

Res. Asst. PhD BANU ÇALIŞ USLU

Personal Information

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Biography

Banu Çalış Uslu received the B.Eng. degree in Industrial Engineering from the Sakarya University in 2000, the M.Eng. degree in Engineering Management from the Institute of Pure and Applied Sciences, Marmara University, in 2008, and the Ph.D. degree in Industrial Engineering from the Institute of Pure and Applied Sciences, Marmara University, in 2015. She was a Postdoctoral Researcher at the Sheffield Hallam University from 20016 to 2017. Her research interests include optimization theory, simulation, scheduling, and IoT.

Education Information

Post Doctorate, Sheffield Hallam University, Materials and Engineering Research Institute, United Kingdom 2016 - 2017

Doctorate, Marmara University, Institute For Graduate Studies İn Pure And Applied Sciences, Department Of Industrial Engineering (Eng), Turkey 2008 - 2015

Postgraduate, Marmara University, Institute For Graduate Studies İn Pure And Applied Sciences, Department Of Engineering Management (Eng), Turkey 2005 - 2008

Undergraduate, Sakarya University, Faculty Of Engineering, Department Of Industrial Engineering, Turkey 1996 - 2000

Dissertations

Doctorate, COOPERATION & COORDINATION OF DISTRIBUTED INTELLIGENT AGENTS FOR MANUFACTURING SYSTEMS, Marmara Üniversitesi, Faculty of Engineering, Endüstri Mühendisliği Bölümü, 2015

Postgraduate, A General Framework for Multi-Agent Manufacturing Systems, Marmara Üniversitesi, Faculty of Engineering, Endüstri Mühendisliği Bölümü, 2008

Research Areas

Industrial Engineering , Stochastic Modeling, Optimization Theory and Methods, Simulation, Strategic planning

Academic Titles / Tasks

Research Assistant, Marmara University, Faculty Of Engineering, Industrial Engineering, 2005 - Continues

Courses

Process Management, Undergraduate, 2021 - 2022

Simulasyon ve Modelleme, Undergraduate, 2020 - 2021
Introduction to Operations Research, Undergraduate, 2020 - 2021
Bilimsel Araştırma ve Sunum Teknikleri, Undergraduate, 2019 - 2020
Operations Research I, Undergraduate, 2019 - 2020
Temel Bilgi Teknolojisi Kullanımı, Undergraduate, 2019 - 2020
Introduction to Simulation, Undergraduate, 2018 - 2019

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **The role of MAS interoperability for IoT applications: A survey on recent advances in manufacturing systems (in press)**
Çalış Uslu B.
Journal Of The Faculty Of Engineering And Architecture Of Gazi University, vol.1111, no.1111, pp.1-40, 2022
(Journal Indexed in SCI Expanded)
- II. **Analysis of factors affecting IoT-based smart hospital design**
Uslu B., Okay E., DURSUN E.
Journal of Cloud Computing, vol.9, no.1, 2020 (Journal Indexed in SCI)
- III. **A HEURISTIC APPROACH TO MINIMISING MAXIMUM LATENESS ON A SINGLE MACHINE**
Calis B., Bulkan S., Tuncer F.
SOUTH AFRICAN JOURNAL OF INDUSTRIAL ENGINEERING, vol.26, no.3, pp.41-53, 2015 (Journal Indexed in SCI)
- IV. **A research survey: review of AI solution strategies of job shop scheduling problem**
ÇALIŞ USLU B., BULKAN S.
JOURNAL OF INTELLIGENT MANUFACTURING, vol.26, no.5, pp.961-973, 2015 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Discrete Event Simulation Model Performed with Data Analytics for a Call Center Optimization**
Serper N. G. , Şen E., Çalış Uslu B.
Istanbul Business Research, vol.51, no.1, pp.1-20, 2022 (Journal Indexed in ESCI)
- II. **Customer churn prediction analysis in a telecommunication company with machine learning algorithms**
Uyar Erdem Z., Çalış Uslu B., Fırat S. Ü.
Journal of Industrial Engineering, vol.32, no.3, pp.496-512, 2021 (Refereed Journals of Other Institutions)
- III. **A review of simulation studies in healthcare: emergency service applications**
Kuyumcu A. D. , Çalış Uslu B.
Journal of Design, Architecture and Engineering, vol.3, no.1, pp.148-162, 2021 (International Refereed University Journal)
- IV. **A Comprehensive Assessment of Agile and Classic Software Development Methodologies in Turkey**
Çalışkan D., Yavuz A. F. , Doğan B., Çalış Uslu B.
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.10, no.1, pp.149-159, 2021 (National Refreed University Journal)
- V. **CAPABILITY MODEL AND COMPETENCE MEASURING FOR SMART HOSPITALSYSTEM: AN ANALYSIS FOR TURKEY**
ÇALIŞ B.
International Journal of Health Services Research and Policy, vol.5, no.1, pp.41-50, 2020 (Refereed Journals of Other Institutions)
- VI. **Big Data Analytics and Simulation for Better Strategic Management**
Şen E., Körük E., Serper N., Çalış B.
Journal of Current Researches on Engineering, Science and Technology, vol.5, no.2, pp.1-12, 2019 (Refereed Journals of Other Institutions)

