

Asst. Prof. Gülşah TMKL ZYER

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Middle East Technical University, Faculty Of Engineering, Bilgisayar Mhendislięi, Turkey 2002 - 2012

Undergraduate, Erciyes University, Mhendislik Fakltesi, Bilgisayar Mhendislięi, Turkey 1997 - 2001

Foreign Languages

English, C1 Advanced

Research Areas

Computer Sciences, Computer Vision, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Human Computer Interaction, Text/Document Processing, Pattern Recognition and Image Processing, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Ataturk University, Mhendislik Fakltesi, Bilgisayar Mhendislięi, 2013 - Continues

Research Assistant, Middle East Technical University, Faculty Of Engineering, Bilgisayar Mhendislięi, 2002 - 2013

Courses

Bilgisayarlı Grmeye Giriş, Undergraduate, 2023 - 2024, 2022 - 2023

Seçmeli Tasarım I, Undergraduate, 2023 - 2024, 2022 - 2023

Nesneye Ynelik Programlama, Undergraduate, 2022 - 2023, 2021 - 2022

Grsel Programlama, Undergraduate, 2023 - 2024, 2022 - 2023

Bilgisayarlı Grme, Doctorate, 2023 - 2024, 2020 - 2021

Nesneye Ynelik Programlama (İ), Undergraduate, 2022 - 2023, 2020 - 2021

Bilgisayar Mhendislięi Seçmeli Tasarım II, Undergraduate, 2022 - 2023

Bilgisayarlı Grme, Doctorate, 2023 - 2024, 2021 - 2022

Bitirme Projesi II, Undergraduate, 2021 - 2022

Yapay Zekaya Giriş, Undergraduate, 2021 - 2022

Nesneye Yönelik Programlama, Undergraduate, 2021 - 2022
Veri Yapıları Ve Alg., Undergraduate, 2022 - 2023
Veri Yapıları Ve Alg., Undergraduate, 2022 - 2023
Görsel Programlama, Undergraduate, 2022 - 2023
Bitirme Projesi II, Undergraduate, 2021 - 2022
Visual Programming, Undergraduate, 2022 - 2023
Data Structures and Algorithms, Undergraduate, 2022 - 2023
Metin Sınıflandırma, Postgraduate, 2022 - 2023
Yapay Zekaya Giriş, Undergraduate, 2021 - 2022
Seçmeli Tasarım I (İÖ), Undergraduate, 2022 - 2023
Object Oriented Programming, Undergraduate, 2021 - 2022
Bilgisayar Mühendisliği Seçmeli Tasarım II, Undergraduate, 2021 - 2022
Programlamaya Giriş (İÖ), Undergraduate, 2021 - 2022
Bitirme Projesi I (ÖÖ), Undergraduate, 2021 - 2022
Bitirme Projesi I (İÖ), Undergraduate, 2021 - 2022
Programlamaya Giriş (ÖÖ), Undergraduate, 2021 - 2022
Nesneye Yönelik Programlama (ÖÖ), Undergraduate, 2020 - 2021

Advising Theses

Tümüklü Özyer G., Sosyal medya izleme ve deprem acil durumlarına hızlı yanıt: Twitter verisi üzerine bir çalışma, Postgraduate, D.CANDAN(Student), 2023
Tümüklü Özyer G., Duygu analizi problemi için geleneksel ve derin transfer makine öğrenmesi yöntemlerinin karşılaştırılması, Postgraduate, N.YILDIZLI(Student), 2021
Tümüklü Özyer G., Video görüntülerinden sperm hareketlerinin otomatik takibi ve analizi, Postgraduate, İ.ALARABI(Student), 2020
TÜMÜKLÜ ÖZYER G., Dengesiz Veri Setlerinde Trafik İşaretlerini Tanıma, Postgraduate, Y.Aydın(Student), 2016
TÜMÜKLÜ ÖZYER G., Metin Sınıflandırma Teknikleri ile Türkçe Twitter Duygu Analizi, Postgraduate, Ö.Çoban(Student), 2016

Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, December, 2023
Post Graduate, Post Graduate, Atatürk Üniversitesi, August, 2023
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, July, 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Leveraging foreground-background cues for semantically-driven, training-free moving object detection**
ŞİMŞEK E., Negin F., Özyer G. T., ÖZYER B.
Engineering Applications of Artificial Intelligence, vol.136, 2024 (SCI-Expanded)
- II. **Objective Parameters in Attention Deficit Hyperactivity Disorder: Eye and Head Movements**
Yıldırım Demirdöğen E., Akıncı M. A., Bozkurt A., Turan B., Esin İ. S., Donbaloğlu M. A., Bingöl İ., Tümüklü Özyer G., Kılıç U., Dursun O. B.
JOURNAL OF ATTENTION DISORDERS, vol.28, no.6, pp.982-991, 2024 (SCI-Expanded)
- III. **Exploring the effect of image enhancement techniques with Deep Neural Networks on Direct Urinary**

System X-Ray (DUSX) images for automated kidney stone detection

Kilic U., Karabey Aksakalli I., Tumuklu Ozyer G., Aksakalli T., Ozyer B., Adanur S.

INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS, vol.2023, pp.1-10, 2023 (SCI-Expanded)

IV. A hybrid IMM-JPDAF algorithm for tracking multiple sperm targets and motility analysis

Tümüklü Özyer G., Özyer B., Negin F., Alarabi I., Agahian S.

NEURAL COMPUTING & APPLICATIONS, vol.34, no.20, pp.17407-17421, 2022 (SCI-Expanded)

V. The effect of population and tourism factors on Covid-19 cases in Italy: Visual data analysis and forecasting approach

Uguz S., Yağanoğlu M., Özyer B., Tümüklü Özyer G., Tokdemir G.

CONCURRENCY AND COMPUTATION-PRACTICE & EXPERIENCE, vol.34, no.6, 2022 (SCI-Expanded)

VI. Vision-assisted recognition of stereotype behaviors for early diagnosis of Autism Spectrum Disorders

Negin F., Özyer B., Agahian S., Kacdioglu S., Ozyer G. T.

NEUROCOMPUTING, vol.446, pp.145-155, 2021 (SCI-Expanded)

VII. Robust landmine detection from thermal image time series using Hough transform and rotationally invariant features

Kaya S., Leloğlu U. M., Ozyer G.

INTERNATIONAL JOURNAL OF REMOTE SENSING, vol.41, no.2, pp.725-739, 2019 (SCI-Expanded)

Articles Published in Other Journals

I. Deep Learning Based Human Detection in Camera-trap Images

Şimşek E., Özyer B., Tümüklü Özyer G.

BAYBURT FEN BİLİMLERİ DERGİSİ, vol.3, no.1, pp.1-8, 2020 (Peer-Reviewed Journal)

II. Improvement of Moving Object Detection by Pattern Recognition Methods

Şimşek E., Tümüklü Özyer G., Özyer B.

BAYBURT FEN BİLİMLERİ DERGİSİ, vol.3, no.1, pp.9-15, 2020 (Peer-Reviewed Journal)

III. Object Detection on Camera-Trap Images with Local Features

Şimşek E., Özyer B., Tümüklü Özyer G.

Gümüşhane Üniversitesi Fen Bilimleri Dergisi, vol.9, no.4, pp.633-644, 2019 (Peer-Reviewed Journal)

IV. Moving Object Detection and Localization in Camera-Trap Images

Şimşek E., Özyer B., Tümüklü Özyer G.

Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.12, no.2, pp.902-919, 2019 (Peer-Reviewed Journal)

V. The impact of term weighting method on Twitter sentiment analysis

Çoban Ö., Tümüklü Özyer G.

PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSİTESİ MUHENDİSLİK BİLİMLERİ DERGİSİ, vol.24, no.2, pp.283-291, 2018 (ESCI)

VI. Twitter duygu analizinde terim ağırlıklandırma yönteminin etkisi

Çoban Ö., Tümüklü Özyer G.

PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSİTESİ MUHENDİSLİK BİLİMLERİ DERGİSİ, vol.24, no.2, pp.283-291, 2018 (Peer-Reviewed Journal)

VII. Traffic Sign Recognition System for Imbalanced Dataset

Aydın Y., Özdemir D., Tümüklü Özyer G.

JOURNAL OF COMPUTERS, vol.12, pp.543-549, 2017 (ESCI)

VIII. Direction and Position Reconstruction on Mobile Robots

Şimşek E., Tümüklü Özyer G., Özyer B.

Balkan Journal of Electrical and Computer Engineering, vol.3, 2015 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **16. Ulusal Yazılım Mühendisliği Sempozyumu Bildiri Kitabı**
Tümüklü Özyer G. (Editor)
Atatürk Üniversitesi Yayınevi, Erzurum, 2023

