

MOSTAFA SABBAGHI

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ACADEMIC POSITION

Sacramento State University, Marketing & Supply Chain Management Department

Assistant Professor of Supply Chain Management (2022 – present)

Courses taught: Operations Management

The Pennsylvania State University, Smeal College of Business

Visiting Assistant Professor of Supply Chain Management (2018 – 2022)

Courses taught: Business Analytics, Information Technology and Business Strategy, Manufacturing and Services Strategies

EDUCATION

University at Buffalo, the State University of New York, Amherst, NY

Ph.D. in Industrial and Systems Engineering, Production Systems (2018)

Khajeh Nasir Toosi University of Technology, Tehran, Iran

Master of Industrial and Systems Engineering (2011)

Iran University of Science and Technology, Tehran, Iran

Bachelor of Industrial and Systems Engineering (2009)

RESEARCH INTERESTS

Behavioral and Sustainable Operations, Remanufacturing, Advanced Manufacturing Systems

PUBLICATIONS

Under Review

Sabbaghi, M., Bansal, S., Guide, VDR. (2020). "Implications of Behavioral Cost Aggregation in Procurement of Semi-finished Products."

Peer-reviewed Papers

Sabbaghi, M., Cade, W., Olson, W., Behdad, S. (2018). "The Global Flow of Hard Disk Drives: Quantifying the Concept of Value Leakage in E-waste Recovery Systems." *Journal of Industrial Ecology* [Impact Factor: 6.54].

Sabbaghi, M., Behdad, S. (2018). "Consumer decisions to repair mobile phones and manufacturer pricing policies: The concept of value leakage." *Resources, Conservation and Recycling* [Impact Factor: 8.09], 133, 101-111.

Sabbaghi, M., Behdad, S. (2017). "Environmental Evaluation of Product Design Alternatives: The Role of Consumers Repair Behavior and Deterioration of Critical Components." *ASME Journal of Mechanical Design* [Impact Factor: 2.65], 139.8, 081701.

Sabbaghi, M., Cade, W., Behdad, S., Bisantz, A. M. (2017). "The current status of the consumer electronics repair industry in the US: A survey-based study." *Resources, Conservation and Recycling* [Impact Factor: 8.09], 116, 137-151.

Sabbaghi, M., Behdad, S., Zhuang, J. (2016). "Managing consumer behavior toward on-time return of the waste electrical and electronic equipment: A game theoretic approach." *International Journal of Production Economics* [Impact Factor: 5.13], 182, 545-563.

- Sabbaghi, M.**, Esmaeilian, B., Cade, W., Wiens, K., Behdad, S. (2015). "Business outcomes of product repairability: A survey-based study of consumer repair experiences." *Resources, Conservation and Recycling* [Impact Factor: 8.09], 109, 114-129.
- Sabbaghi, M.**, Esmaeilian, B., Raihanian Mashhadi, A., Cade W., Behdad, S. (2015). "Reusability Assessment of Lithium-ion Laptop Batteries Based on Consumers Actual Usage Behavior." *ASME Journal of Mechanical Design* [Impact Factor: 2.65], 137.12, 124501.
- Sabbaghi, M.**, Esmaeilian, B., Mashhadi, A. R., Behdad, S., Cade, W. (2015). "An Investigation of Used Electronics Return Flows: A Data-driven Approach to Capture and Predict Consumers Storage and Utilization Behavior." *Waste Management* [Impact Factor: 5.45], 36, 305-315.
- Teimoury, E., Nedaei, H., Ansari, S., **Sabbaghi, M.** (2013). "A Multi-objective Analysis for Import Quota Policy Making in a Perishable Fruit and Vegetable Supply Chain: A System Dynamics Approach." *Computers and Electronics in Agriculture* [Impact Factor: 3.86], 93, 37-45.
- Mohammadi, S. F., **Sabbaghi, M.**, Hadi, Z., Hashemi, H., Alizadeh, S., Majdi, M., Tae, F. (2012). "Using Artificial Intelligence to Predict the Risk for Posterior Capsule Opacification after Phacoemulsification." *Journal of Cataract and Refractive Surgery* [Impact Factor: 2.69], 38(3), 403-408.

Working Papers

- Sabbaghi, M.**, Bansal, S., Guide, VDR. "Let's Consume One Less Can of Paint and Share the Savings: Practicability of Collaborative Contracts."
- Sabbaghi, M.**, Bansal, S., Guide, VDR. "Repair Knowledge Creation and Dissemination in Forum-based Networks."
- Sabbaghi, M.**, Behdad, S. "Design for Repair: A Game between Manufacturer and Independent Repair Service Provider."
- Sabbaghi, M.**, Frame-Endres, C., Cade, W., Lewis, K. E., Behdad, S. "Energy Left in Discarded Household Alkaline Batteries: Analysis of a Large Sum of Small Values and the Efficiency of Consumption."

Books

- Behdad, S., **Sabbaghi, M.**, Nagel, J.K.S. (2019) "Sustainable Manufacturing." Bar-Cohen, Yoseph (Ed.): "Advances in manufacturing and processing of materials and structures." CRC Press/Taylor Francis Group, LLC.
- Heydari, M., Bozorgi, A., Ansari S., Rahmani, H., **Sabbaghi, M.** (2011). "Production and inventory planning and control". Termeh Publications (In Persian).

