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Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: L-1830-2017

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Education Information

Doctorate, Kocaeli University, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği (Dr), Turkey 2012 - 2018

Postgraduate, Kocaeli University, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği (YI) (Tezli), Turkey 2010 - 2012

Undergraduate, Kocaeli University, Mühendislik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, Turkey 2006 - 2010

Dissertations

Doctorate, GÖMÜLÜ PLATFORMLAR İÇİN GÖRÜNTÜ İŞLEME TEMELLİ GERÇEK ZAMANLI ŞERİT TESPİT VE UYARI YÖNTEMLERİ, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği (Doktora), 2018

Postgraduate, Dsp ile gerçek zamanlı sayısal video stabilizasyonu, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Mühendisliği (YI) (Tezli), 2012

Research Areas

Information Systems, Communication and Control Engineering, Robotics and Mechatronics Systems, Computer Vision, Signal Processing, Image and Video Processing, Pattern Recognition and Analysis, Computer Sciences, algorithms, Computer Graphics, Computer Graphics, Computer Vision, Computer Vision, Equipment, Processor Architectures, Artificial Intelligence, Computer Learning and Pattern Recognition, Computer Learning, Pattern Recognition and Image Processing, Neural Networks, Software, Programming Languages, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Kocaeli University, Mühendislik Fakültesi, Elektronik ve Haberleşme Mühendisliği, 2021 - Continues
Research Assistant, Kocaeli University, Fen Bilimleri Enstitüsü, 2013 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

1. An efficient activity recognition model by integrating object recognition and image captioning with deep learning techniques for the visually impaired Görme engelliler için nesne tanıma ve resim alt yazısını derin öğrenme teknikleriyle entegre eden verimli bir aktivite tanıma modeli

KİLİMCİ Z. H., KÜÇÜKMANİSA A.

Journal of the Faculty of Engineering and Architecture of Gazi University, vol.39, no.4, pp.2177-2186, 2024 (SCI-Expanded)

- II. **Enhanced ProtoNet With Self-Knowledge Distillation for Few-Shot Learning**
Habib M. E. H., KÜÇÜKMANİSA A., URHAN O.
IEEE ACCESS, vol.12, pp.145331-145340, 2024 (SCI-Expanded)
- III. **A Novel Capacitive Touch Sensing Approach and Its Application in Gender Classification**
AHMET M. N., KÜÇÜKMANİSA A., KARSON A., URHAN O.
IEEE ACCESS, vol.12, pp.157313-157328, 2024 (SCI-Expanded)
- IV. **A novel framework for mispronunciation detection of Arabic phonemes using audio-oriented transformer models**
Çalık Ş. S., KÜÇÜKMANİSA A., KİLİMCİ Z. H.
Applied Acoustics, vol.215, 2023 (SCI-Expanded)
- V. **Feature distillation from vision-language model for semisupervised action classification**
Çelik A., Küçükmanisa A., Urhan O.
Turkish Journal of Electrical Engineering and Computer Sciences, vol.31, no.SI-1, pp.1129-1145, 2023 (SCI-Expanded)
- VI. **An ensemble-based framework for mispronunciation detection of Arabic phonemes**
Çalık S. S., KÜÇÜKMANİSA A., KİLİMCİ Z. H.
Applied Acoustics, vol.212, 2023 (SCI-Expanded)
- VII. **SIMD-based low bit-depth motion estimation with application to HEVC**
DUVAR R., KÜÇÜKMANİSA A., AKBULUT O., Celebi A., URHAN O.
SIGNAL IMAGE AND VIDEO PROCESSING, vol.17, no.4, pp.1449-1456, 2023 (SCI-Expanded)
- VIII. **D3NET (divide and detect drivable area net): deep learning based drivable area detection and its embedded application**
Acun O., KÜÇÜKMANİSA A., Genç Y., URHAN O.
Journal of Real-Time Image Processing, vol.20, no.2, 2023 (SCI-Expanded)
- IX. **A real-time defective pixel detection system for LCDs using deep learning based object detectors**
ÇELİK A., KÜÇÜKMANİSA A., Sumer A., Celebi A., URHAN O.
JOURNAL OF INTELLIGENT MANUFACTURING, vol.33, no.4, pp.985-994, 2022 (SCI-Expanded)
- X. **A deep learning based fast lane detection approach**
Oğuz E., Küçükmanisa A., Duvar R., Urhan O.
Chaos, Solitons and Fractals, vol.155, 2022 (SCI-Expanded)
- XI. **Real-time illumination and shadow invariant lane detection on mobile platform**
KÜÇÜKMANİSA A., Tarim G., URHAN O.
JOURNAL OF REAL-TIME IMAGE PROCESSING, vol.16, no.5, pp.1781-1794, 2019 (SCI-Expanded)
- XII. **Robust and real-time lane detection filter based on adaptive neuro-fuzzy inference system**
KÜÇÜKMANİSA A., AKBULUT O., URHAN O.
IET IMAGE PROCESSING, vol.13, no.7, pp.1181-1190, 2019 (SCI-Expanded)
- XIII. **Assessment of the performance of low Bit-Depth representation based motion estimation methods on HEVC**
Duvar R., KÜÇÜKMANİSA A., AKBULUT O., Celebi A., URHAN O.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, no.2, pp.786-799, 2019 (SCI-Expanded)
- XIV. **Gömülü bir platform üzerinde gerçek zamanlı şeritten ayrılma uyarı sistemi**
KÜÇÜKMANİSA A., URHAN O.
Journal Of The Faculty Of Engineering And Architecture Of Gazi University, vol.32, pp.1287-1300, 2017 (SCI-Expanded)
- XV. **Real-time lane departure warning system on an embedded platform**
KÜÇÜKMANİSA A., URHAN O.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.32, no.4, pp.1287-