Refereed Congress / Symposium Publications in Proceedings

- I. **SkelResNet: Transfer Learning Approach for Skeleton-Based Action Recognition SkelResNet: İskelet Tabanlı Eylem Tanıma için Transfer Öğrenme Yaklaşımı**
Kılıç U., Karadağ Ö. Ö., Özyer G. T.
32nd IEEE Conference on Signal Processing and Communications Applications, SIU 2024, Mersin, Turkey, 15 - 18 May 2024
- II. **Textual-based Turkish Offensive Language Detection Model**
Ba Alawi A. E., Bozkurt F., Tümüklü Özyer G.
16. ULUSAL YAZILIM MÜHENDİSLİĞİ SEMPOZYUMU (UYMS 2022), Erzurum, Turkey, 27 February - 01 March 2023, pp.77-88
- III. **Experimental Investigation of Spatial-temporal Graph Convolutional Networks and Attentional Mechanism in Skeleton-Based Action Recognition İskelet Tabanlı Eylem Tanımada Uzaysal-Zamansal izge Evrişimsel Ağlar ve Dikkat Mekanizmasının Deneysel İncelenmesi**
Kilic U., Karadağ O. O., Özyer G. T.
2023 Innovations in Intelligent Systems and Applications Conference, ASYU 2023, Sivas, Turkey, 11 - 13 October 2023
- IV. **Dikkat Eksikliği Hiperaktivite Bozukluğunda Objektif Parametreler: Göz Ve Baş Hareketleri**
Yıldırım Demirdöğen E., Akıncı M. A., Bozkurt A., Turan B., Esin İ. S., Donbaloğlu M. A., Bingöl İ., Tümüklü Özyer G., Kılıç U., Dursun O. B.
31. Ulusal Çocuk ve Ergen Ruh Sağlığı ve Hastalıkları Kongresi, İzmir, Turkey, 17 - 20 May 2022, pp.461-472
- V. **Recognition of Electronic Circuit Components Using a Modern Convolutional Object Detector**
Kılıç U., Demir Y., Kaplan N. H., Tümüklü Özyer G.
1st International Conference on Advances in Engineering, Architecture, Science and Technology, Erzurum, Turkey, 15 December 2021
- VI. **Extracting Face Measurements on Children for ADHD Classification**
Esin İ. S., Dursun O. B., Özyer B., Tümüklü Özyer G., Aktaş H., Öztürk S. B., Doğru H.
12th International Congress on Psychopharmacology & 8th International Symposium on Child and Adolescent Psychopharmacology (ICP 2021), Antalya, Turkey, 17 - 20 November 2021
- VII. **Annotated Corpus of Comments and Basic Semantic Analysis**
Çelik S., Tümüklü Özyer G.
IEEE 2nd International Conference on Computing and Data Science, California, United States Of America, 28 - 29 January 2021, pp.1-4
- VIII. **Recognizing Self-Stimulatory Behaviours for Autism Spectrum Disorders**
Kaçdioğlu S., Özyer B., Tümüklü Özyer G.
28th Signal Processing and Communications Applications Conference (SIU), Gaziantep, Turkey, 5 - 07 October 2020, pp.1-5
- IX. **Kinect Sensörü ile Robot Manipulator Kontrolü**
Şimşek E., Tümüklü Özyer G., Özyer B.
5. Türkiye Robotbilim Konferansı (ToRK 2019), İstanbul, Turkey, 26 - 28 June 2019
- X. **Engel Üzerinden Zıplayan Zıpzıp Robot**
Aydın Y. E., TÜMÜKLÜ ÖZYER G., ÖZYER B.
5. Türkiye Robotbilim Konferansı (ToRK 2019), İstanbul, Turkey, 26 - 28 June 2019, pp.1
- XI. **Sperm detection and analysis using feature description algorithms**

