Assoc. Prof. HATİCE TEKİNER MOĞULKOÇ

Personal Information

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International Researcher IDs ScholarID: 3PrkDWgAAAAJ ORCID: 0000-0002-1338-3368 Publons / Web Of Science ResearcherID: AAL-8265-2020 ScopusID: 49862196700 Yoksis Researcher ID: 120401

Biography

She received her BS and MS degrees in Industrial Engineering from Marmara University and Sabanci University, respectively. She obtained her PhD from Rutgers, the State University of New Jersey in Industrial and Systems Engineering. She is interested in optimization problems in electricity generation/transmission/distribution networks, multi-objective stochastic optimization problems, system reliability optimization, vehicle scheduling and airline crew pairing problems.

Education Information

Doctorate, Rutgers, The State University of New Jersey, New Brunswick Campus, Industrial and Systems Engineering, United States Of America 2006 - 2010 Postgraduate, Sabanci University, Institute Of Science, Industrial Engineering, Turkey 2004 - 2006 Undergraduate, Marmara University, Faculty of Engineering, Industrial Engineering, Turkey 1999 - 2004

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, MULTI-OBJECTIVE STOCHASTIC MODELS FOR ELECTRICITY GENERATION EXPANSION PLANNING PROBLEMS CONSIDERING RISK, Rutgers, The State University of New Jersey, New Brunswick Campus, 2010 Postgraduate, Robust Crew Pairing for Managing Extra Flights, Sabanci University, Institute Of Science, 2006

Research Areas

Industrial Engineering

Academic Titles / Tasks

Associate Professor, Marmara University, Faculty of Engineering, Industrial Engineering, 2023 - Continues Assistant Professor, Marmara University, Faculty of Engineering, Industrial Engineering, 2020 - 2023 Assistant Professor, Istanbul Sehir University, Faculty Of Engineering And Natural Sciences, Department Of Industrial Engineering, 2010 - 2020

Academic and Administrative Experience

Director of The Institution, Istanbul Sehir University, Institute Of Science, 2013 - 2020

Courses

Üretim Sistemleri Tasarımı ve Analizi, Undergraduate, 2021 - 2022, 2020 - 2021 Statistics for Engineers, Undergraduate, 2021 - 2022, 2020 - 2021 Engineering Project-II, Undergraduate, 2021 - 2022, 2020 - 2021 Bitirme Projesi II, Undergraduate, 2021 - 2022 Üretim Planlama ve Kontrol, Undergraduate, 2021 - 2022, 2020 - 2021 Engineering Project-I, Undergraduate, 2021 - 2022, 2020 - 2021 Bitirme Projesi I, Undergraduate, 2021 - 2022, 2020 - 2021 Bitirme Projesi I, Undergraduate, 2021 - 2022 İstatistik, Undergraduate, 2020 - 2021 Advanced Linear Optimization, Doctorate, 2021 - 2022

Advising Theses

Tekiner Moğulkoç H., Ulukuş M. Y., PREDICTING HUMAN STRESS EMOTIONS USING MACHINE LEARNING MODELS, Postgraduate, E.AHMETI(Student), 2022 Tekiner Moğulkoç H., An Impact Analysis of Vehicle to Grid (V2G) System on Grid by Considering the Associated Stochastic Parameters Explicitly, Postgraduate, B.BIBAK(Student), 2020 Tekiner Moğulkoç H., Application of Hierarchical Clustering on Demand of Electric Vehicles for GEP Problems, Postgraduate, S.AFGHAH(Student), 2020 Tekiner Moğulkoç H., Analysis of Turkish electricity system: Focusing on smart grid concept, Postgraduate, A.TUĞRUL(Student), 2018 Tekiner Moğulkoç H., Evaluation of the impacts of plug-in hybrid electric vehicles on electricity load curve for Istanbul, Postgraduate, S.EDİZ(Student), 2017 Tekiner Moğulkoç H., Using data envelopment analysis and malmquist total factor productivity index for agriculture of Turkish regions, Postgraduate, Z.ŞİŞMAN(Student), 2017 Tekiner Moğulkoç H., A web-based decision support system for class-teacher timetabling problem, Postgraduate, A.ŞAHİN(Student), 2017 Tekiner Moğulkoç H., Güler M. G., A state space reduction heuristic for multiple depot vehicle scheduling problem, Postgraduate, İ.SEVİM(Student), 2016 Tekiner Moğulkoç H., Understanding residential electricity consumption considering efficiency policies and the impact on the electricity system, Postgraduate, M.NUR(Student), 2014

Advising Graduates (Non-Thesis)

Tekiner Moğulkoç H., Forecasting Parking Space Utilization of a Facility Located in İstanbul, Masters (Non-Thesis), M.Nabeel(Student), 2017

Tekiner Moğulkoç H., Investigating Risk Measures for a Multi-Period Supply Chain Network Design Under Demand