- VII. **Agent Based Simulation Model for Profit Maximization**
ÇALIŞ B.
Journal of Military and Information Science, vol.4, pp.26-33, 2016 (Refereed Journals of Other Institutions)
- VIII. **EFFICIENCY MEASURES IN THE HEALTHSERVICES WITH DEA AN OVERVIEW**
ÇALIŞ B., Nilgün G., Hakan T.
Journal of Naval Science and Engineering, vol.6, pp.1-14, 2010 (Refereed Journals of Other Institutions)

Books & Book Chapters

- I. **Efficient Data Transmission and Remote Monitoring System for IoT Applications**
Farhan L., MaanAbdulsattar F., Alzubaidi L., Fadhel M. A. , ÇALIŞ USLU B., Al-Amidie M.
in: Smart Healthcare System Design: Security and Privacy Aspects, SK Hafizul Islam, Debabrata Samanta, Editor, Scrivener Publishing Wiley, Beverly, pp.235-261, 2021
- II. **Knowledge Management Strategies for Higher Education**
Çalış B., Doğan B., Yıldız K., Baş A., Demir Ö., Ülkü E. E.
in: Enhancing Academic Research and Higher Education With Knowledge Management Principles, Suzanne Zyngier, Editor, IGI GLOBAL, Sydney, pp.1-10, 2021
- III. **A Comprehensive Study on Internet of Things Based on Key Artificial Intelligence Technologies and Industry 4.0**
Çalış B., Fırat S. Ü.
in: Advanced Metaheuristic Methods in Big Data Retrieval and Analytics, Baghdad Atmani vd., Editor, IGI Global, Arizona, pp.1-26, 2019
- IV. **Paydaş Analizi**
Yıldız Şen M. L. , Bakoğlu R., Öncer A. Z. , Çalış Uslu B.
in: Üniversitelerin Strateji Geliştirme Süreci ve Uygulamalı Durum Analizleri, Refika Bakoğlu, Müge Leyla Yıldız, Editor, Beta Basım Yayım Dağıtım, İstanbul, pp.45-65, 2016

Refereed Congress / Symposium Publications in Proceedings

- I. **A Review of Heuristic Approaches to Vehicle Routing Problems**
BÜYÜKÖZDEMİR K., YILDIZ K., BAŞ A., ÇALIŞ USLU B.
IEEE CSDE 2021, Asia-Pacific Conference on Computer Science and Data Engineering 2021, Brisbane, Australia, 08 December 2021
- II. **SUPPLY CHAIN RISK MANAGEMENT: A LITERATURE REVIEW ON DEFINITION, THEORY, AND THE ROLE OF SIMULATION AND EXISTING OPTIMIZATION METHODS**
Topcu G., Çağıl ., Susoy Y., Çalış Uslu B.
19th Logistic and Supply Chain Congress, Gaziantep, Turkey, 21 - 22 October 2021, pp.401-415
- III. **Vehicle Route Optimization for Solid Waste Management: A Case Study of Maltepe, Istanbul**
Şahin Akdaş H., DEMİR Ö., DOĞAN B., BAŞ A., ÇALIŞ USLU B.
13th International Conference on Electronics, Computers and Artificial Intelligence, Pitesti, Romania, 01 July 2021
- IV. **Evsel Katı Atık Miktarının Üstel Düzeltme Yöntemi ve Yapay Sinir Ağları Modelleri İle Tahmini: İstanbul İline Yönelik Bir Uygulama**
Akgul M., Kalayci E. E. , DOĞAN B., ÇALIŞ B.
2020 Innovations in Intelligent Systems and Applications Conference (ASYU), Istanbul, Turkey, Turkey, 15 - 17 October 2020
- V. **A Comparative Study of PCA and LBP for Face Recognition Under Illumination Variations**
Erol M. K. , Kapan U. A. , Ozturk M. K. , Çalış B., Baş A.
2020 Innovations in Intelligent Systems and Applications Conference (ASYU), İstanbul, Turkey, 15 - 17 October 2020