- KESKENLER M. F., ÖZYER B., HAŞILOĞLU A., TÛMÛKLÛ ÖZYER G.
27. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Sivas, Turkey, 24 - 26 April 2019, pp.1
- XII. **Word2vec and Clustering based Twitter Sentiment Analysis**
ÇOBAN Ö., TÛMÛKLÛ ÖZYER G.
International Conference on Artificial Intelligence and Data Processing (IDAP 2018), Malatya, Turkey, 28 - 30 September 2018
- XIII. **A Comparison of Performance Metrics of Turkish Twitter Messages Using Text Representations**
KARCIOĞLU A. A., AYDIN T., TÛMÛKLÛ ÖZYER G.
1. International Technological Sciences And Desing Symposium, Giresun, Turkey, 27 - 29 June 2018, pp.433-444
- XIV. **Animal Detection in Camera-Trap Images**
ŞİMŞEK E., ÖZYER B., TÛMÛKLÛ ÖZYER G., BAYINDIR L.
1. ULUSLARARASI TEKNOLOJİ BİLİMLERİ VE TASARIM SEMPOZYUMU, 27 - 29 June 2018
- XV. **Human-Animal Recognition in Camera Trap Images**
Simsek E., ÖZYER B., BAYINDIR L., TÛMÛKLÛ ÖZYER G.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XVI. **Word2vec and Clustering based Twitter Sentiment Analysis**
Coban O., TÛMÛKLÛ ÖZYER G.
International Conference on Artificial Intelligence and Data Processing (IDAP), Malatya, Turkey, 28 - 30 September 2018
- XVII. **Traffic Sign Recognition System For Imbalanced Dataset**
AYDIN Y., ÖZDEMİR D., TÛMÛKLÛ ÖZYER G.
International Conference on Computer and Information Technology (ICCIT 2016), 19 - 21 May 2016
- XVIII. **Balancing inverted pendulum using reinforcement algorithms**
ÖZAKAR R., TÛMÛKLÛ ÖZYER G., ÖZYER B.
2016 24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, Turkey, 16 - 19 May 2016
- XIX. **Traffic Sign Recognition Using Scale Invariant Feature Transform and Bagging Based Ensemble**
AYDIN Y., TÛMÛKLÛ ÖZYER G., Ozdemir D.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.605-608
- XX. **Sentiment Classification for Turkish Twitter Feeds using LDA**
ÇOBAN Ö., TÛMÛKLÛ ÖZYER G.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.129-132
- XXI. **Music Genre Classification from Turkish Lyrics**
ÇOBAN Ö., TÛMÛKLÛ ÖZYER G.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.101-104
- XXII. **Direction and Position Reconstruction on Mobile Robots**
ŞİMŞEK E., TÛMÛKLÛ ÖZYER G., ÖZYER B.
International Engineering Research Symposium, 10 - 12 September 2015
- XXIII. **Gezgin Robotlar İçin Görüntü İşleme ve Çizge Tabanlı Engel ve Minimum Rota Yön Bulma Yöntemi**
ŞİMŞEK E., TÛMÛKLÛ ÖZYER G., ÖZYER B.
2. Ulusal Yönetim Bilişim Sistemleri Kongresi, Turkey, 8 - 10 October 2015
- XXIV. **SMS spam filtering based on text classification and expert system**
BOZAN Y. S., ÇOBAN Ö., TÛMÛKLÛ ÖZYER G., ÖZYER B.
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1-4
- XXV. **Estimation of center of mass of the object to be held by barycentric coordinate system and polygon parcelling**
BOZAN Y. S., TÛMÛKLÛ ÖZYER G., ÖZYER B.

- 23rd Signal Processing and Communications Applications (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1-4
- XXVI. **Sentiment analysis for Turkish Twitter feeds**
Çoban Ö., Özyer B., Tümöklü Özyer G.
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 May 2015, pp.1-4
- XXVII. **A Comparison of Similarity Metrics for Sentiment Analysis on Turkish Twitter Feeds**
ÇOBAN Ö., ÖZYER B., TÜMÜKLÜ ÖZYER G.
2015 IEEE International Conference on Smart City/SocialCom/SustainCom (SmartCity), Chengdu, China, 19 - 21 December 2015, pp.333-338
- XXVIII. **A Content Based Image Retrieval system using Visual Attention**
TÜMÜKLÜ ÖZYER G., YARMAN VURAL F. T.
2010 IEEE 18th Signal Processing and Communications Applications Conference, Diyarbakir, Turkey, Turkey, 22 - 24 April 2010

Supported Projects

- Özyer B., TÜMÜKLÜ ÖZYER G., TUBITAK Project, Takdik-Rob: Bir İnsansı Robotun Taklit Yolu Ile Dikkat Temelli Derin Mimariler Kullanılarak Eğitimi, 2023 - 2026
- COŞKUNÇAY A., TÜMÜKLÜ ÖZYER G., ÖZYER B., YAĞANOĞLU M., BOZKURT F., GÜNAY F. B., FINDIK COŞKUNÇAY D., ÖZTÜRK S. B., Project Supported by Higher Education Institutions, 16. Ulusal Yazılım Mühendisliği Sempozyumu (UYMS 2022), 2022 - 2023
- TÜMÜKLÜ ÖZYER G., Project Supported by Higher Education Institutions, Mimik ve Vücut Hareketleri Algılanarak Duygu İncelenmesi, 2020 - 2021

Scientific Refereeing

- TUBITAK Project, 1501 - Industry R & D Projects Support Program, Ataturk University, Turkey, January 2024
- TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, Ataturk University, Turkey, November 2023
- TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, Ataturk University, Turkey, October 2023
- TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, Ataturk University, Turkey, September 2023
- TUBITAK Project, 1501 - Industry R & D Projects Support Program, Ataturk University, Turkey, August 2023
- TUBITAK Project, 1501 - Industry R & D Projects Support Program, Ataturk University, Turkey, August 2023
- TUBITAK Project, 1509 - TÜBİTAK International Industry R&D Projects Support Program, Ataturk University, Turkey, July 2023
- TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, Ataturk University, Turkey, July 2023
- TUBITAK Project, 1507 - TÜBİTAK SME R&D Start Support Program, Ataturk University, Turkey, December 2022

Tasks In Event Organizations

- Erdem E., TÜMÜKLÜ ÖZYER G., 16. Ulusal Yazılım Mühendisliği Sempozyumu, Scientific Congress, Erzurum, Turkey, Mart 2023

Metrics

- Publication: 49
Citation (WoS): 34
Citation (Scopus): 58
H-Index (WoS): 4
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