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Research Areas

Computer Sciences, Information Security and Reliability, Information System Reliability, Engineering and Technology

Academic Titles / Tasks

Lecturer PhD, Karadeniz Technical University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2019 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Golden ratio based deep fake video detection system with fusion of capsule networks**
Dinçer S., Ulutas G., Ustubioglu B., Tahaoglu G., Sklavos N.
Computers and Electrical Engineering, vol.117, 2024 (SCI-Expanded)
- II. **Audio forgery detection and localization with super-resolution spectrogram and keypoint-based clustering approach**
ÜSTÜBİOĞLU B., TAHAOĞLU G., ULUTAŞ G., Ustubioglu A., KILIÇ M.
JOURNAL OF SUPERCOMPUTING, vol.80, no.1, pp.486-518, 2024 (SCI-Expanded)
- III. **Robust Copy-Move Forgery Detection Technique Against Image Degradation and Geometric Distortion Attacks**
Tahaoğlu G., Üstübioğlu B., Ulutaş G., Ulutaş M., Nabihev V.
WIRELESS PERSONAL COMMUNICATIONS, vol.131, no.4, pp.2919-2947, 2023 (SCI-Expanded)
- IV. **Mel spectrogram-based audio forgery detection using CNN**
Ustubioglu A., ÜSTÜBİOĞLU B., ULUTAŞ G.
SIGNAL IMAGE AND VIDEO PROCESSING, vol.17, no.5, pp.2211-2219, 2023 (SCI-Expanded)
- V. **Color Image Splicing Localization Based on Block Classification Using Transition Probability Matrix**
ODABAŞ YILDIRIM E., TAHAOĞLU G., ULUTAŞ G., ÜSTÜBİOĞLU B., NABIYEV V.
WIRELESS PERSONAL COMMUNICATIONS, vol.129, no.3, pp.1893-1919, 2023 (SCI-Expanded)
- VI. **Detection of audio copy-move-forgery with novel feature matching on Mel spectrogram**
ÜSTÜBİOĞLU B., TAHAOĞLU G., ULUTAŞ G.
EXPERT SYSTEMS WITH APPLICATIONS, vol.213, 2023 (SCI-Expanded)
- VII. **Robust copy-move detection in digital audio forensics based on pitch and modified discrete cosine transform**
ÜSTÜBİOĞLU B., Kucukgurlu B., ULUTAŞ G.
MULTIMEDIA TOOLS AND APPLICATIONS, vol.81, no.19, pp.27149-27185, 2022 (SCI-Expanded)

