

Prof. Dr. HALDUN SÜRAL

Kişisel Bilgiler

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Uluslararası Araştırmacı ID'leri

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ScopusID: 14421681700

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Biyografi

Haldun Süral is a faculty member at the IE Department of METU, Ankara, Turkey. He received his BS, MS, and PhD all from METU. His work experience includes teaching and research positions at METU, INSEAD (Fontainebleau, France), and UW and *WLU* (Waterloo, Canada). He is area editor of production planning and scheduling at INFOR: Information Systems and Operational Research, he is member of the past advisory board of OR Spectrum and he served at the editorial board of Turkish Journal of Industrial Engineering. He is past president of the OR Society of Turkey.

His applied research works range from beer forecasting and supply network design to restructuring a large humanitarian aid organization and waste management system design. Areas are Methodology, Modeling, and Applications in Operations Research; Production Planning and Scheduling; Logistics, Location, Distribution, and Routing; Facility Logistics; History of Operations Research in Turkey.

Eğitim Bilgileri

Doktora, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (Dr), Türkiye 1988 - 1996

Araştırma Alanları

Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Prof. Dr., Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2014 - Devam Ediyor

Akademik İdari Deneyim

Erasmus Koordinatörü, Orta Doğu Teknik Üniversitesi, 2018 - Devam Ediyor

Yönetilen Tezler

SÜRAL H., Order picking problem: its variations and integration, Doktora, S.SAYLAM(Öğrenci), 2022

SÜRAL H., The refugee camp framework: Methodology and modeling through systems view, Yüksek Lisans, E.NAZ(Öğrenci), 2022

SÜRAL H., Green logistics applications in transportation and warehousing, Doktora, A.ATASHI(Öğrenci), 2021

SÜRAL H., Şehir lojistiğinde yer seçimi rotalama ve senkronizasyon problemleri, Doktora, M.Saleh(Öğrenci), 2020

SÜRAL H., İnşaat sektöründe çap tahvilli stok kesme problemi, Yüksek Lisans, D.Altınpulluk(Öğrenci), 2019

SÜRAL H., Açık-döngü ters lojistik tehlikeli malzemeler dikkate alınarak elektrik ve elektronik ekipmanların atık ağı tasarımı, Yüksek Lisans, T.Mohammadi(Öğrenci), 2019

SÜRAL H., ÇELİK M., On the effect of freight villages in Turkey, Yüksek Lisans, A.METE(Öğrenci), 2018

SÜRAL H., ÇELİK M., Impact of demand uncertainty on facility layouts: distributed versus dynamic facility layouts, Yüksek Lisans, B.EFEOĞLU(Öğrenci), 2016

SÜRAL H., İYİGÜN C., City logistics system design under cost uncertainty, Yüksek Lisans, U.CAN(Öğrenci), 2015

SÜRAL H., BAKAL İ. S., The single-item lot sizing problem in SMT production lines, Yüksek Lisans, H.SERİN(Öğrenci), 2014

SÜRAL H., GÜREL S., Heterojen araçlı hava kuryesi çizelgeleme problemi, Yüksek Lisans, Y.Durdak(Öğrenci), 2013

SÜRAL H., Çizgi bariyer yerleştirme ile doğrusal engelleme sorunu, Yüksek Lisans, H.Gharehmeshk(Öğrenci), 2013

KIRCA Ö., SÜRAL H., Multi-layer network design problems in telecommunication, Doktora, İ.YÜKSEL(Öğrenci), 2013

SÜRAL H., The air cargo scheduling problem with heterogenous fleet, Yüksek Lisans, Y.DURDAK(Öğrenci), 2013

İYİGÜN C., SÜRAL H., Generalization of restricted planar location problems: Unified meta-heuristics for single facility case, Yüksek Lisans, M.SALEH(Öğrenci), 2013

SÜRAL H., Locations on a line and generalization to the dynamic p-medians, Doktora, H.GÜDEN(Öğrenci), 2012

GÜREL S., SÜRAL H., Heat exchanger network synthesis with detailed design: Reformulation as a shortest path problem by temperature discretization, Yüksek Lisans, İ.KIRKIZOĞLU(Öğrenci), 2012

SÜRAL H., The order-picking problem in parallel-aisle warehouses, Yüksek Lisans, M.ÇELİK(Öğrenci), 2009

SÜRAL H., The campaign routing problem, Yüksek Lisans, E.ÖZDEMİR(Öğrenci), 2009

SÜRAL H., Approximate models and solution approaches for the vehicle routing problem with multiple use of vehicles and time windows, Yüksek Lisans, J.WOUTER(Öğrenci), 2008

