

## Asst. Prof. FATMA ÖZGE ÖZKÖK

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAU-9124-2021

ScopusID: 57200860271

Yoksis Researcher ID: 215746

### Education Information

Postgraduate, Erciyes University, İktisadi Ve İdari Bilimler Fak., İşletme, Turkey 2021 - 2024

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, Turkey 2016 - 2021

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, Turkey 2014 - 2016

Undergraduate, Anadolu University, Faculty Of Business Administration, İşletme, Turkey 2011 - 2015

Undergraduate Double Major, Erciyes University, Mühendislik Fakültesi, Biyomedikal Mühendisliği, Turkey 2012 - 2014

Undergraduate, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey 2009 - 2014

### Certificates, Courses and Trainings

Data Analysis, Kuramsaldan Uygulamaya Yapay Öğrenmede Güncel Teknikler, Sabancı Üniversitesi, 2023

Data Analysis, 2nd Social ComQuant Summer School in Computational Social Sciences, Koç Üniversitesi, 2022

IT, Yapay Öğrenme Kış Okulu, Koç Üniversitesi, 2020

IT, Kuzeybatıda Yapay Öğrenme Yaz Okulu, Koç Üniversitesi, 2019

IT, IBM Big Data Engineer, IBM Türkiye, 2018

Education Management and Planning, Boğaz'da Yapay Öğrenme İsmail Arı Yaz Okulu, Boğaziçi Üniversitesi, 2018

Education Management and Planning, Veri Bilimi Yaz Okulu, VBYO, Boğaziçi Üniversitesi, 2017

Education Management and Planning, İsmail Arı Bilgisayar Bilimleri ve Mühendisliği Bilimsel Eğitim Etkinliği, Boğaziçi Üniversitesi, 2017

Education Management and Planning, Bozkırda Yapay Öğrenme Yaz Okulu, Hacettepe Üniversitesi, 2017

Education Management and Planning, İsmail Arı Bilgisayar Bilimleri ve Mühendisliği Bilimsel Eğitim Etkinliği, Boğaziçi Üniversitesi, 2015

IT, Microsoft Yaz Okulu, Microsoft, 2013

### Dissertations

Doctorate, Yüksek çözünürlüklü erime eğrilerinin sınıflandırılması için derin öğrenme tabanlı yöntemlerin geliştirilmesi, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2021

Postgraduate, Gıdalarda Bozulmaya Neden Olan Maya Türlerinin Belirlenmesi İçin Veri Madenciliği Tekniklerinin Geliştirilmesi, Erciyes Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2016

## Research Areas

Engineering and Technology

## Academic Titles / Tasks

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2022 - Continues

Research Assistant PhD, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2021 - 2022

Research Assistant, Erciyes University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2014 - 2021

## Courses

Electrical Circuits, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022

Design Project, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023

Bilimsel Hesaplama, Undergraduate, 2023 - 2024, 2022 - 2023

Bitirme Ödevi, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023

Social Network Analysis, Postgraduate, 2024 - 2025, 2023 - 2024

Quantum Computing, Postgraduate, 2023 - 2024

Kariyer Planlama, Undergraduate, 2023 - 2024, 2022 - 2023

Electrical and Electronic Circuits Laboratory, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Natural Language Processing, Postgraduate, 2023 - 2024

Quantum Computing, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Öğretmenlik Uygulaması, Undergraduate, 2023 - 2024, 2022 - 2023

Discrete Simulation, Postgraduate, 2022 - 2023

Elektronik Devreler, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Elektrik ve Elektronığe Giriş, Undergraduate, 2023 - 2024, 2022 - 2023

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

- I. **A hybrid CNN-LSTM model for high resolution melting curve classification**  
ÖZKÖK F. Ö., ÇELİK M.  
Biomedical Signal Processing and Control, vol.71, 2022 (SCI-Expanded)
- II. **A Hybrid Validity Index to Determine K Parameter Value of k -Means Algorithm for Time Series Clustering**  
Özkök F. Ö., Çelik M.  
International Journal of Information Technology and Decision Making, vol.20, pp.1615-1636, 2021 (SCI-Expanded)
- III. **Convolutional neural network analysis of recurrence plots for high resolution melting classification**  
ÖZKÖK F. Ö., ÇELİK M.  
Computer Methods and Programs in Biomedicine, vol.207, 2021 (SCI-Expanded)
- IV. **Assessment of Multi Fragment Melting Analysis System (MFMAS) for the Identification of Food-Borne Yeasts**  
KESMEN Z., BUYUKKIRAZ M. E., Özbekar E., ÇELİK M., ÖZKÖK F. Ö., KILIC O., ÇETİN B., Yetim H.  
CURRENT MICROBIOLOGY, vol.75, no.6, pp.716-725, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Best Individual Guided Immune Plasma Algorithm on Solving Path Planning Problem of Unmanned Combat Aerial Vehicles**

ASLAN S., ÖZKÖK F. Ö.