Peer-Reviewed Conference Proceedings

- Sabbaghi, M.**, Behdad, S. (2017). "Design for Repair: A Game between Manufacturer and Independent Repair Service Provider." The ASME 2017 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference. IDETC/DAC 2017, Aug 6-9, Cleveland, Ohio, U.S.
- Sabbaghi, M.**, Behdad, S. (2017). "Optimal Positioning of Product Components to Facilitate Ease-of-Repair." The Industrial Systems Engineering Research Conference (ISERC). IIE Annual Conference, May 20-23, Pittsburgh, Pennsylvania, U.S.
- Sabbaghi, M.**, Behdad, S. (2016). "Environmental Impact Assessment of Product Lifespan: The Role of Consumers Repair Behavior and Critical Components Deterioration." The ASME 2016 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference. IDETC/DFMLC 2016, Aug 21-24, Charlotte, North Carolina, U.S.
- Sabbaghi, M.**, Esmaeilian, B., Mashhadi, A. R., Behdad, S., Cade, W. (2015). "Assessment of Products Future Reusability Based on Consumers Usage Behavior: Implications for Lithium-ion

Laptop Batteries." The ASME 2015 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference. IDETC/DFMLC 2015, Aug 2-5, Boston, Massachusetts, U.S.

Sabbaghi, M., Ghazi, M., Aleagha, M. (2011). "Fuzzy Programming for Flow Shop Scheduling Problems with Sequence-dependent Setup Times." 4th International Conference of Iranian Operations Research Society, May 18-19, Rasht, Iran (In Persian).

Ansari, S., Nedaei, H., **Sabbaghi, M.** (2010). "Price Fluctuations Investigation of Agricultural Products throughout the Supply Chain by Using System Dynamics Approach." 7th International Industrial Engineering Conference, Oct 6-7, Isfahan, Iran (In Persian).

Technical Reports

Ghafari, M., **Sabbaghi, M.**, (2017). "Catalytic NO Oxidation with Liquid Absorption Using Polymeric Catalysts: Sustainable and Cost-Effective NOx Control." New York State Pollution Prevention Institute, Rochester, New York, U.S.

Handwerker, C., Olson, B., Rifer, W., Behdad, S., Cade, W., Fitzpatrick, C., Imholte, D., Jin, H., Lovell, I., McIntyre, T., Nguyen, R., **Sabbaghi, M.**, Spencer, G., Sutherland, J., Schaffer, M., (2017) "Value Recovery from Used Electronics." International Electronics Manufacturing Initiative, Herndon, Virginia, U.S.

TEACHING

The Pennsylvania State University

Instructor (leading lectures and hands-on activities, grading assignments)

- Spring 2022, Smeal Undergraduate Major in Supply Chain & Information Systems, MIS 446 Information Technology and Business Strategy (6.39 out of 7)
- Fall 2021, Smeal Undergraduate Major in Supply Chain & Information Systems, MIS 446 Information Technology and Business Strategy (6.50 out of 7)
- Fall 2021, Smeal Undergraduate Major in Supply Chain & Information Systems, MIS 301 Business Analytics (6.50 out of 7)
- Spring 2020, Smeal Undergraduate Major in Management Information Systems, MIS 301 Business Analytics (6.45 out of 7)
- Fall 2019, Smeal Undergraduate Major in Supply Chain & Information Systems, SCM 405 Manufacturing and Services Strategies (6.41 out of 7)
- Spring 2019, Smeal Undergraduate Major in Supply Chain & Information Systems, SCM 405 Manufacturing and Services Strategies (6.57 out of 7)
- Fall 2018, Smeal Undergraduate Major in Supply Chain & Information Systems, SCM 405 Manufacturing and Services Strategies (6.49 out of 7)

University at Buffalo, the State University of New York

Teaching Assistant (leading recitations, grading assignments, tutoring students)

- Spring 2018, Mechanical and Aerospace MS Program, MAE 521 Sustainable Manufacturing
- Fall 2016, Industrial and Systems Engineering MS Program, IE 515 Transportation Analytics
- Fall 2016, Mechanical and Aerospace MS Program, MAE 526 Decision-based System Design
- Fall 2014, Industrial and Systems Engineering MS Program, IE 504 Facilities Design

Guest Lecturer (co-teaching subjects and modules)

- Fall 2016, Industrial and Systems Engineering Undergraduate Program, IE 409 Lean Six Sigma, 3-day Introduction Module to Statistical Quality Control

University of Missouri-Columbia

Teaching Assistant (leading recitations, grading assignments, tutoring students)

Mostafa Sabbaghi

- Fall 2013, Industrial & Manufacturing Systems Engineering Undergraduate Program, IMSE 4001/7001 Decision Support System
- Spring 2013, Industrial & Manufacturing Systems Engineering Undergraduate Program, IMSE 2030 System Analysis and Design

Khajeh Nasir Toosi University of Technology

Guest Lecturer (co-teaching subjects and modules)

- Fall 2010, Industrial and Systems Engineering MS Program, KNTU 6684019 Data-mining and Knowledge Acquisition, 2-day Introduction Module to Principal Component Analysis

PRESENTATIONS

Department of Mechanical & Industrial Engineering, University of Illinois at Chicago, IL.