SÜRAL H., The multiple retailer inventory routing problem with backorders, Yüksek Lisans, O.ALİŞAN(Öğrenci), 2008

SÜRAL H., One-warehouse multi-retailer problem under inventory control and transportation policies, Doktora, O.SOLYALI(Öğrenci), 2008

KARASAKAL E., SÜRAL H., A genetic algorithm for the biobjective traveling salesman problem with profits, Yüksek Lisans, S.KARADEMİR(Öğrenci), 2008

KARASAKAL E., SÜRAL H., The biobjective traveling salesman problem with profit, Yüksek Lisans, Ö.ŞİMŞEK(Öğrenci), 2007

ÖZDEMİREL N. E., SÜRAL H., A genetic algorithm for TSP with backhauls based on conventional heuristics, Yüksek Lisans, İ.ÖNDER(Öğrenci), 2007

SÜRAL H., Modeling and analysis of the facility layout problem, Yüksek Lisans, Z.KIRKIZOĞLU(Öğrenci), 2006

SÜRAL H., Offline and online disk scheduling problems, Yüksek Lisans, N.EVREN(Öğrenci), 2006

SÜRAL H., The inventory routing problem with deterministic order-up-to level inventory policies, Yüksek Lisans, Ö.PINAR(Öğrenci), 2005

SÜRAL H., Sıraya bağlı hazırlıklar içeren genel parti büyüklüğü belirleme ve sıralama problemi, Yüksek Lisans, A.Koçlar(Öğrenci), 2005

SÜRAL H., The general lot sizing and scheduling problem with sequence dependent changeovers, Yüksek Lisans, A.KOÇLAR(Öğrenci), 2005

SÜRAL H., Analysis of an inventory system with advance demand information and supply uncertainty, Yüksek Lisans, E.ARIKAN(Öğrenci), 2005

SÜRAL H., Ön talep bilgisi ve rassal tedarik miktarı altında bir envanter sisteminin incelenmesi, Yüksek Lisans, E.Arikan(Öğrenci), 2005

SÜRAL H., An integrated inventory control and vehicle routing problem, Yüksek Lisans, O.SOLYALI(Öğrenci), 2005

SÜRAL H., Analysis of evolutionary algorithms for constrained routing problems, Yüksek Lisans, E.DEMİR(Öğrenci), 2004

AZİZOĞLU M., SÜRAL H., Scheduling with discounted revenues, Yüksek Lisans, A.KICIROĞLU(Öğrenci), 2003

SÜRAL H., ÖZDEMİREL N. E., An evolutionary approach to tsp: Crossover with conventional heuristics, Yüksek Lisans, M.Sönmez(Öğrenci), 2003

- ÖZDEMİREL N. E., SÜRAL H., An evolutionary approach to TSP: Crossover with conventional heuristics, Yüksek Lisans, M.SÖNMEZ(Öğrenci), 2003
- SÜRAL H., An iterative hub location and routing problem for postal delivery systems, Yüksek Lisans, S.ÇETİNER(Öğrenci), 2003
- SÜRAL H., Solution approaches for the two-level p-median problem, Yüksek Lisans, G.ŞAHİN(Öğrenci), 2002
- SÜRAL H., Heuristic algorithms for the routing problems with backhauls, Yüksek Lisans, Ö.DEMİREL(Öğrenci), 2001