UNMANNED SYSTEMS, 2024 (ESCI)

**II. A New Approach to Determine Eps Parameter of DBSCAN Algorithm**

ÖZKÖK F. Ö., ÇELİK M.

International Journal of Intelligent Systems and Applications in Engineering, vol.4, pp.247-251, 2017 (Peer-Reviewed Journal)

## **Books & Book Chapters**

**I. Classification of High Resolution Melting Curves Using Recurrence Quantification Analysis And Data Mining Algorithms**

Özkök F. Ö., Çelik M.

in: Springer Lecture Notes on Data Engineering and Communications Technologies, Fatos Xhafa, Editor, Springer, London/Berlin , Barcelona, pp.641-650, 2023

## **Refereed Congress / Symposium Publications in Proceedings**

**I. AUTOMATIC CLASSIFICATION OF PISTACHIOS SPECIES USING DEEP LEARNING**

Özkök F. Ö.

International Conference on Research in Engineering, Technology and Science (ICRETS), Toskent, Uzbekistan, 22 - 25 August 2024, pp.1

**II. DETECTION OF PLASTIC WASTE USING END TO END OBJECT DETECTION WITH TRANSFORMER ALGORITHM**

Özkök F. Ö., Salman Y. B.

International Conference on Technology, Engineering, and Life Sciences (ICTELS), Amsterdam, Netherlands, 20 - 23 July 2023, pp.1

**III. FOREST FIRE DETECTION USING UNMANNED AERIAL IMAGES AND DEEP LEARNING METHODS**

Özkök F. Ö., Salman Y. B.

9th International Conference on Engineering and Natural Sciences (ICENS), Sarajevo, Bosnia And Herzegovina, 17 - 21 May 2023, pp.104-110

**IV. DETECTION OF WEEDS IN SOYBEAN CROPS USING UAV AND U-NET**

Özkök F. Ö.

5th International Conference on Research in Engineering, Technology and Science, Budapest, Hungary, 6 - 09 July 2023, pp.1

**V. A Deep-learning Based Object Detection Approach For Rainy Image Dataset**

Özkök F. Ö.

ICASEM IV. Uluslararası Uygulamalı Bilimler, Mühendislik ve Matematik Kongresi, Tekirdağ, Turkey, 20 - 23 October 2022, pp.143

**VI. Predicting Personality Traits of Employee Candidates Using Natural Language Processing**

Özkök F. Ö.

12th International Statistics Days Conference, İzmir, Turkey, 13 - 16 October 2022, pp.1

**VII. Automatic Image Segmentation Using ST-DBSCAN Clustering Algorithm**

Özkök F. Ö., Çelik M.

8th International Conference on Advanced Technologies (ICAT'19), Sarajevo, Bosnia And Herzegovina, 26 - 30 August 2019, pp.207-211

**VIII. Automatic Determination of K Parameter Value of K-Means for Time Series Clustering**

Özkök F. Ö., Çelik M.

11. Statistics Congress, Muğla, Turkey, 4 - 08 October 2019

**IX. A Novel Approach for Identification of Food-borne Yeasts: Multi-Fragment Melting Analysis System**

## (MFMAS)

KESMEN Z., BÜYÜKKİRAZ M. E., Özbekar E., ÖZKÖK F. Ö., ÇELİK M.

2nd International Congress on Advances in Bioscience and Biotechnology (ICABB), Podgorica, KARADAĞ, 26 - 30 June 2018, pp.25-26

