall 2021

Teaching at the Department of Mathematics and Statistics, Missouri University of Science and Technology:

• Instructor for:

- o MATH 1214 Calculus for Engineers 1: Fall 2017
- o MATH 1120 College Algebra: Fall 2017, Fall 2014, Spring 2014
- o MATH 3108 Linear Algebra 1: Fall 2016, Spring

Teaching at Columbia College, Rolla MO:

• Instructor for:

- o MATH 215 Differential Calculus: Spring 2017, Spring
- o MATH 226 Integral Calculus Part I: Spring 2017, Fall 2016, Spring 2016
- o MATH 235 Integral Calculus Part I: Spring 2017, Fall 2016
- o MATH 300 Multivariate Calculus: Fall 2017, Fall 2016

Teaching Awards/Certificates and Other Teaching Activities:

- GTA Teaching Excellence Award, Department of Mathematics and Statistics, Missouri S&T, Fall 2015
- Completion Certificate, Designing Courses for Significant Learning (online course), Fall 2016
- Attended 2016 Curator's Teaching Summit, Missouri S&T, Rolla, MO, Fall 2016
- Attended Teaching and Learning Technology 2017 Conference, Missouri S&T, Rolla, MO, Fall 2017
- Mathematics teaching to pre-college students, Izmir, Turkey, 2009-2011

INDUSTRY CONSULTING

- Hunter Engineering: PhD Lead, Critical Part Risk Assessment Tool, Spring 2023
- Olin Business School: PhD Lead, Process Analysis of Obtaining Visas for Olin International Students, Fall 2022
- Express Script: PhD Lead, Sales & Operations Planning, Fall 2021
- MilliporeSigma: PhD Lead, Maximizing Packaging Capacity and Performance through Productivity Tool, Spring 2020
- InsideRX: PhD Lead, Digital Marketing Optimization & Modeling Framework, Fall 2019

OTHER AWARDS and CERTIFICATES

- Web-Scraping and Data-Cleaning for Research, Kelley School of Business, Indiana University, July 2021
- NSF Travel Support for the 51st Spring Topology and Dynamical Systems Conference, Spring 2017
- NSF Travel Support for the 50th Spring Topology and Dynamical Systems Conference, Spring 2016
- NSF Travel Support for the 49th Spring Topology and Dynamical Systems Conference, Spring 2015
- NSF Travel Support for the 48th Spring Topology and Dynamical Systems Conference, Spring 2014
- NSF Travel Support for the 47th Spring Topology and Dynamical Systems Conference, Spring 2013
- Achievement of Honor's List Status, Missouri S&T, Fall 2014
- Participation Certificate, Taller de Investigación en Continuos e Hiperspacios, Matemáticas Autónoma de Chiapas, June 2014
- *Travel Support* for Continuum Theory Workshop in Mexico, Department of Mathematics & Statistics, Missouri S&T, Spring 2014 **OTHER**

Programming: Phyton, R, Matlab, LaTex **Language:** Turkish (Native), English