Prof. ŞENER AKPINAR

Personal Information

Email: sener.akpinar@deu.edu.tr
Web: https://avesis.deu.edu.tr/sener.akpinar

International Researcher IDs
ScholarID: 9IhS1w8AAAAJ
ORCID: 0000-0001-8115-7330
Publons / Web Of Science ResearcherID: O-7141-2019
ScopusID: 55489939300
Yoksis Researcher ID: 119874

Education Information

Post Doctorate, University of Southampton, Southampton Business School, United Kingdom 2015 - 2016
Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (Dr), Turkey 2009 - 2013
Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (Yl) (Tezli), Turkey 2006 - 2009
Undergraduate, Dokuz Eylul University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 1999 - 2004

Dissertations

Doctorate, Modeling and solving mixed-model assembly line balancing problem with setups, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (Dr), 2013
Postgraduate, A hbyrid genetic algorithm for mixed-model assembly line balancing problem with parallel workstation assignment, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Endüstri Mühendisliği (Yl) (Tezli), 2009

Research Areas

Industrial Engineering

Academic Titles / Tasks

Professor, Dokuz Eylul University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2024 - Continues
Associate Professor, Dokuz Eylul University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2018 - 2024
Assistant Professor, Dokuz Eylul University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2013 - 2018
Research Assistant, Sivas Cumhuriyet University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2013 - 2013
Research Assistant, Dokuz Eylul University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2006 - 2013
Research Assistant, Sivas Cumhuriyet University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, 2005 - 2006

Courses

Doctorate
Ph.D. Seminar, Doctorate, 2023 - 2024, 2021 - 2022, 2020 - 2021

Ph.D. Research, Doctorate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Ph.D. Thesis, Doctorate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Postgraduate

M.Sc. Research, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

M.Sc. Thesis, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

M.Sc. Seminar, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Fundamentals of Optimization, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017

Lean Production Systems, Postgraduate, 2014 - 2015

Undergraduate

Bilgisayar Programlama Uygulamaları, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Bilgisayar Programlama, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015, 2013 - 2014

Introduction to Computational Intelligence, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Montaj ve Demontaj Sistemleri, Undergraduate, 2022 - 2023, 2021 - 2022, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015

Bilgisayar Programlama Uygulamaları, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015

Yönetim ve Organizasyon, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2013 - 2014

Kesikli Olay Sistemlerinin Modellenmesi ve Analizi, Undergraduate, 2013 - 2014

Supervised Theses

Akpınar Ş., Bir gerçek hayat otobüs servis sisteminin simülasyon modellemesi ve ortalama seyahat süresinin simülasyon entegre metasezgisel algoritmalarla optimizasyonu, Postgraduate, D.CAN(Student), 2022

Akpınar Ş., Montaj hattı işçi atama ve dengeleme problemi için bir sabitle ve optimize et algoritması, Postgraduate, A.AKPUNAR(Student), 2022

Akpınar Ş., Zaman pencereli ve toplamali ve daitimli araç rotalama problemi icin bir kurt optimizasyon algoritması, Postgraduate, M.FARAMARZZADEH(Student), 2022

Akpınar Ş., Alternatif altgrafik montaj hattı dengeleme problemi için bir çözüm yaklaşımı, Postgraduate, Ü.PALAMUT(Student), 2021

AKPINAR Ş., Tip-II montaj hattı dengeleme problemleri için bir adaptif büyük komşuluk arama algoritması, Postgraduate, H.ALİ(Student), 2021

AKPINAR Ş., Karşılanamayan talepli çoklu ürün envanter yerleşim rotalama problemi, Postgraduate, Ö.ŞATIR(Student), 2019

Advising Graduates (Non-Thesis)

Akpınar Ş., Sağlık Sektöründe Kaizen ve 5S Tekniklerinin Uygulanması , Masters (Non-Thesis,Evening Education), S.ÖZSEVİM(Student), 2022

