

Assoc. Prof. BURCU AĐLAR GENOSMAN

Personal Information

Office Phone: [+90 224 294 0916](tel:+902242940916)

Email: burcucaglar@uludag.edu.tr

Web: <https://avesis.uludag.edu.tr/burcucaglar>

International Researcher IDs

ScholarID: So8W9GAAAAAJ

ORCID: 0000-0003-0159-8529

Publons / Web Of Science ResearcherID: AAG-8600-2021

ScopusID: 56263661900

Yoksis Researcher ID: 156677

Education Information

Doctorate, Bursa UludaĐ University, FEN BİLİMLERİ ENSTİTÜSÜ, Endüstri MühendisliĐi (Dr), Turkey 2009 - 2014

Postgraduate, Bursa UludaĐ University, FEN BİLİMLERİ ENSTİTÜSÜ, Endüstri MühendisliĐi (YI) (Tezli), Turkey 2006 - 2009

Undergraduate, Bursa UludaĐ University, MÜHENDİSLİK FAKÜLTESİ, Endüstri MühendisliĐi Bölümü, Turkey 2002 - 2006

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Ardışık makinelerde çoklu operasyona sahip işlerin eş zamanlı çizelgelenmesi, Bursa UludaĐ University, FEN BİLİMLERİ ENSTİTÜSÜ, Endüstri MühendisliĐi (Dr), 2014

Postgraduate, İnternet madenciliĐinde istatistiksel metotların uygulanması, Bursa UludaĐ University, FEN BİLİMLERİ ENSTİTÜSÜ, Endüstri MühendisliĐi (YI) (Tezli), 2009

Research Areas

Computer Vision, Computer Learning, Pattern Recognition and Image Processing, Neural Networks, Optimization Theory and Methods, Linear Programming, Heuristic Methods, Integer and Mixed Integer Programming, Scheduling, Optimization

Academic Titles / Tasks

Associate Professor, Bursa UludaĐ University, Mühendislik Fakültesi, Endüstri MühendisliĐi, 2006 - Continues

Courses

Constraint Programming, Postgraduate, 2021 - 2022
Araştırma Teknikleri ve Yayın Etiği , Postgraduate, 2021 - 2022
Applied Mathematical Modeling, Undergraduate, 2020 - 2021
VERİMLİLİK VE DEĞER ANALİZİ, Undergraduate, 2017 - 2018
OPERATIONS RESEARCH I, Undergraduate, 2017 - 2018

Advising Theses

Çağlar Gençosman B., DETECTION OF DANGEROUS OBJECTS IN REAL-TIME IMAGES USING A DEEP LEARNING APPROACH, Postgraduate, Ş.Aykut(Student), 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Exact optimization and decomposition approaches for shelf space allocation**
ÇAĞLAR GENÇOSMAN B., Begen M. A.
European Journal of Operational Research, vol.299, pp.432-447, 2022 (SCI-Expanded)
- II. **Characterization of Syrian refugees with work permit applications in Turkey: A data mining based methodology**
Gencosman B. C., İNKAYA T.
EXPERT SYSTEMS WITH APPLICATIONS, vol.180, 2021 (SCI-Expanded)
- III. **Prediction of Polycyclic Aromatic Hydrocarbons (PAHs) Removal from Wastewater Treatment Sludge Using Machine Learning Methods**
ÇAĞLAR GENÇOSMAN B., EKER ŞANLI G.
WATER AIR AND SOIL POLLUTION, vol.232, no.3, 2021 (SCI-Expanded)
- IV. **Hybrid radial basis function neural networks for urban traffic signal control**
Çağlar Gençosman B.
JOURNAL OF ENGINEERING RESEARCH, vol.8, no.4, pp.153-168, 2020 (SCI-Expanded)
- V. **Scheduling Methods for Efficient Stamping Operations at an Automotive Company**
ÇAĞLAR GENÇOSMAN B., Begen M. A., ÖZMUTLU H. C., Yılmaz I. O.
PRODUCTION AND OPERATIONS MANAGEMENT, vol.25, no.11, pp.1902-1918, 2016 (SCI-Expanded)
- VI. **Character n-gram application for automatic new topic identification**
ÇAĞLAR GENÇOSMAN B., ÖZMUTLU H. C., ÖZMUTLU S.
INFORMATION PROCESSING & MANAGEMENT, vol.50, no.6, pp.821-856, 2014 (SCI-Expanded)
- VII. **Introducing the MCHF/OVRP/SDMP: Multicapacitated/Heterogeneous Fleet/Open Vehicle Routing Problems with Split Deliveries and Multiproducts**
YILMAZ EROĞLU D., ÇAĞLAR GENÇOSMAN B., ÇAVDUR F., ÖZMUTLU H. C.
SCIENTIFIC WORLD JOURNAL, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **Advancing Workplace Safety: A Proactive Approach with Convolutional Neural Network for Hand Pose Estimation in Press Machine Operations**
Atmaca Ş. A., Hamad H., Çağlar Gençosman B.
The European Journal of Research and Development, vol.3, no.4, pp.66-75, 2023 (Peer-Reviewed Journal)
- II. **Raf Atama Yönetimi için Tamsayılı Programlama Destekli Meta-Sezgisel Algoritmalar**
Bayazıt B., uçarkuş g., ÇAĞLAR GENÇOSMAN B., Beğen M.
Avrupa Bilim ve Teknoloji Dergisi, no.41, pp.100-117, 2022 (Peer-Reviewed Journal)
- III. **ARITMA ÇAMURLARINDA POLİSİKLİK AROMATİK HİDROKARBONLARIN (PAH'LARIN)**

