

# EMRE KOÇAK

## RES. ASST. PHD

Email : emrekocak@gazi.edu.tr

International Researcher IDs

ScholarID: de7ot6YAAAAJ

ORCID: 0000-0001-6686-9671

Publons / Web Of Science ResearcherID: ABE-7683-2021

ScopusID: 57410166300

Yoksis Researcher ID: 267764



### Learning Knowledge

Doctorate  
2020 - 2024

Gazi University, Fen Bilimleri Enstitüsü, İstatistik (Dr), Turkey

Postgraduate  
2017 - 2019

Gazi University, Fen Bilimleri Enstitüsü, İstatistik (YI) (Tezli), Turkey

Undergraduate  
2012 - 2016

Selcuk University, Faculty Of Science, Department Of Statistics, Turkey

### Dissertations

Doctorate, Sınıflandırma Problemlerinde Özellik Seçimi için Geliştirilen Modifiye Edilmiş Parçacık Sürü Optimizasyonu Algoritması, Gazi University, Fen Bilimleri Enstitüsü, 2024

Postgraduate, Türkiye'deki devlet üniversitelerinin performanslarının iki aşamalı veri zarflama analizi ile incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, 2019

### Academic Titles / Tasks

Research Assistant  
2017 - Continues

Gazi University, Fen Fakültesi, İstatistik

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

- Particle swarm optimization based feature selection using factorial design**  
Koçak E., Örkücü H. H.  
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.53, no.3, pp.879-896, 2024 (SCI-Expanded)
- Towards net zero emissions target: Energy modelling of the transport sector in Türkiye**  
Dönmezçelik O., KOÇAK E., ÖRKÜ H. H.  
ENERGY, vol.279, 2023 (SCI-Expanded)
- A multi-objective programming approach to Weibull parameter estimation**  
KOÇAK E., DEMİR YURTSEVEN E., ÖRKÜ H. H.  
HACETTEPE JOURNAL OF MATHEMATICS AND STATISTICS, vol.51, no.2, pp.543-558, 2022 (SCI-Expanded)

4. **A multi-objective programming-based approach to material life prediction: Weibull distribution application**  
KOÇAK E., ÖRKÜ H. H.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.37, no.4, pp.1783-1792, 2022 (SCI-Expanded)

## Articles Published in Other Journals

1. **Modeling of wind speed using differential evolution: Istanbul case**  
Koçak E., Özsoy V. S., Örkü H. H.  
SIGMA JOURNAL OF ENGINEERING AND NATURAL SCIENCES-SIGMA MUHENDISLIK VE FEN BILIMLERI DERGISI, vol.42, no.3, pp.642-652, 2024 (ESCI)
2. **The parameter estimation of the COVID-19 death based on the Gumbel distribution through the multi-objective programming: Turkey case**  
Demir Yurtseven E., Koçak E., Örkü H. H.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.37, no.4, pp.1, 2024 (ESCI)
3. **Influence of Finishing Procedures on Surface Roughness and Biaxial Flexural Strength of High-translucent 4Y-PSZ, 5Y-PSZ, and 6Y-PSZ Monolithic Zirconia**  
Doğru G., Demiralp E., Koçak E., Örkü H. H., Aydın P. D. C., Yılmaz H.  
CLINICAL AND EXPERIMENTAL HEALTH SCIENCES, no.1, pp.166-175, 2023 (ESCI)
4. **Energy Modeling of Türkiye Road and Rail Transport Towards Net Zero Emissions Target (2025-2050)**  
Dönmezçelik O., Koçak E., Örkü H. H.  
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, 2023 (ESCI)
5. **Measuring the Efficiency of Turkish State Universities Based on a Two-Stage DEA Model**  
KOÇAK E., ÖRKÜ H. H.  
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.34, no.4, pp.1210-1220, 2021 (ESCI)
6. **Parametre Tahmininde Farklı Doğrusal Programlama Modellerinin Karşılaştırılması**  
Koçak E., Örkü H. H.  
Gazi Üniversitesi Fen Fakültesi Dergisi (GÜFFD), vol.1, pp.22-35, 2020 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **Yapay Zeka Temelli Optimizasyon Matlab ve Python Uygulamalarıyla**  
Örkü H. H., Özsoy V. S., Koçak E.  
Seçkin Yayıncılık, Ankara, 2024
2. **Yöneylem Araştırması**  
Örkü H. H., Özsoy V. S., Koçak E.  
Seçkin Yayıncılık San. ve Tic. A.Ş., Ankara, 2024
3. **Türkiye'de Bulunan Havalimanı Performanslarının İki Aşamalı Veri Zarflama Analizi İle İncelenmesi**  
ÖRKÜ H. H., KOÇAK E.  
in: Verimlilik Ölçümünde Güncel Yaklaşımlar, Koçak Deniz, Editor, Adalet Yayınevi, Ankara, pp.63-73, 2021

