

## **Assoc. Prof. MEHMET ERTEM**

### **Personal Information**

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### **International Researcher IDs**

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Publons / Web Of Science ResearcherID: AAB-7677-2020

ScopusID: 56559726300

Yoksis Researcher ID: 257099

### **Education Information**

Post Doctorate, University of Illinois at Urbana-Champaign, United States Of America 2014 - 2015

Doctorate, University Of Wisconsin, Endüstri Mühendisliği, United States Of America 2009 - 2014

Undergraduate, Istanbul Technical University, İşletme Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 2001 - 2006

### **Foreign Languages**

English, C2 Mastery

### **Dissertations**

Doctorate, A Stochastic Network Interdiction Model For Cyber Security, University of Wisconsin - Madison, 2014

### **Research Areas**

Stochastic Modeling, Optimization Theory and Methods, Production Planning and Control, Decision Theory

### **Academic Titles / Tasks**

Assistant Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, ENDÜSTRİ MÜHENDİSLİĞİ BÖLÜMÜ, 2016 - Continues

### **Courses**

Kesikli Sistemler, Undergraduate, 2017 - 2018

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

1. Renewable Energy-Aware Machine Scheduling Under Intermittent Energy Supply

- ERTEM M.  
IEEE ACCESS, vol.12, pp.23613-23625, 2024 (SCI-Expanded)
- II. **Unrelated parallel machine scheduling problem with stochastic sequence dependent setup times**  
Saraç T., Özçelik F., Ertem M.  
Operational Research, vol.23, no.3, 2023 (SCI-Expanded)
- III. **Workers-constrained shutdown maintenance scheduling with skills flexibility: Models and solution algorithms**  
ERTEM M., As'ad R., Awad M., Al-Bar A.  
COMPUTERS & INDUSTRIAL ENGINEERING, vol.172, 2022 (SCI-Expanded)
- IV. **A stochastic approach for the single-machine scheduling problem to minimize total expected cost with client-dependent tardiness costs**  
ÖZÇELİK F., ERTEM M., SARAÇ T.  
ENGINEERING OPTIMIZATION, vol.54, no.7, pp.1178-1192, 2022 (SCI-Expanded)
- V. **Single machine scheduling problem with stochastic sequence-dependent setup times**  
ERTEM M., ÖZÇELİK F., SARAÇ T.  
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH, vol.57, no.10, pp.3273-3289, 2019 (SCI-Expanded)
- VI. **Data-theoretic methodology and computational platform to quantify organizational factors in socio-technical risk analysis**  
Pence J., Sakurahara T., Zhu X., Mohaghegh Z., ERTEM M., Ostroff C., Kee E.  
RELIABILITY ENGINEERING & SYSTEM SAFETY, vol.185, pp.240-260, 2019 (SCI-Expanded)
- VII. **Methodology to evaluate the monetary benefit of Probabilistic Risk Assessment by modeling the net value of Risk-Informed Applications at nuclear power plants**  
Pence J., Abolhelm M., Mohaghegh Z., Reihani S., ERTEM M., Kee E.  
RELIABILITY ENGINEERING & SYSTEM SAFETY, vol.175, pp.171-182, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. **INVESTIGATION OF THE EFFECT OF SPEED CHANGE IN MACHINES ON SUSTAINABILITY: A MATHEMATICAL MODEL**  
ÖZÇELİK F., SARAÇ T., ERTEM M.  
Endüstri Mühendisliği, vol.35, no.1, pp.115-135, 2024 (Peer-Reviewed Journal)
- II. **Optimal defense strategies against intelligent cyber attacks**  
ERTEM M., Bier V.  
Journal of innovative engineering and natural science (Online), vol.4, no.1, pp.245-262, 2024 (Peer-Reviewed Journal)
- III. **Siber ağların risk analizi: Saldırısı-savunma ağaçlarıyla temellendirilmiş niceliksel bir yaklaşım**  
Ertem M., Özçelik İ.  
Journal of innovative engineering and natural science (Online), vol.4, no.1, pp.113-125, 2023 (Peer-Reviewed Journal)
- IV. **PARALEL İŞLEMCİLİ ESNEK AKIŞ ATÖLYESİ ÇİZELGELEME PROBLEMLERİ İÇİN STOKASTİK ÇÖZÜM YAKLAŞIMI**  
Ertem M., Sağır M.  
Endüstri Mühendisliği, vol.34, pp.69-90, 2023 (Peer-Reviewed Journal)
- V. **Using attack graphs to defend healthcare systems from cyberattacks: a longitudinal empirical study**  
Unozkan H., Ertem M., Bendak S.  
NETWORK MODELING AND ANALYSIS IN HEALTH INFORMATICS AND BIOINFORMATICS, vol.11, no.1, 2022 (ESCI)
- VI. **Bir Savunma Sanayi Firmasında Depo Bölgesi Atama Sisteminin Veri Madenciliği ve Makine Öğrenme Yaklaşımlarıyla İyileştirilmesi**  
Ertem M.  
Avrupa Bilim ve Teknoloji Dergisi, no.34, 2022 (Peer-Reviewed Journal)