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Arc routing based compact formulations for picker routing in single and two block parallel aisle warehouses**
Saylam S., Çelik M., SÜRAL H.
European Journal of Operational Research, cilt.313, sa.1, ss.225-240, 2024 (SCI-Expanded)
- II. **Energy minimizing order picker forklift routing problem**
Atashi Khoei A., Süral H., Tural M. K.
European Journal of Operational Research, cilt.307, sa.2, ss.604-626, 2023 (SCI-Expanded)
- III. **The min-max order picking problem in synchronised dynamic zone-picking systems**
Saylam S., Celik M., SÜRAL H.
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, cilt.61, sa.7, ss.2086-2104, 2023 (SCI-Expanded)
- IV. **Inventory routing in a warehouse: The storage replenishment routing problem**
Çelik M., Archetti C., SÜRAL H.
European Journal of Operational Research, cilt.301, sa.3, ss.1117-1132, 2022 (SCI-Expanded)
- V. **An Effective Metaheuristic for the Multivehicle Inventory Routing Problem**
Solyalı O., SÜRAL H.
Transportation Science, cilt.56, sa.4, ss.1044-1057, 2022 (SCI-Expanded)
- VI. **Multi-facility green Weber problem**
Atashi Khoei A., Süral H., Tural M. K.
Computers and Operations Research, cilt.113, 2020 (SCI-Expanded)
- VII. **Potential effects of logistics clusters: The case of Turkish Freight Villages**
Baydar A. M., SÜRAL H., Celik M.
JOURNAL OF CLEANER PRODUCTION, cilt.233, ss.399-411, 2019 (SCI-Expanded)
- VIII. **The dynamic p-median problem with mobile facilities**
Guden H., SÜRAL H.
COMPUTERS & INDUSTRIAL ENGINEERING, cilt.135, ss.615-627, 2019 (SCI-Expanded)
- IX. **Order picking in parallel-aisle warehouses with multiple blocks: complexity and a graph theory-based heuristic**
ÇELİK M., SÜRAL H.
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, cilt.57, sa.3, ss.888-906, 2019 (SCI-Expanded)
- X. **Generalization of the restricted planar location problems: Unified metaheuristic algorithms**
Farham M. S., SÜRAL H., İYİĞÜN C.
COMPUTERS & OPERATIONS RESEARCH, cilt.99, ss.48-66, 2018 (SCI-Expanded)
- XI. **A column generation approach for the location-routing problem with time windows**
Farham M. S., SÜRAL H., İYİĞÜN C.
COMPUTERS & OPERATIONS RESEARCH, cilt.90, ss.249-263, 2018 (SCI-Expanded)
- XII. **A hybrid Benders approach for coordinated capacitated lot-sizing of multiple product families with set-up times**
Bayley T., SÜRAL H., Bookbinder J. H.
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, cilt.56, sa.3, ss.1326-1344, 2018 (SCI-Expanded)
- XIII. **Time-dependent green Weber problem**
Khoei A. A., SÜRAL H., TURAL M. K.

- COMPUTERS & OPERATIONS RESEARCH, cilt.88, ss.316-323, 2017 (SCI-Expanded)
- XIV. **Freight villages: A literature review from the sustainability and societal equity perspective**
Baydar A. M., Sural H., ÇELİK M.
JOURNAL OF CLEANER PRODUCTION, cilt.167, ss.1208-1221, 2017 (SCI-Expanded)
- XV. **A multi-phase heuristic for the production routing problem**
Solyali O., Süral H.
COMPUTERS & OPERATIONS RESEARCH, cilt.87, ss.114-124, 2017 (SCI-Expanded)
- XVI. **A polynomial algorithm for the earthwork allocation problem with borrow and waste site selection**
Guden H., SÜRAL H.
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, cilt.68, sa.9, ss.1085-1093, 2017 (SCI-Expanded)
- XVII. **Effective network formulations for lot sizing with backlogging in two-level serial supply chains**
Solyali O., Denizel M., SÜRAL H.
IIE TRANSACTIONS, cilt.48, sa.2, ss.146-157, 2016 (SCI-Expanded)
- XVIII. **Order picking in a parallel-aisle warehouse with turn penalties**
ÇELİK M., SÜRAL H.
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, cilt.54, sa.14, ss.4340-4355, 2016 (SCI-Expanded)
- XIX. **The Weber problem in congested regions with entry and exit points**
Farham M. S., SÜRAL H., İYİĞÜN C.
COMPUTERS & OPERATIONS RESEARCH, cilt.62, ss.177-183, 2015 (SCI-Expanded)
- XX. **Locating mobile facilities in railway construction management**
Guden H., SÜRAL H.
OMEGA-INTERNATIONAL JOURNAL OF MANAGEMENT SCIENCE, cilt.45, ss.71-79, 2014 (SCI-Expanded)
- XXI. **Order picking under random and turnover-based storage policies in fishbone aisle warehouses**
Celik M., SÜRAL H.
IIE TRANSACTIONS, cilt.46, sa.3, ss.283-300, 2014 (SCI-Expanded)
- XXII. **The one-warehouse multi-retailer problem: reformulation, classification, and computational results**
Solyali O., SÜRAL H.
ANNALS OF OPERATIONS RESEARCH, cilt.196, sa.1, ss.517-541, 2012 (SCI-Expanded)
- XXIII. **A Branch-and-Cut Algorithm Using a Strong Formulation and an A Priori Tour-Based Heuristic for an Inventory-Routing Problem**
Solyali O., SÜRAL H.
TRANSPORTATION SCIENCE, cilt.45, sa.3, ss.335-345, 2011 (SCI-Expanded)
- XXIV. **Hubbing and routing in postal delivery systems**
Cetiner S., Sepil C., SÜRAL H.
ANNALS OF OPERATIONS RESEARCH, cilt.181, sa.1, ss.109-124, 2010 (SCI-Expanded)
- XXV. **The One-Warehouse Multiretailer Problem with an Order-Up-To Level Inventory Policy**
Solyali O., SÜRAL H., Denizel M.
NAVAL RESEARCH LOGISTICS, cilt.57, sa.7, ss.653-666, 2010 (SCI-Expanded)
- XXVI. **Lagrangian relaxation based heuristics for lot sizing with setup times**
SÜRAL H., Denizel M., Van Wassenhove L. N.
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, cilt.194, sa.1, ss.51-63, 2009 (SCI-Expanded)
- XXVII. **Equivalence of the LP relaxations of two strong formulations for the capacitated lot-sizing problem with setup times**
Denizel M., ALTEKİN F. T., SÜRAL H., Stadler H.
OR SPECTRUM, cilt.30, sa.4, ss.773-785, 2008 (SCI-Expanded)
- XXVIII. **A single supplier-single retailer system with an order-up-to level inventory policy**
Solyali O., SÜRAL H.
OPERATIONS RESEARCH LETTERS, cilt.36, sa.5, ss.543-546, 2008 (SCI-Expanded)
- XXIX. **Comment on Berman and Huang (2004): Minisum collection depots location problem reduces to the p-median problem**
Ozpeynirci O., Sueral H.

- JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, cilt.58, sa.10, ss.1395-1396, 2007 (SCI-Expanded)
- XXX. **A review of hierarchical facility location models**
Sahin G., Sural H.
COMPUTERS & OPERATIONS RESEARCH, cilt.34, sa.8, ss.2310-2331, 2007 (SCI-Expanded)
- XXXI. **Locational analysis for regionalization of Turkish Red Crescent blood services**
Sahin G., Sural H., Meral S.
COMPUTERS & OPERATIONS RESEARCH, cilt.34, sa.3, ss.692-704, 2007 (SCI-Expanded)
- XXXII. **On alternative mixed integer programming formulations and LP-based heuristics for lot-sizing with setup times**
Denizel M., Sural H.
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, cilt.57, sa.4, ss.389-399, 2006 (SCI-Expanded)
- XXXIII. **A knapsack model for bandwidth management of prerecorded multiple MPEG video sources**
Erten Y., Gullu R., Sural H.
TELECOMMUNICATION SYSTEMS, cilt.28, sa.1, ss.101-116, 2005 (SCI-Expanded)
- XXXIV. **A note on "The general lot sizing and scheduling problem"**
Koclar A., Sural H.
OR SPECTRUM, cilt.27, sa.1, ss.145-146, 2005 (SCI-Expanded)
- XXXV. **The single-vehicle routing problem with unrestricted backhauls**
Sural H., Bookbinder J.
NETWORKS, cilt.41, sa.3, ss.127-136, 2003 (SCI-Expanded)
- XXXVI. **Multidimensional assortment problem with an application**
Tripathy A., Sural H., Gerchak Y.
NETWORKS, cilt.33, sa.3, ss.239-245, 1999 (SCI-Expanded)
- XXXVII. **Efes Beverage Group makes location and distribution decisions for its malt plants**
Köksalan M., Sural H.
INTERFACES, cilt.29, sa.2, ss.89-103, 1999 (SCI-Expanded)
- XXXVIII. **A location-distribution application for a beer company**
Köksalan M., SÜRAL H., KIRCA Ö.
European Journal of Operational Research, cilt.80, sa.1, ss.16-24, 1995 (SSCI)

Diğer Dergilerde Yayınlanan Makaleler

- I. **SANTA FE-ENDONEZYA İÇİN ÇOK-SEFERLİ ARAÇ ROTALAMA PROBLEMİ İÇİN KURUCU BİR MAT-SEZGİSEL**
Wouter De Boer J., Çavdar B., Süral H.
ENDÜSTRİ MÜHENDİSLİĞİ, cilt.29, sa.3, ss.31-41, 2018 (Hakemli Dergi)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Energy Minimizing Forklift Routing Problem**
ATASHI KHOEI A., SÜRAL H., TURAL M. K.
1st EUROYoung Workshop, İspanya, 2 - 03 Mayıs 2019
- II. **Multi-facility Green Weber Problem**
Atashikhoei A., Süral H., Tural M. K.
2018 EURO Working Group Conference on Sustainable Supply Chains, Amsterdam, Hollanda, 6 - 07 Temmuz 2018, ss.11
- III. **The inventory routing problem in rectangular warehouses**
SÜRAL H., ÇELİK M., Archetti C.
8th International Workshop on Lot Sizing, Glasgow, Birleşik Krallık, 23 - 25 Ağustos 2017