- VIII. **Ciratefi based copy move forgery detection on digital images**
 TAHAOĞLU G., ULUTAŞ G., ÜSTÜBİOĞLU B., ULUTAŞ M., NABIYEV V.
 MULTIMEDIA TOOLS AND APPLICATIONS, vol.81, no.16, pp.22867-22902, 2022 (SCI-Expanded)
- IX. **Improved copy move forgery detection method via L*a*b* color space and enhanced localization technique**
 TAHAOĞLU G., ULUTAŞ G., ÜSTÜBİOĞLU B., NABIYEV V.
 MULTIMEDIA TOOLS AND APPLICATIONS, vol.80, no.15, pp.23419-23456, 2021 (SCI-Expanded)
- X. **Underwater image enhancement using contrast limited adaptive histogram equalization and layered difference representation**
 ULUTAŞ G., ÜSTÜBİOĞLU B.
 MULTIMEDIA TOOLS AND APPLICATIONS, vol.80, no.10, pp.15067-15091, 2021 (SCI-Expanded)
- XI. **IWT-MDE based reversible thermal image watermarking enhanced with secret sharing mechanism**
 ÜSTÜBİOĞLU A., ULUTAŞ G., ÜSTÜBİOĞLU B.
 MULTIMEDIA TOOLS AND APPLICATIONS, vol.78, no.16, pp.22269-22299, 2019 (SCI-Expanded)
- XII. **Frame duplication detection based on BoW model**
 ULUTAŞ G., ÜSTÜBİOĞLU B., ULUTAŞ M., NABIYEV V.
 MULTIMEDIA SYSTEMS, vol.24, no.5, pp.549-567, 2018 (SCI-Expanded)
- XIII. **Medical Image Tamper Detection Based on Passive Image Authentication**
 ULUTAŞ G., ÜSTÜBİOĞLU A., ÜSTÜBİOĞLU B., NABIYEV V., ULUTAŞ M.
 JOURNAL OF DIGITAL IMAGING, vol.30, no.6, pp.695-709, 2017 (SCI-Expanded)
- XIV. **Frame duplication/mirroring detection method with binary features**
 ULUTAŞ G., ÜSTÜBİOĞLU B., ULUTAŞ M., NABIYEV V.
 IET IMAGE PROCESSING, vol.11, no.5, pp.333-342, 2017 (SCI-Expanded)
- XV. **Improved copy-move forgery detection based on the CLDs and colour moments**
 ÜSTÜBİOĞLU B., ULUTAŞ G., ULUTAŞ M., NABIYEV V.
 IMAGING SCIENCE JOURNAL, vol.64, no.4, pp.215-225, 2016 (SCI-Expanded)
- XVI. **A new copy move forgery detection technique with automatic threshold determination**
 ÜSTÜBİOĞLU B., ULUTAŞ G., ULUTAŞ M., NABIYEV V.
 AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.70, no.8, pp.1076-1087, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **Görsel kelime tabanlı ses sahteciliği tespit yöntemi**
 Üstübioğlu B., Üstübioğlu A.
 Niğde Ömer HalisDemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.13, no.1, pp.350-358, 2024 (Peer-Reviewed Journal)
- II. **Su Altı Görüntülerinin CVC Yöntemi Kullanılarak İyileştirilmesi**
 Üstübioğlu A., Üstübioğlu B.
 Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.28, no.3, pp.962-972, 2023 (Peer-Reviewed Journal)
- III. **YÜKSEK ÇÖZÜNÜRLÜKLÜ SPEKTROGRAM GÖRÜNTÜLERİNDEN AKAZE YÖNTEMİ İLE SES SAHTECİLİĞİ TESPİTİ**
 Üstübioğlu B., Tahaoglu G.
 Kahramanmaraş Sütçü İmam Üniversitesi Fen ve Mühendislik Dergisi, no.26/4, pp.962-970, 2023 (Peer-Reviewed Journal)
- IV. **Video forgery detection method based on local difference binary(Accepted/Kabul Tarihi: 23.01.2020)**
 ULUTAŞ G., ÜSTÜBİOĞLU B., ULUTAŞ M., NABIYEV V.
 Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.26, pp.983-992, 2020 (ESCI)
- V. **Blur Invariant Image Forgery Detection Method Using Local Phase Quantization**

