

Sonya Javadi

CONTACT INFORMATION

Işık University. Industrial Engineering Department
Faculty of Engineering and Natural Sciences, Şile. Istanbul
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RESERACH INTERESTS

Methodology: Stochastic Processes, Markov Decision Processes, Dynamic Programming, Statistical Process Control with a particular interest on Multiattribute Poisson Process, Transportation Models.
Application: Engineering problems with a stochastic and randomness approach, Supply Chain Management.

ACADEMIC APPOINTMENT

Işık University, Istanbul, Turkey Industrial Engineering Department, Assistant Professor	2022 - Present
Doğuş University, Istanbul, Turkey Industrial Engineering Department, Assistant Professor	2018 - 2022
Sabancı University, Istanbul, Turkey Industrial Engineering Department, Teaching Assistant	2013-2018

EDUCATION

Sabancı University, Istanbul, Turkey PhD in Industrial Engineering Thesis Title: <i>On the End-of-Life Inventory Problem</i> Supervised by Semih Onur Sezer and Hans Frenk	2013-2018
Qazvin Islamic Azad University, Qazvin, Iran MSc in Industrial Engineering Thesis Title: <i>A Decision Making Model for Monitoring multi-attribute Poisson Processes</i> Supervised by Seyed Taghi Akhavan Niaki	2009-2012
Azarbaijan Shahid Madani University, Tabriz, BSc in Pure Mathematics	2003-2007

ACADEMIC RESEARCH

Journal Articles
S.Javadi, O. Ketten, A. İ. Özer and R. Z. Alkan (2024): *The Impact of the COVID-19 Pandemic on Online Grocery Supply Chain Management: A Case Study in Istanbul*. Gazi University Journal of Science, 1-1.
Bora Çekyay, J.B.G Frenk and **S. Javadi** (2023): *On computing the multivariate Poisson probability distribution*. Methodology and Computing in Applied Probability Journal, 25(70).
J. B. G. Frenk, **S. Javadi** and S. O. Sezer (2019): *An optimal stopping approach for the end-of-life inventory problem*. Mathematical Methods of Operations Research (90), 329-363.
J. B. G. Frenk, **S. Javadi**, M. Pourakbar and S. O. Sezer (2018): *An exact static solution approach for the service parts end of life inventory problem*. European Journal of Operational Research 272(2), 496-504.
S. T. A. Niaki, **Sonya Javadi** and M. S. Fallahnezhad (2014): *hybrid root transformation and decision on belief approach to monitor multiattribute Poisson processes*. The International Journal of Advanced Manufacturing Technology (75)-1651-1660.
Sonya Javadi and Seyed Taghi Akhavan Niaki (2013): *New uni-attribute control chart to monitor number of nonconformists*. Journal of Optimization in Industrial Engineering (12)-79-83.

Book Chapter

J.B.G Frenk and **S. Javadi** (2022): *On the principle of Lagrange in optimization theory and its application in transportation and location problems*. Springer chapter book: New Perspectives in Operations Research and Management Science.

Journal Submissions

S. Javadi, B.Gülbenzer¹, S.Dikkulak¹, B.Tombul¹ and Z.Yılmaz¹ (2023): *Impact of Fuel Prices on Traffic Flows: A Case Study in Istanbul*. Journal of Traffic and Transportation Research.

Conference

S. Javadi, B.Tombul and Z.Yılmaz¹ (2023): *Impact of Fuel Prices on Traffic Behaviours: A Case Study in Istanbul*. International Conference on Optimization and Data Science in Industrial Engineering, Proceeding, 660-670.

Sonya Javadi, Berçin Işık, Yiğit Topoyan, Yaren Balıktay and Berkay Oluç (2022): *Impact Of Logistic Management For Online Grocery Market On Customer Satisfaction: A Case Study in Istanbul* accepted at 41. YAEM Conference, Denizli, Turkey.

Sonya Javadi (2019): *A mixed Approach to Monitor Multi-attribute Poisson Processes*, accepted at 39. YAEM Conference, Ankara, Turkey.

Javadi. S and Niaki. STA (2012): *mean monitoring method of multi-attribute Poisson processes using root transformation and decision on beliefs*, accepted as a poster in the 29th Quality and productivity research conference (QPRS), California state university-Long Beach, USA.

SCIENTIFIC PROJECTS

2565 TÜBİTAK-Malta (MCST): *ICT-enabled Bee Foraging Sites and Beekeeper Routes Optimization for Efficient Honey Production*, Researcher. 2023-2025

BAP: *A B2C online transporter model for pharmaceutical industry*, Principle Investigator. 2023-2024

THESIS SUPERVISED

Sheilla Nji Dibe (2023): *Predictive Maintenance Simulation of a Chemical Plant in Cameroon*, MSc.

TEACHING EXPERIENCES

Işık University

Instructor:

2022-Present

- INDE 2051: Engineering Statistics
- INDE 4313: Supply Chain Management
- INDE 4003: Operations Research Modeling Applications
- IE 511: Quantitative Models in SCM

Doğuş University

Instructor:

2018-2022

- IE 303: Game Theory for Engineering
- IE 403: Network Theory
- IE 405: Stochastic Models
- IE 435: Supply Chain Management

Sabancı University

Teaching Assistant:

2013-2018

- IE 302: Stochastic Models in Operations Research
- IE 301: Deterministic Models in Operations Research

- IE 403: Quality Planning and Control MATH 306: Statistical Modeling
- MATH 203: Introduction to Probability and Statistics

HONORS and SCHOLARSHIPS

Full Scholarship (Sabancı University)
Best Teaching Assistant Award (Sabancı University)

2013-2018
2015

Skills

Programming

Python, MATLAB, R, Minitab, Cplex

Languages

Azeri (native), Persian (native) Turkish (advanced), English (advanced)