Articles Published in Other Journals

- I. **Heart Disease Prediction with Machine Learning-Based Approaches**
Küçükmanisa A., Kilimci Z. H.
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.28, no.1, pp.101-107, 2024 (Peer-Reviewed Journal)
- II. **Detection of Fault from Acoustic Signals in Automobile Engines using Deep Learning Techniques**
Erdoğan F. A., Küçükmanisa A., Kilimci Z. H.
Kocaeli Journal of Science and Engineering, vol.6, no.2, pp.148-154, 2023 (Peer-Reviewed Journal)
- III. **Temporal Analysis based Driver Drowsiness Detection System using Deep Learning Approaches**
Kumral F., Küçükmanisa A.
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.26, no.4, pp.710-719, 2022 (Peer-Reviewed Journal)
- IV. **Drowsiness Detection System Based on Machine Learning Using Eye State**
Öztürk M., Küçükmanisa A., Urhan O.
Balkan Journal of Electrical and Computer Engineering, vol.10, no.3, pp.258-263, 2022 (Peer-Reviewed Journal)
- V. **Deep Learning Based Road Crack Detection on an Embedded Platform**
ALTIN N., KÜÇÜKMANISA A., URHAN O.
Deep Learning Based Road Crack Detection on an Embedded Platform, 2018 (Peer-Reviewed Journal)
- VI. **Real-Time Lane Marking Detection Using Weighted Filter**
KÜÇÜKMANISA A., AKBULUT O., URHAN O.
International Journal of Computer and Information Engineering, 2018 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Numbering of Teeth in the Mixed Dentition Stage Using Deep Learning Derin Öğrenme İle Karışık Dişlenme Döneminde Dişlerin Numaralandırılması**
Altuntaş A. H., KÜÇÜKMANISA A., URHAN O.
32nd IEEE Conference on Signal Processing and Communications Applications, SIU 2024, Mersin, Turkey, 15 - 18 May 2024
- II. **A Few-shot Learning Approach for Multi-Task CT Image Classification**
Habib M. E. H., Küçükmanisa A., Urhan O.
14th INTERNATIONAL CONFERENCE on ELECTRICAL and ELECTRONICS ENGINEERING, Bursa, Turkey, 30 November - 02 December 2023, pp.1-4
- III. **A RESEARCH ON PERSONALITY CLASSIFICATION WITH ARTIFICIAL INTELLIGENCE**
Sarıkaya B., Küçükmanisa A., Kilimci Z. H.
INCOHIS 2023, İstanbul, Turkey, 20 - 21 May 2023, pp.216-223
- IV. **SPEECH EMOTION RECOGNITION EMPLOYING MACHINE LEARNING TECHNIQUES: A REVIEW**
Bayraktar Ü., Kilimci Z. H., Küçükmanisa A.
INTERNATIONAL CONGRESS OF NEW HORIZONS IN SCIENCES, İstanbul, Turkey, 20 - 21 May 2023, pp.64-71
- V. **A COMPARATIVE ANALYSIS OF ACTIVE LEARNING METHODS**
Durgunlu E., Küçükmanisa A.
International Conference on Intelligent Systems and New Applications, Liverpool, England, 28 - 30 April 2023, pp.169-172
- VI. **REAL-TIME VEHICLE COUNTING AND TRACKING SYSTEM WITH DEEP LEARNING APPROACHES FOR EMBEDDED SYSTEMS**
Duran A., Dereli F., Küçükmanisa A., Urhan O.
International Marmara Sciences Congress (IMASCON Spring 2022), Kocaeli, Turkey, 13 - 14 May 2022, pp.544-550
- VII. **Deep Learning-Based Pronunciation Detection of Arabic Phonemes**

Calik S. S., KÜÇÜKMANİSA A., KİLİMCİ Z. H.