Refereed Congress / Symposium Publications in Proceedings

- I. **Audio Forgery Detection Method with Mel Spectrogram**
Üstübioğlu B., Üstübioğlu A., Ulutaş G.
16. Uluslararası Bilgi Güvenliği ve Kriptoloji Konferansı-ISC Türkiye 2023, Ankara, Turkey, 18 October 2023 - 19 January 2024, pp.10-15
- II. **Deepfake audio detection with vision transformer based method**
Ulutaş G., Tahaoğlu G., Üstübioğlu B.
46th International Conference on Telecommunications and Signal Processing, Brno, Czech Republic, 12 - 14 July 2023, pp.1-5
- III. **Robust Audio Forgery Detection Method Based on Capsule Network**
DİNÇER S., ÜSTÜBİOĞLU B., ULUTAŞ G., TAHAOĞLU G., Ustubioglu A.
2023 International Conference on Electrical and Information Technology, IEIT 2023, Malang, Indonesia, 14 - 15 September 2023, pp.243-247
- IV. **Deep Fake Video Detection Based on Enhanced Capsule Network with Golden Ratio**
DİNÇER S., ÜSTÜBİOĞLU B., TAHAOĞLU G., ULUTAŞ G.
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- V. **Forge Audio Detection Using Keypoint Features on Mel Spectrograms**
ULUTAŞ G., TAHAOĞLU G., ÜSTÜBİOĞLU B.
45th International Conference on Telecommunications and Signal Processing, TSP 2022, Virtual, Online, Czech Republic, 13 - 15 July 2022, pp.413-416
- VI. **Block-Based Forgery Detection with Binary Gradient Model Ikili Gradyan Modeli ile Blok Tabanlı Ses Sahteciliği Tespiti**
Yazıcı S., ÜSTÜBİOĞLU B., Kılıç M., ULUTAŞ G.
15th International Conference on Information Security and Cryptography, ISCTURKEY 2022, Ankara, Turkey, 19 - 20 October 2022, pp.38-43
- VII. **Localization of Forgery on Audio Clips Using GLCM Features and Mel Spectograms**
ULUTAŞ G., Ustubioglu A., ÜSTÜBİOĞLU B., TAHAOĞLU G.
45th International Conference on Telecommunications and Signal Processing, TSP 2022, Virtual, Online, Czech Republic, 13 - 15 July 2022, pp.314-317
- VIII. **A new approach for localization of copy-move forgery in digital images**
Tahaoğlu G., Ulutaş G., Üstübioğlu B.
44th Telecommunication and Signal Processing, Brno, Czech Republic, 26 - 28 July 2021, pp.183-186
- IX. **Ataklara Karşı Dayanıklı Yeni Bir Kopyala Yapıtır Sahteciliği Tespiti Yöntemi**
Tahaoğlu G., Ulutaş G., Üstübioğlu B.
Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU2020), Gaziantep, Turkey, 5 - 07 October 2020, pp.1-3
- X. **Duplicated Audio Segment Detection with Local Binary Pattern**
KÜÇÜKUĞURLU B., ÜSTÜBİOĞLU B., ULUTAŞ G.
2020 43rd International Conference on Telecommunications and Signal Processing (TSP), Milan, Italy, 07 July 2020, pp.350-353
- XI. **Copy Move Forgery Detection with Quadtree Decomposition Segmentation**
Tahaoğlu G., Ulutaş G., Üstübioğlu B.
43rd International Conference on Telecommunications and Signal Processing (TSP -2020), Milan, Italy, 7 - 09 July 2020, pp.1-5
- XII. **Performance Analysis in Common Color Spaces of 2D Gaussian Color Model for Skin Segmentation**
KETENCİ S., ÜSTÜBİOĞLU B.