## VII. Stokastik İlişkisiz Paralel Makine Çizelgeleme Problemi için bir Matematiksel Model

Ertem M., Özçelik F., Saraç T.

Avrupa Bilim ve Teknoloji Dergisi, vol.29, pp.278-283, 2021 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **A mathematical model for stochastic unrelated parallel machine scheduling problem**  
ERTEM M., ÖZÇELİK F., SARAÇ T.  
5th International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2021, 21 October 2021
- II. **Convergence analysis study to determine required number of scenarios to represent uncertainty of sequence dependent setup times for machine scheduling problem**  
ERTEM M., SARAÇ T., ÖZÇELİK F.  
International Conference on Applied Analysis and Mathematical Modeling, ICAAMM18, İstanbul, Turkey, 20 - 24 June 2018
- III. **A genetic algorithm for solving stochastic single machine scheduling problem**  
ÖZÇELİK F., ERTEM M., SARAÇ T.  
XIII Balkan Conference on Operational Research (BALCOR 2018), Belgrade, Serbia, 25 - 28 May 2018
- IV. **Reliability Analysis of Logistics Network under Period Based Resource Allocations**  
Ndiaye M., ERTEM M.  
IEEE International Conference on Technology Management, Operations and Decisions (ICTMOD), Marrakech, Morocco, 21 - 23 November 2018, pp.257-261
- V. **A two-stage stochastic programming approach for stochastic single machine scheduling problem**  
ERTEM M., SARAÇ T., ÖZÇELİK F.  
International Conference on Applied Analysis and Mathematical Modeling, İstanbul, Turkey, 3 - 07 July 2017
- VI. **Stochastic scheduling of workforce-constrained preventive maintenance activities in petroleum plants**  
AWAD M., ERTEM M.  
2017 Annual Reliability and Maintainability Symposium (RAMS), 23 - 26 January 2017
- VII. **Analyzing Importance Measure Methodologies for Integrated Probabilistic Risk Assessment in Nuclear Power Plants**  
SAKURAHARA T., Reihani S., ERTEM M., Mohaghegh Z., Kee E.  
PSAM12 - Probabilistic Safety Assessment and Management, 22 - 27 June 2014

## Supported Projects

SAĞIR M., ERTEM M., Project Supported by Higher Education Institutions, Sıra Bağımlı Stokastik Hazırlık Süreli, Çok Katmanlı Paralel İşlemcili Akış Atölyelerinde Çizelgeleme Problemi için Bir Çözüm Yaklaşımı Geliştirilmesi, 2019 - 2023

## Metrics

Publication: 22

Citation (WoS): 46

Citation (Scopus): 72

H-Index (WoS): 3

H-Index (Scopus): 5