Akpınar Ş., Optimum Personel Sayısının Belirlenmesi: Bir Endüstriyel Uygulama, Masters (Non-Thesis,Evening Education), M.BAŞPINAR(Student), 2021

Akpınar Ş., MATERIAL REQUEST SYSTEM DESIGN: AN INDUSTRIAL APPLICATION , Masters (Non-Thesis,Evening Education), Ö.ÇAM(Student), 2018

Akpınar Ş., ERGONOMİK RİSK DEĞERLENDİRME: BİR ENDÜSTRİYEL UYGULAMA , Masters (Non-Thesis,Evening Education), S.Merve(Student), 2018

Published journal articles indexed by SCI, SSCI, and AHCI

I. **A Novel Mathematical Model with Fairness Constraints for Uninterrupted Network Coverage in Disasters**
Şatır Akpunar Ö., Akpınar Ş.
JOURNAL OF NETWORK AND SYSTEMS MANAGEMENT, vol.33, no.2, pp.1-30, 2025 (SCI-Expanded)

II. **Machine learning of weighted superposition attraction algorithm for optimization diesel engine performance and emission fueled with butanol-diesel biofuel**
Veza I., Karaoğlan A. D., Akpinar Ş., Spraggon M., Idrıs M.
AIN SHAMS ENGINEERING JOURNAL, vol.15, no.12, pp.1-13, 2024 (SCI-Expanded)

III. **An ant colony optimization based hyper-heuristic for the mixed model assembly line balancing problem with setups**
Akpinar Ş.
SOFT COMPUTING, vol.28, no.21-22, pp.12587-12602, 2024 (SCI-Expanded)

IV. **A two-stage real world serial batching scheduling problem: a case study**
Karakütük S. S., Akpınar Ş., Örnek M. A.
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, vol.75, no.12, pp.2392-2403, 2024 (SCI-Expanded)

V. **Optimizing of Wear Performance on Elevated Temperature of ZrO2 Reinforced AMCs Using Weighted Superposition Attraction Algorithm**
Simsek D., Ozyurek D., Ileri E., AKPINAR Ş., Karaoglan D.
JOURNAL OF SCIENTIFIC & INDUSTRIAL RESEARCH, vol.81, no.5, pp.462-474, 2022 (SCI-Expanded)

VI. **An application of a circular economy approach to design an energy-efficient heat recovery system**
Karakutuk S. S., AKPINAR Ş., Ornek M. A.
JOURNAL OF CLEANER PRODUCTION, vol.320, 2021 (SCI-Expanded)

VII. **A hybrid adaptive large neighbourhood search algorithm for the capacitated location routing problem**
Akpunar O. S., AKPINAR Ş.
EXPERT SYSTEMS WITH APPLICATIONS, vol.168, 2021 (SCI-Expanded)

VIII. **Enhanced superposition determination for weighted superposition attraction algorithm**
BAYKASOĞLU A., AKPINAR Ş.
SOFT COMPUTING, vol.24, no.19, pp.15015-15040, 2020 (SCI-Expanded)

IX. **Solving combinatorial optimization problems with single seekers society algorithm**
Hamzadayı A., BAYKASOĞLU A., AKPINAR Ş.
KNOWLEDGE-BASED SYSTEMS, vol.201, 2020 (SCI-Expanded)

X. **Optimizing cetane improver concentration in biodiesel-diesel blend via grey wolf optimizer algorithm**
Ileri E., KARAOĞLAN A. D., AKPINAR Ş.
FUEL, vol.273, 2020 (SCI-Expanded)

XI. **Single Seekers Society (SSS): Bringing together heuristic optimization algorithms for solving complex problems**
BAYKASOĞLU A., Hamzadayı A., AKPINAR Ş.
KNOWLEDGE-BASED SYSTEMS, vol.165, pp.53-76, 2019 (SCI-Expanded)