- IV. **Lojistik Köyler Üzerine**
Baydar A. M., SÜRAL H., ÇELİK M.
37.Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, İstanbul, Türkiye, 5 - 07 Temmuz 2017
- V. **The Vaccination Campaign Routing Problem**
ÇELİK M., ÇAVDAR B., SÜRAL H.
2016 INFORMS Annual Meeting, Nashville, Amerika Birleşik Devletleri, 13 - 16 Kasım 2016
- VI. **Coordinated Capacitated Lot sizing For Multiple Product Families With Setup Times**
Bayley T., SÜRAL H., Bookbinder J.
2016 INFORMS Annual Meeting, Nashville, Amerika Birleşik Devletleri, 13 - 17 Kasım 2016
- VII. **Low Carbon Weber Problems**
Atashi Khoei A., TURAL M. K., SÜRAL H.
28th European Conference on Operational Research, Poznan, Polonya, 3 - 06 Temmuz 2016
- VIII. **Impact of Demand Stochasticity on Facility Layouts**
Efeoglu B., ÇELİK M., SÜRAL H.
28th European Conference on Operational Research, Poznan, Polonya, 3 - 06 Temmuz 2016
- IX. **Benders Decomposition for the Multi layer Telecommunication Network Design Problem**
Yüksel Ergun I., SÜRAL H., KIRCA Ö.
28th European Conference on Operational Research, Poznan, Polonya, 3 - 06 Temmuz 2016
- X. **The Two echelon Freight Transportation Network in City Logistics**
Farham M. S., SÜRAL H., İYİĞÜN C.
28th European Conference on Operational Research, Poznan, Polonya, 3 - 06 Temmuz 2016
- XI. **Low Carbon Weber Problem**
Atashi Khoei A., TURAL M. K., SÜRAL H.
28th European Conference on Operational Research, Poznan, Polonya, 3 - 06 Temmuz 2016
- XII. **The storage replenishment problem in rectangular warehouse**
SÜRAL H., Archetti C., ÇELİK M.
International Material Handling Research Colloquium, Karlsruhe, Almanya, 12 - 16 Haziran 2016
- XIII. **A Performance Measurement Framework and Solution Approach for the Integrated Facility Layout Problem with Uncertain Demand**
ÇELİK M., Efeoglu B., SÜRAL H.
International Material Handling Research Colloquium, Karlsruhe, Almanya, 12 - 16 Haziran 2016
- XIV. **A Genetic Algorithm for the Traveling Salesman Problem with Pickup and Delivery Using Depot Removal and Insertion Moves**
Cinar V., ÖNCAN T., SÜRAL H.
Evo Applications 2010 Conference, İstanbul, Türkiye, 7 - 09 Nisan 2010, cilt.6025, ss.431-433

Desteklenen Projeler

- ÇELİK M., ÇAVDAR B., SÜRAL H., Yükseköğretim Kurumları Destekli Proje, Gezici Proje Rotalama Problemi için Yenilikçi Çözüm Yaklaşımları, 2016 - 2016
- SÜRAL H., ÇELİK M., Yükseköğretim Kurumları Destekli Proje, Belirsizlik Altında Esnek Tesis Yerleşimi İçin Yenilikçi Yaklaşımlar, 2015 - 2015
- SÜRAL H., İYİĞÜN C., GÜREL S., Yükseköğretim Kurumları Destekli Proje, Şehir Lojistiği için Lisans Araştırmaları, 2014 - 2015

Metrikler

Yayın: 55

Atf (WoS): 773

Atıf (Scopus): 697

H-İndeks (WoS): 14

H-İndeks (Scopus): 15

Akademi Dışı Deneyim

Management Sciences, University of Waterloo

Industrial Engineering Department METU

Industrial Engineering Department, METU

School of Business and Economics, Wilfrid Laurier University

Management Sciences, University of Waterloo

Technology Management, Insead

Industrial Engineering Department, METU

System Sciences Research Centre, METU