### Asst. Prof. BURAK URAZEL

## **Personal Information**

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#### International Researcher IDs

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### **Education Information**

Doctorate, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Elektrik-Elektronik Mühendisliği (Dr), Turkey 2011 - 2018

Postgraduate, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Elektrik-Elektronik Anabilim Dalı, Turkey 2008 - 2011

Undergraduate, Anadolu University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering (English), Turkey 2004 - 2008

## **Dissertations**

Doctorate, Uygun değerler temelli genelleştirilmiş subgradient algoritmasının kısa dönem hidrotermal koordinasyon problemine uygulanması, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Elektrik-Elektronik Mühendisliği (Dr), 2017

Postgraduate, Uygun değerler temelli genelleştirilmiş subgradient algoritmasının bazı elektrik enerji sistemi optimal işletim problemlerine uygulanması, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Elektrik-Elektronik Anabilim Dalı. 2011

## **Research Areas**

Power System Analysis, Electric Power Transmission, Distribution and Protection

# **Academic Titles / Tasks**

Assistant Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ BÖLÜMÜ, 2017 - Continues

Research Assistant, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ BÖLÜMÜ, 2009 - 2017

# Academic and Administrative Experience

Deputy Head of Department, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ BÖLÜMÜ, 2020 - Continues

#### **Courses**

### **Postgraduate**

Economic Operation of Electric Energy Systems, Postgraduate, 2020 - 2021

Introduction to Linear Transformations, Postgraduate, 2020 - 2021, 2019 - 2020

#### Undergraduate

Introduction to Project Management, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Optimization Methods For Engineering Applications, Undergraduate, 2020 - 2021

Introduction to Project Management, Undergraduate, 2020 - 2021, 2017 - 2018

Introduction to Electrical and Electronics Engineering, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Energy Transmission Lines, Undergraduate, 2020 - 2021

Engineering Graphics, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Introduction to Electrical and Electronics Engineering, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

Energy Transmission Lines, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

Engineering Graphics, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

Occupational Health and Safety in Electrical Engineering, Undergraduate, 2019 - 2020, 2018 - 2019

Occupational Health and Safety in Electrical Engineering, Undergraduate, 2019 - 2020, 2018 - 2019

Principles of Energy Conversion, Undergraduate, 2017 - 2018

## Published journal articles indexed by SCI, SSCI, and AHCI

I. Fuel constrained combined heat and power dispatch problem using marine predators algorithm KESKİN K., URAZEL B.

Electrical Engineering, vol.105, no.6, pp.4011-4023, 2023 (SCI-Expanded)

II. A modified metaheuristic algorithm for a home health care routing problem with health team skill levels

Somar S., URAZEL B., BURUK ŞAHİN Y.

Applied Soft Computing, vol.148, 2023 (SCI-Expanded)

III. A new solution approach for non-convex combined heat and power economic dispatch problem considering power loss

URAZEL B., KESKIN K.

Energy, vol.278, 2023 (SCI-Expanded)

IV. High-Dimension EEG Biometric Authentication Leveraging Sub-Band Cube-Code Representation IŞIKLI ESENER İ., Kilinc O., URAZEL B., Yaman B. N., İLHAN ALGIN D., ERGİN S.

TRAITEMENT DU SIGNAL, vol.40, no.5, pp.1983-1995, 2023 (SCI-Expanded)

V. Solution to security constrained environmental/economic pumped-storage hydraulic unit scheduling problem by modified subgradient algorithm based on feasible values and pseudo water price FADIL S., URAZEL B.

INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.60, pp.399-413, 2014 (SCI-Expanded)

VI. A security constrained environmental/economic power dispatch technique using F-MSG algorithm for a power system area including limited energy supply thermal units

FADIL S., URAZEL B.

INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.56, pp.185-197, 2014 (SCI-Expanded)

VII. Solution to Security-constrained Non-convex Pumped-Storage Hydraulic Unit Scheduling Problem by Modified Subgradient Algorithm Based on Feasible Values and Pseudo Water Price

FADIL S., URAZEL B.

ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.41, no.2, pp.111-135, 2013 (SCI-Expanded)

VIII. A solution to security constrained non-convex economic dispatch problem by modified subgradient algorithm based on feasible values

FADIL S., YAZICI A., URAZEL B.

INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.43, no.1, pp.849-858, 2012 (SCI-Expanded)

IX. A Security-constrained Economic Power Dispatch Technique Using Modified Subgradient Algorithm
Based on Feasible Values and Pseudo Scaling Factor for a Power System Area Including Limited
Energy Supply Thermal Units

FADIL S., YAZICI A., URAZEL B.

ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.39, no.16, pp.1748-1768, 2011 (SCI-Expanded)

# Articles Published in Other Journals

I. A TOPSIS-Based Improved Weighting Approach with Evolutionary Computation

Zeydan M., Güngör M., Urazel B.

Transactions on Fuzzy Sets and Systems (TFSS), vol.3, no.1, pp.171-183, 2024 (Peer-Reviewed Journal)

II. Solving a Cubic Cell Formation Problem with Quality Index Using a Hybrid Meta-Heuristic Approach URAZEL B., SAHİN Y. B.

GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.36, no.2, pp.752-771, 2023 (Scopus)

III. SOC ESTIMATION FOR BATTERY OF ELECTRIC VEHICLES

Keskin B., SORA GUNAL E., urazel b., Keskin K.

Nicel bilimler dergisi (Online), vol.4, no.2, pp.161-175, 2022 (Peer-Reviewed Journal)

IV. Reliability Analysis of Energy Efficient Mobile Robot Routing

Urazel B., Taş M. O.

Journal of Multidisciplinary Engineering Science Studies, vol.7, no.6, pp.3935-3941, 2021 (Peer-Reviewed Journal)

V. A Hybrid Solution Approach for Electric Vehicle Routing Problem with Soft Time-Windows URAZEL B., KESKİN K.

El-Cezeri Fen ve Mühendislik Dergisi, vol.8, no.2, pp.994-1006, 2021 (Scopus)

VI. Fuzzy control of dual storage system of an electric drive vehicle considering battery degradation KESKİN K., URAZEL B.

An International Journal of Optimization and Control: Theories Applications (IJOCTA), vol.11, no.1, pp.30-40, 2021 (ESCI)

VII. Electric Drive Vehicle Model and Simulation with MATLAB

URAZEL B., KESKİN K.

Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.4, pp.2461-2473, 2020 (Peer-Reviewed Journal)

VIII. Application of Modified Subgradient AlgorithmBased on Feasible Values to Security ConstrainedNon Convex Economic Dispatch Problems withProhibited Zones and Ramp Rates

FADIL S., URAZEL B., TAMYÜREK B.

IJEEE, vol.4, no.1, pp.1-8, 2016 (Peer-Reviewed Journal)

IX. Yasak İşletim Bölgeli Birimler İçeren Elektrik Enerji Sisteminde Çevresel Ekonomik Güç Dağıtım Probleminin Uygun Değerler Temelli Genişletilmiş Subgradyent Yöntemiyle Çözümü FADIL S., URAZEL B.

3e Electrotech, no.237, pp.206-218, 2014 (Peer-Reviewed Journal)

X. Pompayla Doldurmalı Hidrolik Birim İçeren Elektrik Enerji Sisteminde Optimal Güç Dağıtım Probleminin Uygun Değerler Temelli Genelleştirilmiş Subgradyent Yöntemiyle Çözümü FADIL S., URAZEL B. 3e Electrotech, vol.226, pp.174-186, 2013 (Peer-Reviewed Journal)

XI. Solution to Security Constrained Environmental Pumped Storage Hydraulic Unit Scheduling Problem by Genetic Algorithm

FADIL S., URAZEL B., Demir C.