XII. **Weighted Superposition Attraction (WSA): A swarm intelligence algorithm for optimization problems - Part 1: Unconstrained optimization**
BAYKASOĞLU A., AKPINAR Ş.
APPLIED SOFT COMPUTING, vol.56, pp.520-540, 2017 (SCI-Expanded)

XIII. **Combinatorial Benders cuts for assembly line balancing problems with setups**
AKPINAR Ş., Elmi A., Bektas T.
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, vol.259, no.2, pp.527-537, 2017 (SCI-Expanded)

XIV. **Hybrid large neighbourhood search algorithm for capacitated vehicle routing problem**
AKPINAR Ş.

EXPERT SYSTEMS WITH APPLICATIONS, vol.61, pp.28-38, 2016 (SCI-Expanded)

XV. **Weighted Superposition Attraction (WSA): A swarm intelligence algorithm for optimization problems - Part 2: Constrained optimization**
BAYKASOĞLU A., AKPINAR Ş.
APPLIED SOFT COMPUTING, vol.37, pp.396-415, 2015 (SCI-Expanded)

XVI. **Multiple colony bees algorithm for continuous spaces**
AKPINAR Ş., BAYKASOĞLU A.
APPLIED SOFT COMPUTING, vol.24, pp.829-841, 2014 (SCI-Expanded)

XVII. **Modeling and solving mixed-model assembly line balancing problem with setups. Part II: A multiple colony hybrid bees algorithm**
AKPINAR Ş., BAYKASOĞLU A.
JOURNAL OF MANUFACTURING SYSTEMS, vol.33, no.4, pp.445-461, 2014 (SCI-Expanded)

XVIII. **Performance evaluation of ant colony optimization-based solution strategies on the mixed-model assembly line balancing problem**
AKPINAR Ş., Bayhan G. M.
ENGINEERING OPTIMIZATION, vol.46, no.6, pp.842-862, 2014 (SCI-Expanded)

XIX. **Modeling and solving mixed-model assembly line balancing problem with setups. Part I: A mixed integer linear programming model**
AKPINAR Ş., BAYKASOĞLU A.
JOURNAL OF MANUFACTURING SYSTEMS, vol.33, no.1, pp.177-187, 2014 (SCI-Expanded)

XX. **Hybridizing ant colony optimization via genetic algorithm for mixed-model assembly line balancing problem with sequence dependent setup times between tasks**
AKPINAR Ş., Bayhan G. M., BAYKASOĞLU A.
APPLIED SOFT COMPUTING, vol.13, no.1, pp.574-589, 2013 (SCI-Expanded)

XXI. **A hybrid genetic algorithm for mixed model assembly line balancing problem with parallel workstations and zoning constraints**
AKPINAR Ş., Bayhan G. M.
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.24, no.3, pp.449-457, 2011 (SCI-Expanded)

Articles Published in Other Journals

I. **A hybrid metaheuristic based on the firefly and bat algorithms to solve the alternative subgraphs assembly line balancing problem**
Palamut Ü., Akpınar Ş.
PRODUCTION ENGINEERING, vol.18, pp.533-556, 2024 (ESCI)

II. **A GREY WOLF OPTIMIZER ALGORITHM FOR THE VEHICLE ROUTING PROBLEM WITH TIME WINDOWS AND SIMULTANEOUS PICK-UPS AND DELIVERIES**
Faramarzzadeh M., Akpınar Ş.
Endüstri Mühendisliği, vol.34, no.2, pp.141-160, 2023 (Peer-Reviewed Journal)

III. **A Firefly Algorithm for the Alternative Subgraphs Assembly Line Balancing Problem**
Palamut Ü., AKPINAR Ş.
Journal of Turkish Operations Management, vol.3, no.2, pp.290-297, 2019 (Peer-Reviewed Journal)

IV. **KARŞILANAMAYAN TALEPLİ ÇOKLU ÜRÜN ENVANTER YERLEŞİM VE ROTALAMA PROBLEMİ**
Akpunar Şatır Ö., AKPINAR Ş.
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.23, no.4, pp.177-192, 2018 (Peer-Reviewed Journal)

V. **Large neighbourhood search algorithm for type-II assembly line balancing problem**
AKPINAR Ş.
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.23, no.4, pp.444-450, 2017 (ESCI)

VI. **Emek Sürecinde Yeni Arayışlar**

AKPINAR T., AKPINAR Ş.