Uncertainty, Masters (Non-Thesis), A.Eshghi(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- The parametric analysis of the electric vehicles and vehicle to grid system's role in flattening the I. power demand Bibak B., TEKİNER MOĞULKOÇ H. SUSTAINABLE ENERGY GRIDS & NETWORKS, vol.30, 2022 (SCI-Expanded) II. Application of hierarchical clustering on electricity demand of electric vehicles for GEP problems Afghah S., TEKİNER MOĞULKOÇ H., Bibak B. TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.7, pp.2654-2671, 2022 (SCI-Expanded) III. Scheduling the vehicles of bus rapid transit systems: a case study SEVİM İ., Tekiner-Mogulkoc H., GÜLER M. G. INTERNATIONAL TRANSACTIONS IN OPERATIONAL RESEARCH, vol.29, no.1, pp.347-371, 2022 (SCI-Expanded) IV. Influences of vehicle to grid (V2G) on power grid: An analysis by considering associated stochastic parameters explicitly Bibak B., TEKİNER MOĞULKOÇ H. SUSTAINABLE ENERGY GRIDS & NETWORKS, vol.26, 2021 (SCI-Expanded) V. Profiling energy efficiency tendency: A case for Turkish households Tumbaz M. N. M., Mogulkoc H. ENERGY POLICY, vol.119, pp.441-448, 2018 (SCI-Expanded) VI. Mean-risk stochastic electricity generation expansion planning problems with demand uncertainties considering conditional-value-at-risk and maximum regret as risk measures Tekiner-Mogulkoc H., Coit D. W., Felder F. A. INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.73, pp.309-317, 2015 (SCI-Expanded) VII. Electric power system generation expansion plans considering the impact of Smart Grid technologies Tekiner-Mogulkoc H., Coit D. W., Felder F. A. INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.42, no.1, pp.229-239, 2012 (SCI-Expanded) VIII. System Reliability Optimization Considering Uncertainty: Minimization of the Coefficient of Variation for Series-Parallel Systems Tekiner-Mogulkoc H., Coit D. W. IEEE TRANSACTIONS ON RELIABILITY, vol.60, no.3, pp.667-674, 2011 (SCI-Expanded) IX. Multi-period multi-objective electricity generation expansion planning problem with Monte-Carlo simulation Tekiner H., Coit D. W., Felder F. A. ELECTRIC POWER SYSTEMS RESEARCH, vol.80, no.12, pp.1394-1405, 2010 (SCI-Expanded)
 - X. Robust crew pairing for managing extra flights
 Tekiner H., Birbil S. I., Bulbul K.
 COMPUTERS & OPERATIONS RESEARCH, vol.36, no.6, pp.2031-2048, 2009 (SCI-Expanded)

Articles Published in Other Journals

I. Using malmquist TFP index for evaluating agricultural productivity: Agriculture of Türkiye NUTS2 regions

Tekiner Moğulkoç H., Şişman Z. SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES, vol.40, no.3, pp.513-528, 2022 (ESCI)

- II. A Methodology for Explicit Representation Of The Stochastic Demand Due To Electric Vehicles in Generation Expansion Planning Problems
 Tekiner Moğulkoç H.
 Academic Platform-Journal of Engineering and Science, vol.9, no.2, pp.257-263, 2021 (Peer-Reviewed Journal)
- III. A comprehensive analysis of Vehicle to Grid (V2G) systems and scholarly literature on the application of such
 Bibak B., TEKİNER MOĞULKOÇ H.
 RENEWABLE ENERGY FOCUS, vol.36, pp.1-20, 2021 (ESCI)
- IV. AUTOMATED VEHICLE SCHEDULING SYSTEM: A CASE STUDY OF METROBUS SYSTEM
 SEVİM İ., Mogulkoc H., GÜLER M. G., Mutlu Z. P.
 SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.7, no.1, pp.1-7, 2016 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. Optimization of LTE Radio Resource Block Allocation for Maritime Channels
 Kachroo A., ÖZDEMİR M. K., TEKİNER MOĞULKOÇ H.
 2016 IEEE 37TH SARNOFF SYMPOSIUM, Newark, 19 21 September 2016, pp.88-93
- II. Review and Comparison of System Reliability Optimization Algorithms Considering Reliability Estimation Uncertainty Coit D. W., Jin T., Tekiner H.

8th International Conference on Reliability, Maintainability and Safety (ICRMS 2009), Chengdu, China, 20 - 24 July 2009, pp.49-50

III. System reliability optimization considering uncertainty: Minimization of a coefficient of variation measure

TEKİNER MOĞULKOÇ H., Coit D. W.

IIE Annual Conference and Expo 2008, Vancouver, Canada, 17 - 21 May 2008, pp.995-1000

Supported Projects

Tekiner Moğulkoç H., Tunaboylu B., Ulukuş M. Y., Bilsel M., TUBITAK Project, Elektrikli Araçların Elektrik Üretim Genisletme Problemine Entegrasyonu Ve Optimum Araç Penetrasyon Seviyelerinin Belirlenmesi, 2021 - 2024

Metrics

Publication: 17 Citation (WoS): 203 Citation (Scopus): 275 H-Index (WoS): 7 H-Index (Scopus): 8