ISRN Power Engineering, vol.2013, pp.1-12, 2013 (Peer-Reviewed Journal)

XII. Güvenlik Kısıtlı Aktif ve Reaktif Güç Dağıtım Probleminin Uygulanabilir Değerler Üzerinde Çalışan Genişletilmiş Subgradyent Yöntemiyle Çözümü

FADIL S., URAZEL B.

3e Electrotech, no.214, pp.110-120, 2012 (Peer-Reviewed Journal)

# Papers Published in Refereed Scientific Meetings

I. Multi Objective Manta Ray Foraging Optimizer for a Home Health Care Routing Problem Buruk Şahin Y., Urazel B.

The 3rd International Conference on Applied Mathematics in Engineering (ICAME'24), Balıkesir, Turkey, 26 - 28 June 2024, pp.132

 $II. \quad A \ Multi-Objective \ Approach \ for \ a \ Cubic \ Cell \ Formation \ with \ Quality \ Index$ 

BURUK ŞAHİN Y., URAZEL B.

International Conference on Applied Mathematics in Engineering (ICAME), Balıkesir, Turkey, 01 September 2021

III. Application of Modified Subgradient Algorithm Based on Feasible Values to Security Constrained
Non convex Economic Dispatch Problems with Prohibited Zones and Ramp Rates
FADIL S., URAZEL B., TAMYÜREK B.

ASR 2015 2nd International Conference on Electrical and Electronics Engineering, ICEE, Ankara, Turkey, 28 - 29 April 2015

IV. Solution to Short Term Hydrothermal Scheduling Problem by Modified Subgradient Algorithm Based on Feasible Values

FADIL S., URAZEL B.

9th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 26 - 28 November 2015, pp.505-509

V. A Genetic Algorithm Approach for Multi Objective Multi Depot Vehicle Routing Allocation Problem ÖZDEN G., GOCUKLU G., URAZEL B.

26th European Conference on Operational Research, 1 - 04 July 2013

VI. Application of Modified Subgradient Algorithm Based on Feasible Values to Security Constrained Economic Dispatch Problem with Prohibited Operation Zones

FADIL S., URAZEL B.

8th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 28 - 30 November 2013, pp.549-553

VII. A Security Constrained Environmental Economic Power Dispatch Technique Using F MSG Algorithm for a Power System Area Including Limited Energy Supply Thermal Units

FADIL S., YAZICI A., URAZEL B.

ELECO 2011 7th International Conference on Electrical and Electronics Engineering, Bursa, Turkey, 1 - 04 December 2011, vol.1, pp.33-37

VIII. Solution to Security Constrained Pumped Storage Hydraulic Unit Scheduling Problem by Using Modified Subgradient Algorithm Based on Feasible Values

FADIL S., URAZEL B., Gök E.

ELECO 2011 7th International Conference on Electrical and Electronics Engineering, Bursa, Turkey, 1 - 04 December 2011, vol.1, pp.96-100

IX. Solution to Security Constrained Lossy Economic Power Dispatch Problem for a Power System Area Including Limited Energy Supply Thermal Units Using Modified Subgradient Algorithm Based on Feasible Values

FADIL S., YAZICI A., URAZEL B.

ELECO 2011 7th International Conference on Electrical and Electronics Engineering, Bursa, Turkey, 1 - 04 December 2011, vol.1, pp.33-37

X. Güvenlik Kısıtlı Aktif ve Reaktif Güç Dağıtım Probleminin Uygulanabilir Değerler Üzerinde Çalışan Genişletilmiş Subgradyent Yöntemiyle Çözümü

FADIL S., URAZEL B.

ELECO'2010, Bursa, Turkey, 2 - 05 December 2010, pp.98-102

# **Supported Projects**

Keskin K., Urazel B., Project Supported by Higher Education Institutions, Elektrikli Araç Dinamiğinin MATLAB Ortamında Gerçeklenmesi, 2020 - 2021

## **Metrics**

Publication: 31 Citation (WoS): 48 Citation (Scopus): 66 H-Index (WoS): 4 H-Index (Scopus): 5