- X. **Comprarison of the Performances of Clustering Algorithms on High Resolution Melt Curves of Yeast Species**  
ÇELİK M., ÖZKÖK F. Ö., KESMEN Z., BÜYÜKKİRAZ M. E.  
7th International Conference on Advanced Technologies (ICAT'xx18), Antalya, Turkey, 24 April - 01 May 2018, pp.504-509
- XI. **AutoVDBSCAN: An Automatic and Level-Wise Varied-Density Based Anomaly Detection Algorithm**  
ÖZEKES A., ÇELİK M., ÖZKÖK F. Ö., Kömüşçü A. Ü., DADAŞER ÇELİK F.  
7th International Conference on Advanced Technologies (ICAT'xx18), Antalya, Turkey, 28 April - 01 May 2018, pp.534-538
- XII. **Multi-Fragment Melting Analysis System (MFMAS) A Novel Approach for Identification of Lactobacillus Species**  
KESMEN Z., KILIC Ö., ÖZKÖK F. Ö., ÇELİK M.  
6th International Molecular Biology and Biotechnology Congress (MOLBIOTECH), Afyon, Turkey, 22 - 25 December 2017, pp.16
- XIII. **Comparison the Performances of DBSCAN Clustering Algorithm and Image Processing Techniques for Counting White Blood Cells**  
ÖZKÖK F. Ö., ÇELİK M.  
5th International Conference on Advanced Technology Sciences (ICAT'xx17), İstanbul, Turkey, 9 - 12 May 2017, vol.227
- XIV. **MULTI-FRAGMENT MELTING ANALYSIS SYSTEM (MFMAS) FOR IDENTIFICATION OF CANDIDA SPECIES**  
KESMEN Z., ÇELİK M., ÖZKÖK F. Ö., Erdem Büyükkiraz M., Özbekar E., SOYLU B.  
IWBBIO 2017 (5th International Work-Conference on Bioinformatics and Biomedical Engineering), Granada, Spain, 26 - 28 April 2017, pp.44-48
- XV. **Maya Türlerinin Tanımlanmasında Yeni bir Yaklaşım: Çoklu Fragment Melting Analiz Sistemi**  
KESMEN Z., ERDEM M., Özbekar E., ÖZKÖK F. Ö., ÇELİK M., KILIC Ö., ÇETİN B., YETİM H.  
1. Ulusal İnsan Mikrobiyotası ve Sağlığımıza Etkileri Kongresi, Ankara, Turkey, 8 - 10 December 2016
- XVI. **Counting of White Blood Cells Using STDBSCAN Clustering Algorithm**  
ÖZKÖK F. Ö., YILDIRIM İ., ÇELİK M.  
International Conference on Information Complexity and Statistical Modelling in High Dimensions with Applications (IC-SMHD-2016), Nevşehir, Turkey, 18 - 21 May 2016, pp.67
- XVII. **An Application for Dynamic and Real Time Shopping Route Recommendation in Retail Markets**  
YILDIRIM İ., ÖZKÖK F. Ö., ÇELİK M.  
International Conference on Information Complexity and Statistical Modelling in High Dimensions with Applications (IC-SMHD-2016), Nevşehir, Turkey, 18 - 21 May 2016, pp.51

## Supported Projects

ÖZKÖK F. Ö., ASLAN S., Project Supported by Higher Education Institutions, İHA Görüntülerinde Hava Olaylarına Bağlı Oluşan Gürültülerin Derin Öğrenme Tabanlı Yöntemlerle Ayrıştırılması, 2023 - Continues

ÇELİK M., YAZICI C., ÖZKÖK F. Ö., TUBITAK Project, Diyabet Hastalarına Ait Verilerin Veri Madenciliği Yöntemleri ile Analiz Edilmesi, 2012 - Continues

Özkök F. Ö., Aslan S., Yüksel E., TUBITAK Project, AI-based Agricultural Unmanned Aerial Vehicle Software, 2023 - 2025

ÖZKÖK F. Ö., KILIÇ M. A., ÇARK U. Ç., OKUMUŞ A., YÜNT İ., AVCI B., DEMİR K., MOLLAMUSA B., Project Supported by Higher Education Institutions, Teknofest-Savaşan İHA Yarışması, 2023 - 2023

Özkök F. Ö., TUBITAK Project, 4K İHA görüntülerinde nesne tespiti ve takibi için uçtan uca transformer tabanlı

yöntemlerin geliştirilmesi, 2022 - 2023

Özkök F. Ö., TUBITAK Project, "Hastaneler Arası Hasta Nakil Sisteminin Yapay Zekâ ile Gerçekleştirilmesi, 2022 - 2023

Özkök F. Ö., TUBITAK Project, "Makine Öğrenmesi ve Görüntü İşleme Tekniği ile Orman Yangınlarını Tespit İHA' sı, 2022 - 2023

Özkök F. Ö., TUBITAK Project, "Makine Öğrenmesi ile Türkiye'deki Depremlerin Tahmini, 2022 - 2023

KESMEN Z., YETİM H., YETİMAN A. E., ÇELİK M., ÇETİN B., ÖZKÖK F. Ö., TUBITAK Project, GIDALARDA BOZULMAYA NEDEN OLAN MAYA TÜRLERİNİN TANIMLANMASINA YÖNELİK KİT GELİŞTİRİLMESİ, 2014 - 2016

## Activities in Scientific Journals

Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, Editor, 2021 - Continues

## Metrics

Publication: 24

Citation (WoS): 12

Citation (Scopus): 17

H-Index (WoS): 3

H-Index (Scopus): 3

## Awards

Özkök F. Ö., Best Presenter Award, 8Th International Conference On Advanced Technologies (Icat'19), August 2019

ÖZKÖK F. Ö., Best Presenter Award, 7th International Conference on Advanced Technologies, April 2018

ÖZKÖK F. Ö., Best Paper Award, 7th International Conference on Advanced Technologies, April 2018

ÖZKÖK F. Ö., NEW GENERATION MICROORGANISM IDENTIFICATION KIT, İstanbul Uluslararası Buluş Fuarı, ISIF17, March 2017

ÖZKÖK F. Ö., Mezuniyet: Bilgisayar Mühendisliği Bölümü, Bölüm Birinciliği, Erciyes Üniversitesi, June 2014

## Entrepreneurship Activities

Anonymous, FOMOTECH Yazılım ve Arge A.Ş, 27 December 2023, Founder Owner