

Sonya Javadi

CONTACT INFORMATION

Industrial Engineering Department
Faculty of Engineering and Natural Sciences, Şile. Istanbul
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RESEARCH INTERESTS

Methodology: Stochastic Processes, Markov Decision Processes, Dynamic Programming, Statistical Process Control with a particular interest on Multiattribute Poisson Process.

Application: Engineering problems with a stochastic and randomness approach, Supply Chain Management.

ACADEMIC APPOINTMENT

Işık University, Istanbul, Turkey 2022 - Present
Industrial Engineering Department, Assistant Professor

Doğuş University, Istanbul, Turkey 2018 - 2022
Industrial Engineering Department, Assistant Professor

Sabancı University, Istanbul, Turkey 2013-2018
Industrial Engineering Department, Teaching Assistant

EDUCATION

Sabancı University, Istanbul, Turkey 2013-2018
PhD in Industrial Engineering
Thesis Title: ***On the End-of-Life Inventory Problem***
Supervised by Semih Onur Sezer and Hans Frenk

Qazvin Islamic Azad University, Qazvin, Iran 2009-2012
MSc in Industrial Engineering
Thesis Title: ***A Decision Making Model for Monitoring multi-attribute Poisson Processes***
Supervised by Seyed Taghi Akhavan Niaki

Azarbaijan Shahid Madani University, Tabriz, 2003-2007
BSc in Pure Mathematics

ACADEMIC RESEARCH

Journal Articles

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.

Conference Articles

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.

Manuscript

Bora Çekyay, J.B.G Frenk and **S. Javadi**: *On computing the multivariate Poisson probability distribution*. Submitted to Methodology and Computing in Applied Probability Journal.

Sonya Javadi, Olcay Keten, A. İhsan Özer and R. Zeynep Alkan: *Online Grocery Supply Chain Management during the COVID-19 Pandemic: A Case Study in Istanbul* Submitted to Gazi University Journal of Science.

Work in Progress

On Multivariate Poisson Distributions and Poisson Process with Bora Çekyay and J.B.G Frenk.

An Optimal Decision Approach for E-hailing Taxicab Drivers

TEACHING EXPERIENCES

Işık University

Instructor:

2022-Present

- INDE 2051: Engineering Statistics
- INDE 4313: Supply Chain Management

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 Full Scholarship (Sabancı University) 2013-2018
SCHOLARSHIPS Best Teaching Assistant Award (Sabancı University) 2015

Skills

Programming

Python, MATLAB, R, Minitab, Ed8, Cplex

Languages

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