Çalışma ve Toplum, vol.4, no.47, pp.77-94, 2015 (Peer-Reviewed Journal)

Papers Published in Refereed Scientific Meetings

I. **Energy-constrained multi-drone covering tour problem with visit durations**
Şatır Akpunar Ö., Akpınar Ş., Bektaş T., İris Ç., Kasapidis G.
33rd European Conference on Operational Research (EURO 2024), Kobenhavn, Denmark, 30 June - 03 July 2024, pp.55

II. **A Simulated Annealing Based Fix-and-Optimize Algorithm for the Assembly Line Worker Assignment and Balancing Problem**
Akpunar A., Akpınar Ş.
International Conference on Applied Mathematics in Engineering (ICAME), Balıkesir, Turkey, 1 - 03 September 2021, pp.129

III. **A Grey Wolf Optimizer Algorithm for the Vehicle Routing Problem with Time Windows and Pick-ups and Deliveries**
Faramarzzadeh M., Akpınar Ş.
31st European Conference on Operational Research, Athens, Greece, 11 - 14 July 2021, pp.195

IV. **Kapasite Kısıtlı Araç Rotalama Problemi İçin Tabu Arama Optimizasyonu Tabanlı Bir Hipersezgisel Algoritma**
Üstün M., Akpınar Ş.
40. Yöneylem Araştırması - Endüstri Mühendisliği Kongresi, İstanbul, Turkey, 5 - 07 July 2021, pp.70

V. **A hybrid metaheuristic approach for solving vehicle routing problem with mixed pickup and delivery**
HAMZADAYI A., BAYKASOĞLU A., AKPINAR Ş.
International Conference on Data Science, Machine Learning and Statistics 2019 (DMS-2019), Van, Turkey, 26 - 29 June 2019, pp.70-72

VI. **Montaj Hattı Dengeleme Problemi için Karınca Kolonisi Optimizasyonu Tabanlı Bir Hiper-Sezgisel Algoritma**
AKPINAR Ş., İzel İ., Haspolat C., Aksay T., Cihat T.
39. Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Turkey, 12 - 14 June 2019

VII. **Alternatif Alt Grafikk Montaj Hattı Dengeleme Problemi için bir Ateşböceği Algoritması**
Palamut Ü., AKPINAR Ş.
39. Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Turkey, 12 - 14 June 2019

VIII. **Weighted Superposition Attraction Algorithm for Type-I Mixed-Model Assembly Line Balancing Problem**
AKPINAR Ş., BAYKASOĞLU A.
ISEOS 2018: 19th International Symposium on Econometrics, Operations Research and Statistics, 17 - 20 October 2018

IX. **Tip-II Basit Montaj Hattı Dengeleme Problemleri için Bir Adaptif Büyük Komşuluk Arama Algoritması**
Sönmez H. A., AKPINAR Ş.
38. Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi, Turkey, 26 - 29 June 2018

X. **KARŞILANAMAYAN TALEPLİ ÇOKLU ÜRÜN ENVANTER YERLEŞİM VE ROTALAMA PROBLEMİ**
ŞATIR Ö., AKPINAR Ş.
7. ULUSAL LOJİSTİK VE TEDARİK ZİNCİRİ KONGRESİ, Bursa, Turkey, 3 - 05 May 2018

XI. **Combinatorial Benders cuts for assembly line balancing problems with setups**
AKPINAR Ş., BEKTAŞ T., ELMI A.
International Symposium on Combinatorial Optimisation, 1 - 03 September 2016