16th International Conference on INnovations in Intelligent SysTems and Applications, INISTA 2022, Biarritz, France, 8 - 12 August 2022

- VIII. **LCD pixel defect detection using shallow CNN based approach**
ÇELİK A., KÜÇÜKMANİSA A., Sumer A., TAŞYAPI ÇELEBİ A., URHAN O.
2021 International Conference on INnovations in Intelligent SysTems and Applications, INISTA 2021, Kocaeli, Turkey, 25 - 27 August 2021
- IX. **Drivable Road Area Detection with Regression Output CNN Surulebilir Yol Alanlar1n1n Regresyon 1kil1 KSA ile Tespiti**
Acun O., KÜÇÜKMANİSA A., Genc Y., URHAN O.
28th Signal Processing and Communications Applications Conference, SIU 2020, Gaziantep, Turkey, 5 - 07 October 2020
- X. **Drivable Road Area Detection with Regression Output CNN**
Acun O., KÜÇÜKMANİSA A., Genc Y., URHAN O.
28th Signal Processing and Communications Applications Conference (SIU), ELECTR NETWORK, 5 - 07 October 2020
- XI. **Pixel Defect Detection in LCD TV Images using Adaptive Thresholding**
SÜMER A., ÇELİK A., KÜÇÜKMANİSA A., TAŞYAPI ÇELEBİ A., URHAN O.
2019 27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, Turkey, 24 - 26 April 2019
- XII. **Gömülü Platformlar İçin Kuşbakışı Görüntüler Üzerinden Derin Öğrenme Temelli Gerçek Zamanlı Şerit İşareti Tespit Sistemi**
Tarım G., KÜÇÜKMANİSA A., URHAN O.
Uluslararası Marmara Fen ve Sosyal Bilimler Kongresi, Turkey, 26 - 28 April 2019
- XIII. **LCD Pksel Hatalarının GLCM Öznitelikleri ve SVM ile Tespiti**
ÇELİK A., AYDIN S., KÜÇÜKMANİSA A., TAŞYAPI ÇELEBİ A., URHAN O.
Uluslararası Marmara Fen ve Sosyal Bilimler Kongresi-IMASCON 2018, 23 - 25 November 2018
- XIV. **Real-Time Lane Marking Detection Using Weighted Filter**
KÜÇÜKMANİSA A., AKBULUT O., URHAN O.
20th International Conference on Computer Sciences, Computational and ArtificialIntelligence, 30 - 31 August 2018
- XV. **Performance analysis of one-bit transform based motion estimation using sparse search on HEVC HEVC'de seyrek arama kullanarak bir-bit dönüşümlü hareket kestiriminin performans analizi**
DUVAR R., KÜÇÜKMANİSA A., AKBULUT O., CELEBI A., URHAN O.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4
- XVI. **HEVC'de Seyrek Arama Kullanarak Bir-Bit Dönüşümlü Hareket Kestiriminin Performans Analizi**
DUVAR R., KÜÇÜKMANİSA A., AKBULUT O., TAŞYAPI ÇELEBİ A., URHAN O.
26. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SİU'2018), 2 - 05 May 2018
- XVII. **Deep Learning Based Road Crack Detection on an Embedded Platform**
Altın N., KÜÇÜKMANİSA A., URHAN O.
20th International Conference on Computer Vision and Image Processing, 12 - 13 February 2018
- XVIII. **Performance Analysis of One-Bit Transform based Motion Estimation using Sparse Search on HEVC**
DUVAR R., KÜÇÜKMANİSA A., AKBULUT O., TAŞYAPI ÇELEBİ A., URHAN O.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XIX. **Implementation of 1-bit transform based motion estimation to HEVC encoder**
DUVAR R., KÜÇÜKMANİSA A., AKBULUT O., TAŞYAPI ÇELEBİ A., URHAN O.
2017 25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, Turkey, 15 - 18 May 2017
- XX. **Real-time lane marking detection using modified 1-bit transform based pre-processing Geliştirilmiş 1-Bit Dönüşümü Temelli Ön İşlem Kullanarak Gerçek Zamanlı Şerit İşareti Tespiti**
KÜÇÜKMANİSA A., DUVAR R., URHAN O.

