Asst. Prof. Uğur YILDIRAN

Personal Information

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International Researcher IDs
ScholarID: ZGy9_ksAAAAJ
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Education Information

Doctorate, Bogazici University, Institute Of Science, Elektrik-Elektronik Mühendisliği, Turkey 2001 - 2009
Postgraduate, Bogazici University, Institute Of Science, Department Of System And Control Engineering
(Interdisciplinary), Turkey 1999 - 2001
Undergraduate, Istanbul Technical University, Elektrik-Elektronik, Kontrol ve Bilgisayar Mühendisliği, Turkey 1994 -
1999

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Bazı ikinci derece polinom eniyileme problemleri için doğrusal matris eşitsizliği formülasyonları, Bogazici
University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, 2008
Postgraduate, DEĞİŞKEN YAPILI SİSTEMLER KURAMININ AKILLI SİSTEMLERİN EĞİTİMİNE UYGULANMASI , Bogazici
University, Institute Of Science, Department Of System And Control Engineering (Interdisciplinary), 2001

Research Areas

Control and System Engineering, Robotics and Mechatronics Systems, Energy, Renewable energy, Stochastic Processes,
Optimization Theory and Methods, Nonlinear Programming, Linear Programming, Global Optimization, Integer and
Mixed Integer Programming

Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Electrical & Electronics, Control And Automation Engineering,
2022 - Continues
Assistant Professor, Yeditepe University, Faculty Of Engineering-Architecture, Department Of Industrial And Systems
Engineering, 2010 - 2022
Research Assistant, Yeditepe University, Faculty Of Engineering-Architecture, Department Of Industrial And Systems
Engineering, 2004 - 2009

Research Assistant, Oklahoma State University, 2003 - 2004

Research Assistant, Bogazici University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, 2000 - 2003

Academic and Administrative Experience

Deputy Head of Department, Yeditepe University, Faculty Of Engineering, 2012 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Robust multi-stage economic dispatch with renewable generation and storage**
YILDIRAN U.
European Journal of Operational Research, vol.309, no.2, pp.890-909, 2023 (SCI-Expanded)

II. **Risk-averse stochastic model predictive control-based real-time operation method for a wind energy generation system supported by a pumped hydro storage unit**
Yildiran U., Kayahan I.
APPLIED ENERGY, vol.226, pp.631-643, 2018 (SCI-Expanded)

III. **MILP based short-term centralized and decentralized scheduling of a hydro-chain on Kelkit River**
Yildiran U., Kayahan I., Tunc M., Sisbot S.
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.69, pp.1-8, 2015 (SCI-Expanded)

IV. **Optimal Distribution of Electrical Energy Sources in Turkey with the Impact of the Kyoto Protocol**
Sisbot S., Yildiran U., Tunc M.
ENERGY SOURCES PART B-ECONOMICS PLANNING AND POLICY, vol.10, no.3, pp.288-297, 2015 (SCI-Expanded)

V. **LMI Representations of the convex hulls of quadratic basic semialgebraic sets**
Yildiran U., Emre Köse I.
Journal of Convex Analysis, vol.17, no.2, pp.535-551, 2010 (SCI-Expanded)

VI. **Convex hull of two quadratic constraints is an LMI set**
Yildiran U.
IMA JOURNAL OF MATHEMATICAL CONTROL AND INFORMATION, vol.26, no.4, pp.417-450, 2009 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **Dynamic Programming vs Q-learning for Feedback Motion Planning of Manipulators**
YILDIRAN U.
5th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, HORA 2023, İstanbul, Turkey, 8 - 10 June 2023

II. **Nonnegative Wind Speed Time Series Models for SDDP and Stochastic Programming Applications**
Yildiran U.
2019 IEEE PES Innovative Smart Grid Technologies Europe, ISGT-Europe 2019, Bucharest, Romania, 29 September - 02 October 2019

III. **A study on object classification using deep convolutional neural networks and comparison with shallow networks**
Erdas A., Arslan E., Ozturkcan B., Yildiran U.
6th International Conference on Control Engineering and Information Technology, CEIT 2018, İstanbul, Turkey, 25 - 27 October 2018

IV. **Stochastic model predictive control-based real-time operation of a transmission constrained joint wind-PHS system**
Kayahan I., Yildiran U.

6th International Conference on Control Engineering and Information Technology, CEIT 2018, İstanbul, Turkey, 25 - 27 October 2018

V. **An Application of SMC Theory for Experimental Learning Control of Robotic Manipulators**
Yildiran U., Kaynak O.
2003 IEEE/RSJ International Conference on Intelligent Robots and Systems, Las Vegas, NV, United States Of America, 27 - 31 October 2003, vol.1, pp.694-698

VI. **Neural network based control of a cement mill by means of a VSS based training algorithm**
Yildiran U., Kaynak M.
IEEE International Symposium on Industrial Electronics, L'Aquila, Italy, 8 - 11 July 2002, pp.326-331

VII. **VSS learning based intelligent control of a bioreactor system**
Yildiran U., Kaynak O.
5th International Conference on Asian Fuzzy Systems Society, AFSS 2002, Calcutta, India, 3 - 06 February 2002, vol.2275, pp.281-287

Supported Projects

Yıldıran U., Kaynak M. O., Project Supported by Higher Education Institutions, Kayma Kipli Denetim Metodlarının Esnek İşlemsel Zeka İçeren Sistemlere Uygulanması, 2003 - 2006

Yıldıran U., Kaynak M. O., TUBITAK Project, Doğrusal olmayan sistemlerin denetiminde işlemsel zeka yöntemleri ile kayma kipli denetim kuramının entegrasyonu, 2001 - 2003

Scientific Refereeing

SIAM JOURNAL ON OPTIMIZATION, SCI Journal, January 2023
SIAM JOURNAL ON OPTIMIZATION, SCI Journal, December 2021

Metrics

Publication: 14
Citation (WoS): 40
Citation (Scopus): 61
H-Index (WoS): 4
H-Index (Scopus): 5