GİDERİMLERİNİN VERİ MADENCİLİĞİ YÖNTEMLERİ İLE TAHMİNİ

Çağlar Gençosman B., Eker Şanlı G.

Uludağ University Journal of The Faculty of Engineering, vol.26, no.1, pp.233-252, 2021 (Peer-Reviewed Journal)

- IV. **Bir Otomasyon Teknolojileri Üreticisinde Standart Zaman Hesaplama ve Montaj Hattı Dengeleme Yazılımı Geliştirilmesi**
ATAHAN A., KAPUAĞASI M., KOÇ Ü. N., ÇAĞLAR GENÇOSMAN B., İNKAYA T.
Uludağ University Journal of The Faculty of Engineering, vol.23, pp.263-284, 2018 (Peer-Reviewed Journal)
- V. **Radyal Tabanlı Fonksiyon Ağları İle Adaptif Trafik Sinyal Kontrolü**
ÇAĞLAR GENÇOSMAN B.
Journal of Current Researches on Engineering, Science and Technology, 2017 (Peer-Reviewed Journal)
- VI. **DENEYSEL TASARIM İLE SULU ÇÖZELTİLERDEN METAL AYRIŞIMINA ETKİ EDEN FAKTORLERİN OPTİMİZASYONU**
ÇAĞLAR GENÇOSMAN B., ORBAK A. Y., ORBAK İ.
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, 2015 (Peer-Reviewed Journal)
- VII. **DENEYSEL TASARIM İLE SULU ÇÖZELTİLERDEN METAL AYRIŞIMINA ETKİ EDEN FAKTÖRLERİN OPTİMİZASYONU**
ÇAĞLAR GENÇOSMAN B., ORBAK A. Y., ORBAK İ.
Uludağ University Journal of The Faculty of Engineering, vol.20, no.1, pp.39-49, 2015 (Peer-Reviewed Journal)
- VIII. **Arama Motorlarında Yeni Konu Tanılamada Karakter N gram ve Yapay Sinir Ağları Uygulaması**
ÇAĞLAR GENÇOSMAN B., ÖZMUTLU H. C.
Mühendislik-Mimarlık Fakültesi Dergisi, vol.2, 2009 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Solution Methods for Generalized Flowshop Problems**
ÇAĞLAR GENÇOSMAN B.
LAP LAMBERT Academic Publishing, Deutschland, 2016
- II. **Automotive Stamping Operations Scheduling Using Mathematical Programming and Constraint Programming**
ÇAĞLAR GENÇOSMAN B., ÖZMUTLU H. C., Özkan H., Beğen M.
in: Industrial Engineering Non-Traditional Applications in International Settings, Bopaya Bidanda, İhsan Sabuncuoğlu, Bahar Y. Kara, Editor, CRC Press, Taylor and Francis Group, New York, pp.37-69, 2014