- 25th Signal Processing and Communications Applications Conference, SIU 2017, Antalya, Turkey, 15 - 18 May 2017
- XXI. **Multi band pass filter based one-bit transforms in motion estimation Hareket Kestiriminde Çoklu Bant Geçiren Süzgeç tabanlı Bir Bit Dönüşümleri**
AKBULUT O., Duvar R., KÜÇÜKMANİSA A., URHAN O.
25th Signal Processing and Communications Applications Conference, SIU 2017, Antalya, Turkey, 15 - 18 May 2017
- XXII. **Real-Time Lane Marking Detection using Modified 1-Bit Transform based Pre-processing**
KÜÇÜKMANİSA A., DUVAR R., URHAN O.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- XXIII. **Implementation of 1-Bit Transform Based Motion Estimation to HEVC Encoder**
Duvar R., KÜÇÜKMANİSA A., OrhanAkbulut O., CELEBİ A., URHAN O.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- XXIV. **Multi Band Pass Filter based One-Bit Transforms in Motion Estimation**
AKBULUT O., Duvar R., KÜÇÜKMANİSA A., URHAN O.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- XXV. **Histogram Distance Based Road Surface Detection on a Single Image**
KÜÇÜKMANİSA A., URHAN O.
7th European Conference of Computer Science (ECCS '16), 21 - 23 October 2016
- XXVI. **Tek Bir Görüntü ile Şerit Tespit Temelli Yol Yüzeyi Belirleme**
KÜÇÜKMANİSA A., URHAN O.
24. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SİU'2016), 16 - 19 May 2016
- XXVII. **Road Surface Detection on a Single Image using Lane Detection**
KÜÇÜKMANİSA A., Urhban O.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.2153-2156
- XXVIII. **An uncooled infrared camera with embedded real-time target tracking capability Gerçek zamanlı gömülü hedef takibi yapabilen soğutmasız kızıl ötesi kamera**
Güvenel Ç., Tekyildiz A., Türkoğlu Ç., Yıldız Ç., KÜÇÜKMANİSA A., ÇELEBİ A., URHAN O., GÜLLÜ M. K., ERTÜRK S.
2012 20th Signal Processing and Communications Applications Conference, SIU 2012, Fethiye, Mugla, Turkey, 18 - 20 April 2012
- XXIX. **DSP implementation of phase correlation based real-time video stabilization Faz korelasyonu temelli gerçek-zamanlı video stabilizasyonunun DSP üzerinde gerçekleşmesi**
KÜÇÜKMANİSA A., URHAN O., GÜLLÜ M. K., ERTÜRK S.
2012 20th Signal Processing and Communications Applications Conference, SIU 2012, Fethiye, Mugla, Turkey, 18 - 20 April 2012

Supported Projects

DUVAR R., ÇORUH N., BÖYÜK M., KÜÇÜKMANİSA A., DURAN A., Project Supported by Higher Education Institutions, İnsansız Hava Aracı ve Görüntü İşleme Temelli Uçak Muayene Sistemi, 2020 - Continues

Küçükmanisa A., TUBITAK Project, AHŞAP PANEL ÜRETİM HATTINDA GERÇEK ZAMANLI GÖRÜNTÜ İŞLEME KULLANILARAK YAPAY ZEKA TEMELLİ YÜZEY HATA TESPİT SİSTEMİ GELİŞTİRİLMESİ, 2023 - 2025

Küçükmanisa A., TUBITAK Project, Yapay Zeka Destekli Hata Tespiti ve Kestirimci Bakım, 2023 - 2024

Küçükmanisa A., TUBITAK Project, UZAKTAN VE YÜZYÜZE İŞLEMLERDE DİJİTAL KİMLİK TANIMLAMA SİSTEMİ, 2020 - 2023

KÜÇÜKMANİSA A., USLU H., TOSUN M., ÖKSÜZ C., ESİ Ç., URHAN O., KARACA A. C., GÜLLÜ M. K., Project Supported by Higher Education Institutions, DERİN ÖĞRENME YAKLAŞIMLARI İLE MEME KANSERİ TESPİTİ VE SINIFLANDIRMASI, 2020 - 2023

Duvar R., KÜÇÜKMANİSA A., TUBITAK Project, Baskı Makineleri İçin Görüntü İşleme Temelli Kalite Kontrol Sistemi, 2021 - 2022

KÜÇÜKMANİSA A., URHAN O., Project Supported by Higher Education Institutions, DERİN ÖĞRENME YAKLAŞIMLARI İLE

GÖMÜLÜ PLATFORMLARA UYGUN GERÇEK ZAMANLI SÜRÜCÜ YORGUNLUK TESPİTİ, 2019 - 2021

URHAN O., KÜÇÜKMANİSA A., Project Supported by Higher Education Institutions, DERİN ÖĞRENME YAKLAŞIMI İLE

GÖMÜLÜ ŞERİTTEN AYRILMA UYARI SİSTEMİ, 2017 - 2018

Urhan O., Çelebi A., Taşyapı Çelebi A., TUBITAK Project, HEVC için Paralel ve Donanımsal Gerçeklemeye Uygun Hareket Kestirim Yaklaşımları, 2016 - 2018

Metrics

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