- VI. **An Integrated Model for Sustainable Procurement Management**
ÇALIŞ B.
International Symposium on Engineering Natural Sciences and Architecture, Kocaeli, Turkey, 2 - 04 May 2019, pp.326-332
- VII. **Effects of Decision Levels for Management of the Operating Theatre Scheduling Problem**
ÇALIŞ B., Perera T.
Engineering and Technology Management Summit 2018, İstanbul, Turkey, 4 - 05 October 2018, pp.71-82
- VIII. **Goal Directed Supplier Selection Model: An Agent Based Architecture**
ÖZTEMEL E., ÇALIŞ B.
7th International Conference on Recent Trends in Science, Engineering and Technology (RTSET-2017), Londrina, United Kingdom, 26 - 27 June 2017, pp.23-36
- IX. **PROFIT BASED SCHEDULING USING AGENT BASED ARCHITECTURE A Single Machine Problem**
ÇALIŞ B.
International Conference on Value Chain Sustainability, İstanbul, Turkey, 12 - 13 March 2015
- X. **A Research Survey: Application Of AI Strategies For Optimal Production Scheduling” 27 September - Antalya**
ÇALIŞ B., BULKAN S.
8th International Symposium on Intelligent and Manufacturing Systems, Antalya, Turkey, 27 December 2012
- XI. **Future Engineering Education**
Çalış B., Er Kara M.
The International Higher Education Congress: New Trends and Issues (UYK-2011), İstanbul, Turkey, 27 May 2011, pp.1915-1922
- XII. **Applicability of Process Control Techniques in PET Strapping Production Process**
ÇALIŞ B., ŞENVAR Ö., Çiğdem B. T. , FIRAT S. Ü.
Yöneylem Araştırması ve Endüstri Mühendisliği 30. Ulusal Kongresi, İstanbul, Turkey, 30 June - 02 July 2010
- XIII. **Application of Process Control Techniques in PET Strapping Production Process**
ÇALIŞ B., Turğut B. T. , ŞENVAR Ö., FIRAT S. Ü.
Yöneylem Araştırması ve Endüstri Mühendisliği 30. Ulusal Kongresi'ni (YAEM 2010), İstanbul, Turkey, 30 June - 02 July 2010, pp.353
- XIV. **Role of Information Systems in Multi Agent Architecture**
ÖZTEMEL E., ÇALIŞ B.
6th International Symposium on Intelligent and Manufacturing Systems, Sakarya, Turkey, 14 - 17 October 2008
- XV. **Gelecekte İmalat Sistemleri ve Manufuture**
ÖZTEMEL E., ÇALIŞ B.
Yöneylem Araştırması ve Endüstri Mühendisliği 27. Ulusal Kongresi, İzmir, Turkey, 2 - 04 July 2007

Supported Projects

Çalış Uslu B., Dursun E., United Nations Development Program - UNDP Supported Project, SMART FACILITIES FOR HEALTH SYSTEMS SOLUTIONS, 2022 - 2022

Çalış Uslu B., Project Supported by Other Private Institutions, IoMT Tabanlı Mekanik Üretim Çizelgeleme Modeli Geliştirilmesi, 2022 - 2022

Çalış Uslu B., Demir Ö., Doğan B., Yıldız K., Baş A., Ülkü E. E. , Newton Programme Project, Location optimisation of underground and aboveground containers and development of a dynamic, intelligent and sustainable scheduling for solid waste collection in urban areas: A case study of Maltepe Municipality, 2020 - 2021

Citations

Total Citations (WOS):96

h-index (WOS):2

Awards

Çalış Uslu B., Honorary Rosalind Member of London Journals Press, London Journals Press, August 2020