Consumer Behavior Modeling in System Design for Ease-of-return. (February 2019)

The Industrial Systems Engineering Research Conference (ISERC), IIE Annual Conference, Orlando, FL. (May 2018)

- Energy Left in Discarded Primary Batteries: A Large Sum of Small Values
- Defining the Optimal Time Horizon of Offering Remanufactured Products: The Role of Technological Obsolescence and Customer Product Return Behavior

Department of Mechanical and Mechatronic Engineering and Sustainable Manufacturing, California State University, Chico, CA. Consumer Behavior Modeling in System Design for Ease-of-repair and Ease-of-return. (March 2018)

The Doctoral Colloquium Poster Session, The Industrial Systems Engineering Research Conference (ISERC). IIE Annual Conference, Pittsburgh, PA. Behavioral Economics and Environmental Modeling in Sustainable Design Engineering and Logistics Systems. (May 2017)

6th Annual New York State Pollution Prevention Institute R&D Student Competition, University at Buffalo, the State University of New York. Catalytic NO Oxidation with Liquid Absorption Using Polymeric Catalysts: Sustainable and Cost-Effective NO_x Control. (April 2017) [won NYSP2I R&D competition]

The INFORMS 2015 Annual Meeting, Philadelphia, PA. Data-enhanced Prediction of Marketing Strategies: Does Product Repairability Play a Role? (November 2015)

The INFORMS 2014 Annual Meeting, San Francisco, CA. Trends in Used Electronics Return Flows: A Perspective on Consumer Behavior and Design Features. (November 2014)

PROFESSIONAL EXPERIENCE

Industrial Assessment Center, University of Missouri-Columbia, MO

Graduate Researcher (January 2013 – January 2014)

- Energy Auditing and Productivity Assessment for Companies Across the State of Missouri; Providing Sustainable Energy Solutions; Utility Analyses and Identifying Major Energy Consuming Equipment; Finding Energy Savings; Developing an Economic Analysis and Recommendation Report.

Amin Management Consulting Group, Tehran, Iran

Strategy Planning Specialist (October 2010 – October 2011)

- Organizational Strategic Planning and Process and Product Development Analyses for the IRAN Mining Investment Insurance Fund.

Iran Khodro Industrial Group (IKCO), Tehran, Iran

Maintenance Planning Intern (June 2008 – September 2008)

- Maintenance Planning and Reliability Assessment

Iran University of Science and Technology, Tehran, Iran

Undergraduate Student Researcher (October 2007 – August 2009)

Mostafa Sabbaghi

- Developed a Simulation-based Optimization Model to Improve the Performance of Carts Handling System at Mehrabad International Airport.
- Seats Cover Production Line Balancing at Saipa Azin Co.
- Layout Planning and Optimization for the Iran Khodro Powertrain Company (IPCO).

PROFESSIONAL SERVICE

Reviewer

- Journals: Resources, Conservation & Recycling; International Journal of Supply Chain and Inventory Management, Journal of Intelligent Manufacturing, Clean Technologies and Environmental Policy, Environmental Science & Technology, Frontiers Energy Research, International Journal of Mathematics in Operational Research, International Journal of Production Research, Journal of Cleaner Production.
- Conferences: The ASME 2015, 2016, 2017, 2018, 2019, and 2020 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference.

Conference Session Organizer

- Session Co-Chair, Sustainability of Industrial Systems (Special Session), IDETC/DFMLC 2015

AWARDS AND HONORS

Leaders in Excellence Scholarship Award, University at Buffalo (April 2017)
1st place in the Graduate R&D competition, New York State Pollution Prevention Institute (April 2017)
Selected for IISE Doctoral Colloquium (May 2017)
Professional Development Award, University at Buffalo (April 2016)
Robert Kleinschmidt Memorial Scholarship, University at Buffalo (April 2016)
ASMEs Design for Manufacturing and Life Cycle Scholars (August 2015)
Professional Development Award, University at Buffalo (April 2015)
Student Travel Grant, Material Handling Teachers Institute and Future Faculty Symposium, University of Wisconsin-Madison, U.S. (May 2015)
Student Travel Grant, E-Scrape Conference, Orlando, Florida, U.S. (October 2014)
Outstanding Undergraduate Award, Iran University of Science and Technology (December 2009)

Mostafa Sabbaghi

REFERENCES

Professor Saurabh Bansal

Associate Professor of Supply Chain Management
The Pennsylvania State University, Smeal College of Business
Office: 405 Business Building, University Park, PA 16802
Phone: (814) 863-3797
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Professor Daniel Guide

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The Pennsylvania State University, Smeal College of Business
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Professor Sara Behdad

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University of Florida, Department of Environmental Engineering Sciences
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Professor Nicholas C. Petruzzi

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Professor Jun Zhuang

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