Refereed Congress / Symposium Publications in Proceedings

- I. **Improved Hybrid Genetic-Local Search Algorithm for Simultaneous Feature Selection and Weighting**
ÇAĞLAR GENÇOSMAN B., YILMAZ EROĞLU D., Beğen M.
Yazılım 2013, Bursa, Turkey, 27 - 28 September 2013, pp.4
- II. **Detection Of Dangerous Objects In Real-Time Images Using A Deep Learning Approach**
Atmaca Ş. A., ÇAĞLAR GENÇOSMAN B.
3. INTERNATIONAL ULUDAĞ SCIENTIFIC RESEARCH CONGRESS, Bursa, Turkey, 27 - 28 July 2024
- III. **Üretim Sanayinde Makine Öğrenmesi ile Kalan Faydalı Ömür Tahmini ve Çevrim İçi Kestirimci Uyarı Sisteminin Geliştirilmesi**
ÇAĞLAR GENÇOSMAN B.
20. Uluslararası Bilimsel Araştırmalar Kongresi ANKARA/TÜRKİYE 29 - 30 Haziran 2024, Ankara, Turkey, 29 - 30 June 2024
- IV. **Raf Alanı Tahsisi ve Sergileme Problemi çözümünde Genetik Algoritma**
Bayazıt B., ÇAĞLAR GENÇOSMAN B., Beğen M., uçarkuş g.
YAEM 2019- 39.Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Turkey, 12 - 14 June 2019

- V. **Analysis of Immigrants' Work Permit Applications with Association Rules**
ÇAĞLAR GENÇOSMAN B., İNKAYA T.
ICONDATA 2018, 4 - 07 October 2018, vol.1
- VI. **Ergonomic Assessment of Manual Handling Tasks in Textile Industry using Digital Human Modeling**
BOSTANCI A., KARAGÖZ A., KARATAŞ M., ÇAĞLAR GENÇOSMAN B., ÖZALP B. T.
GJCIE 2018-Global Joint Conference on Industrial Engineering and Its Application Areas, Nevşehir, Turkey, 21 June 2018
- VII. **Application of Data Mining Techniques to Immigration Data**
ÇAĞLAR GENÇOSMAN B., İNKAYA T.
GJCIE-Global Joint Conference on Industrial Engineering and Its Application Areas, Nevşehir, Turkey, 21 - 22 June 2018, vol.1, pp.11
- VIII. **A new genetic algorithm improved with heuristic methods and reinforcement learning to solve the symmetric traveling salesman problem**
uçarkuş g., ÇAĞLAR GENÇOSMAN B.
GJCIE 2018, 21 - 22 June 2018, vol.1, pp.17
- IX. **Adaptive traffic signal control with artificial neural networks**
ÇAĞLAR GENÇOSMAN B.
International Conference on Multidisciplinary Sciences, 25 - 26 November 2017
- X. **Bir Otomotiv Yan Sanayi Tedarikçisinde Standart Zaman Hesaplama ve Montaj Hattı Dengeleme**
Koç Ü. N., Kapuğası M., Atahan A., İNKAYA T., ÇAĞLAR GENÇOSMAN B., bakadur g.
YAEM 2016-Yöneylem Araştırması Endüstri Mühendisliği 36. Ulusal Kongresi, İzmir, Turkey, 13 - 15 July 2016
- XI. **Comparison of dynamic scheduling approaches Predictive reactive scheduling vs Robust proactive scheduling in a generalized flowshop environment**
ÇAĞLAR GENÇOSMAN B., YILMAZ EROĞLU D.
GJCIE 2016 - Proceedings of the Global Joint Conference on Industrial Engineering and Its Application Areas, İstanbul, Turkey, 14 - 15 July 2016
- XII. **Dynamic scheduling of generalized flowshop problems using mathematical programming**
ÇAĞLAR GENÇOSMAN B., YILMAZ EROĞLU D.
GJCIE 2016 - Proceedings of the Global Joint Conference on Industrial Engineering and Its Application Areas, İstanbul, Turkey, 14 - 15 July 2016
- XIII. **Comparison of Neural Network and Wrapper Methods for Decision Making Acceptance of Fabrics in Quality Control Process**
YILMAZ EROĞLU D., ÇAĞLAR GENÇOSMAN B.
GJCIE 2016 - Proceedings of the Global Joint Conference on Industrial Engineering and Its Application Areas, 14 - 15 July 2016
- XIV. **Genetic Algorithm Based Hybrid Solution for Feature Selection**
YILMAZ EROĞLU D., ÇAĞLAR GENÇOSMAN B.
GJCIE 2016 - Proceedings of the Global Joint Conference on Industrial Engineering and Its Application Areas, İstanbul, Turkey, 14 July 2016
- XV. **Decomposition of stamping scheduling problem with multiple operations in consecutive machines**
ÇAĞLAR GENÇOSMAN B., mehmet b., ÖZMUTLU H. C.
ICAAMM-International Conference on Applied Analysis and Mathematical Modeling, 8 - 12 June 2015
- XVI. **An iterative mathematical programming algorithm for solving automotive stamping scheduling problem**
ÇAĞLAR GENÇOSMAN B., ÖZMUTLU H. C., beğen m.
ICAAMM-International Conference on Applied Analysis and Mathematical Modeling, 8 - 12 June 2015
- XVII. **Combined use of Constraint Programming and Mixed Integer Programming: A case study in Stamping Scheduling.**
ÇAĞLAR GENÇOSMAN B., YILMAZ EROĞLU D., Beğen M.
INTERNATIONAL CONFERENCE on BUSINESS, MANAGEMENT, ECONOMICS and FINANCE, 4 - 05 October 2013
- XVIII. **Performance comparison between Character N-gram and Levenshtein edit-distance for automatic**

topic identification in search engines

ÇAĞLAR GENÇOSMAN B., YILMAZ EROĞLU D., ÖZMUTLU H. C.