## Refereed Congress / Symposium Publications in Proceedings

1. **Havalimanları Performanslarının Malmquist Endeksi İle İncelenmesi**  
TÜZÜNER Z., KOÇAK E., BAL H.  
3.Uluslararası Akademik Öğrenci Çalışmaları Kongresi, 14 - 15 November 2019

2. **KABA DOĞUM ORANLARI İÇİN MEKÂNSAL ANALİZ YÖNTEMLERİ**  
KOÇAK E., TÜZÜNER Z., BAL H.  
3. ULUSLARARASI AKADEMİK ÖĞRENCİ ÇALISMALARI KONGRESİ, Ankara, Turkey, 14 - 15 November 2019
3. **Evaluating the Performance of State Universities in Turkey With Two-Stage Data Envelopment Analysis**  
KOÇAK E., BAL H.  
International Symposium on Academic Studies in Science, Engineering and Architecture Studies, Ankara, Turkey, 13 - 15 June 2019, pp.53-61
4. **Comparison of DEA models for the performance evaluation of the world'xxs top D investing companies the Automobiles Parts Industry**  
BAL H., ÖZSOY V. S., KOÇAK E.  
IV. International Congress on Social and Economic Sciences, Budapest, Hungary, 26 - 30 November 2018, pp.20-25
5. **Evaluation of the Life Index Based on Data Envelopment Analysis: Quality of Life Indexes of Turkey**  
ÖZSOY V. S., KOÇAK E.  
10th International Statistics Congress, 6 - 08 December 2017, pp.126
6. **SORTING OF DECISION MAKING UNITS USING MCDM THROUGH THE WEIGHTS OBTAINED WITH DEA**  
KOÇAK E., TÜZÜNER Z.  
10th International Statistics Congress, 6 - 08 December 2017
7. **Efficiency And Spatial Regression Analysis Related To Illiteracy Rate**  
TÜZÜNER Z., KOÇAK E.  
10th International Statistics Congress, 6 - 08 December 2017
8. **The Health Performances of the Turkey Cities by the Mixed Integer DEA Models**  
TÜZÜNER Z., ÖRKÜ H. H., BAL H., ÖZSOY V. S., KOÇAK E.  
10th International Statistics Congress, 6 - 08 December 2017, pp.130
9. **SPATIAL INTERACTION ANALYSIS RELATED TO INSTITUTIONAL LITERACY RATE PERFORMANCE**  
TÜZÜNER Z., KOÇAK E.  
International Conference On Computational and Statistical Methods in Applied Sciences, 9 - 11 November 2017
10. **RANKING OF EFFICIENT DECISION MAKING UNITS USING TOPSIS VIA OBJECTIVE WEIGHTS**  
KOÇAK E., BAL H.  
International Conference on Computational and Statistical Methods in Applied Sciences, 9 - 11 November 2017
11. **Measuring the Efficiency of OECD Countries In Terms Of Environmental Performance**  
KOÇAK E., YAPICI PEHLİVAN N.  
3rd International Researchers, Statisticians and Young Statisticians Congress, Konya, Turkey, 24 - 26 May 2017, pp.280

## Courses

Olasılık ve İstatistik, Undergraduate, 2024 - 2025  
Dış Hekimliği İçin İstatistik Uygulamaları, Undergraduate, 2024 - 2025  
Elektronik Tablolar, Undergraduate, 2024 - 2025

## Metrics

Publication: 24  
Citation (WoS): 5  
Citation (Scopus): 7  
H-Index (WoS): 2  
H-Index (Scopus): 2

## Research Areas

Statistics, Statistical Analysis and Applications