XII. **İki Taraflı Rastsal Montaj Hattı Dengeleme Ve Bir İşletmeye Uygulanması**
FATMA SELEN K., ÖZBAKIR L., BAYKASOĞLU A., AKPINAR Ş.
YÖNEYLEM ARAŞTIRMASI VE ENDÜSTRİ MÜHENDİSLİĞİ 35. ULUSAL KONGRESİ, Turkey, 9 - 11 September 2015

XIII. **Tam Otomasyonlu Üretim Hattı Benzetimi Bir Uygulama**
AKPINAR Ş., AKPUNAR A., ŞATIR Ö.
Yöneylem Araştırması ve Endüstri Mühendisliği (YAEM) 35. Ulusal Kongresi, Turkey, 9 - 11 September 2015

XIV. **Analyzing Multi-server Queueing Model with no Waiting Line**
İŞGÜDER H. O., AKPINAR Ş., Elmi A., HAMZADAYI A., Köse Yelkenci S.
25th European Conference on Operational Research, 8 - 11 July 2012

XV. **Multi Criteria Comparison of Catering Service Companies Using Grey Relational Analysis The Case of Turkey**
HAMZADAYI A., SİMGE Y. K., AKPINAR Ş., ELMI A., İŞGÜDER H. O.
25th European Conference on Operational Research, 8 - 11 July 2012

XVI. **A Dynamic Scheduling Approach for Solving the Single Machine Total Weighted Tardiness Problem**
AKPINAR Ş., HAMZADAYI A., SİMGE Y. K., İŞGÜDER H. O., ELMI A.
25th European Conference on Operational Research, 08 July 1912 - 11 July 2012

XVII. **A Hybrid Differential Evolution with Simulated Annealing Algorithm for Flow Shop Scheduling**
Yelkenci Köse S., Elmi A., İŞGÜDER H. O., AKPINAR Ş., HAMZADAYI A.
13th INTERNATIONAL CONFERENCE ON ECONOMETRICS, OPERATIONS RESEARCH, AND STATISTICS, 24 - 26 May 2012

XVIII. **MILP Model for the Parallel Machine Scheduling Problem with Sequence dependent Setups and a Single Server**
ELMI A., SİMGE Y. K., İŞGÜDER H. O., AKPINAR Ş., HAMZADAYI A.
13th International Conference on Econometrics, Operations Research and Statistics, 24 - 26 May 2012

XIX. **Analysis of a Tandem Queue with Heterogeneous Servers Subject to Catastrophes**
İŞGÜDER H. O., AKPINAR Ş.
13th International Conference on Econometrics, Operations Research and Statistics, 24 - 26 May 2012

XX. **An Integer Linear Programming Model for Group Scheduling in Hybrid Flow Shops**
HAMZADAYI A., ELMI A., AKPINAR Ş., AFSHIN E.
4th International Conference of Iranian Operations Research Society, 18 - 19 May 2011

XXI. **Minimization of Total Tardiness on Unrelated Parallel Machines via Simulated Annealing**
AKPINAR Ş., HAMZADAYI A., ELMI A.
4th International Conference of Iranian Operations Research Society, 18 - 19 May 2011

XXII. **A Tabu Search Approach for the Flow Shop Group Scheduling Problem**
ELMI A., HAMZADAYI A., AKPINAR Ş., AFSHIN E.
4th International Conference of Iranian Operations Research Society, 18 - 19 May 2011

XXIII. **Petri Net Aided Scheduling of Manufacturing Systems A Comparison**
AKPINAR Ş., KARAOĞLAN A. D., GÜNHAN MİRAÇ B.
6th International Symposium on Intelligent and Manufacturing Systems, 14 - 17 October 2008

Activities in Scientific Journals

Journal Of Manufacturing Systems, Committee Member, 2017 - Continues

Metrics

Publication: 50
Citation (WoS): 666
Citation (Scopus): 775
H-Index (WoS): 11
H-Index (Scopus): 12