International Software Conference and Exhibition, 27 - 28 September 2013

XIX. Production Scheduling Using Constraint Programming

ÇAĞLAR GENÇOSMAN B., ÖZMUTLU H. C., Hnich B.

The 18th International Conference on Principles and Practice of Constraint Programming (CP'12), 8 - 12 October 2012, pp.1-6

XX. Factor Analysis and Response Surface Optimization for Copper Removal from Aqueous Solutions

ÇAĞLAR GENÇOSMAN B., ORBAK A. Y.

International Conference on Industrial Engineering and Operations Management, IEOM2012, İstanbul, Turkey, 3 - 06 July 2012

XXI. Automatic New Topic Identification in Search Engine Transaction Log Using Goal Programming

ÇAVDUR F., ÖZMUTLU S., ÖZMUTLU H. C., YILMAZ EROĞLU D., ÇAĞLAR GENÇOSMAN B.

Proceedings of the 2012 International Conference on Industrial Engineering and Operations Management, 3 - 06 July 2012

XXII. Endüstride Kullanılan Sulu Çözeltilerden Kadmiyum Ayrışımı için Faktör Analizi ve Cevap Yüzeyi Yöntemi Kullanımı

ÇAĞLAR GENÇOSMAN B., ORBAK A. Y., ORBAK İ.

Yöneylem Araştırması ve Endüstri Mühendisliği 32. Ulusal Kongresi (YAEM2012), İstanbul, Turkey, 20 - 22 June 2012, pp.112-113

XXIII. Açık Uçlu Araç Rotalama Probleminde Genetik Algoritma Yaklaşımı

ÇAĞLAR GENÇOSMAN B., YILMAZ EROĞLU D., ÇAVDUR F., ÖZMUTLU S., ÖZMUTLU H. C.

Yöneylem Araştırması ve Endüstri Mühendisliği 32. Ulusal Kongresi (YA/EM 2012), Turkey, 20 June 2012

XXIV. Statistical Procedures for Robotic Assembly Line Balancing Problems

ÇAĞLAR GENÇOSMAN B., ÖZMUTLU H. C., ORBAK A. Y., ÖZMUTLU S.

24th European Conference on Operational Research, EUROXXIV Lisbon 2010, Lisbon, Portugal, 11 - 14 July 2010, pp.166

Supported Projects

ÇAĞLAR GENÇOSMAN B., BEĞEN M. A., BARLINTI A. M., Project Supported by Higher Education Institutions, İki Boyutlu Kesme ve Paketleme Problemleri Çözümü için Matematiksel Programlama Kısıt Programlama Mantık Tabanlı Benders Ayrıştırma ve Matsezigisel Yöntemlerin Geliştirilmesi, 2024 - Continues

Çağlar Gençosman B., TUBITAK Project, Büyük Ölçekli İşletmeler için Web Tabanlı Önleyici Uyarı ve IOT Veri Analizi Özelliklerine Sahip MES Yazılımı Geliştirilmesi (1707 Siparişe Dayalı TÜBİTAK Ar-Ge Projesi), 2022 - 2023

Çağlar Gençosman B., TUBITAK Project, Raf Alanı Tahsisi ve Sergileme Probleminde Kısıt Programlama Ve Mantık-tabanlı Benders Ayrıştırma Yöntemlerinin Araştırılması (217M920), 2018 - 2020

İNKAYA T., ÇAĞLAR GENÇOSMAN B., TUBITAK Project, Montaj Hatlarında MTM Analizi ve Hat Dengeleme, 2015 - 2017

Çağlar Gençosman B., Gençosman F., TUBITAK Project, Adaptif Trafik Yönetimi Yazılımı Geliştirilmesi, 2015 - 2017

Metrics

Publication: 41

Citation (WoS): 26

Citation (Scopus): 34

H-Index (WoS): 4

H-Index (Scopus): 4

Non Academic Experience

Richard Ivey School of Business / The University of Western Ontario