- IEEE Region 8 Conference EuroCon 2013, Italy, pp.1
- XIII. **Tıbbi Görüntülerin TADD-HWHD ile Damgalanması**
ÜSTÜBİOĞLU A., ULUTAŞ G., Üstübioğlu B.
SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4
- XIV. **Using correlation matrix to detect frame duplication forgery in videos**
ÜSTÜBİOĞLU B., ULUTAŞ G., NABIYEV V., ULUTAŞ M., ÜSTÜBİOĞLU A.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XV. **Watermarking Medical Images with IDWT-FWHT**
ÜSTÜBİOĞLU A., ULUTAŞ G., ÜSTÜBİOĞLU B.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XVI. **Korelasyona Dayalı Hızlı Bir Çerçeve Tekrarlama Sahteciliği Tespit Yöntemi (A Fast Detection Method for Frame Duplication Forgery based on Correlation)**
ÜSTÜBİOĞLU B., ULUTAŞ G., NABIYEV V., ULUTAŞ M., ÜSTÜBİOĞLU A.
2017 IEEE 25. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Turkey, 15 - 18 May 2017
- XVII. **Tamper Localization of the Medical Images Based on Fragile Watermarking**
ÜSTÜBİOĞLU A., ULUTAŞ G., ÜSTÜBİOĞLU B.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017
- XVIII. **AKD İle Videolarda Çerçeve Tekrarlama Sahteciliği Tespiti**
ÜSTÜBİOĞLU B., ULUTAŞ G., ULUTAŞ M., NABIYEV V.
9. Uluslararası Bilgi Güvenliği ve Kriptoloji Konferansı, 25 - 26 October 2016
- XIX. **COLOR LAYOUT DESCRIPTOR BASED VIDEO FORGERY DETECTION**
BOZKURT I., ULUTAŞ G., ÜSTÜBİOĞLU B., NABIYEV V.
9. ULUSLARARASI BİLGİ GÜVENLİĞİ VE KRIPTOLOJİ KONFERANSI, Ankara, Turkey, 25 - 26 October 2016, pp.178-182
- XX. **FRAME DUPLICATION FORGERY DETECTION BY USING DCT**
ÜSTÜBİOĞLU B., ÜSTÜBİOĞLU A., ULUTAŞ G., ULUTAŞ M., NABIYEV V.
9. ULUSLARARASI BİLGİ GÜVENLİĞİ VE KRIPTOLOJİ KONFERANSI, Ankara, Turkey, 25 October - 26 December 2016, pp.141-144
- XXI. **Copy Move Forgery Detection Using Gabor Filter and Scaled ORB**
Tahaoğlu G., Makul Ö., Üstübioğlu B., Ulutaş G.
International Conference on Image Processing, Production and Computer Science (ICIPCS'2016), London, United Kingdom, 26 - 27 March 2016
- XXII. **A novel keypoint based forgery detection method based on local phase quantization and SIFT**
ÜSTÜBİOĞLU B., MUZAFFER G., ULUTAŞ G., NABIYEV V., ULUTAŞ M.
9th International Conference on Electrical and Electronics Engineering, ELECO 2015, Bursa, Turkey, 26 - 28 November 2015, pp.185-189
- XXIII. **LBP-DCT Based Copy Move Forgery Detection Algorithm**
Ustubioglu B., Ulutas G., Ulutas M., Nabiye V., Ustubioglu A.
30th International Symposium on Computer and Information Sciences (ISCIS), London, Canada, 21 - 24 September 2015, vol.363, pp.127-136
- XXIV. **Image Forgery Detection based on SIFT and k-means plus**
BAYKAL KABLAN E., ÜSTÜBİOĞLU B., ULUTAŞ G.
39th International Conference on Telecommunications and Signal Processing (TSP), Vienna, Austria, 27 - 29 June 2016, pp.474-477
- XXV. **A Novel Keypoint Based Forgery Detection Method Based on LPQ and SIFT**
Üstübioğlu B., Tahaoğlu G., Ulutaş G., Nabiye V., Ulutaş M.
"International Conference on Electrical and Electronics Engineering, ELECO 2015", Bursa, Turkey, 26 - 28 November 2015
- XXVI. **Enerji Olasılık Değerlerini Kullanan Görüntü Sahtecilik Tespit Yöntemi**
ÜSTÜBİOĞLU B., ULUTAŞ G., NABIYEV V., ULUTAŞ M.
IEEE 23. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, 16 May 2015

- XXVII. **Renkli SIFT Tabanlı Görüntü Sahtecilik Tespit Yöntemi**
ÜSTÜBİOĞLU B., AYAS S., DOĞAN H., ULUTAŞ G.
IEEE 23. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Malatya, Turkey, 16 - 19 May 2015, pp.1-4
- XXVIII. **Image Forgery Detection Using Colour Moments**
ÜSTÜBİOĞLU B., NABIYEV V., ULUTAŞ G., ULUTAŞ M.
38th International Conference on Telecommunications and Signal Processing (TSP), Prague, Czech Republic, 9 - 11 July 2015, pp.540-544
- XXIX. **Image Forgery Detection based on Energy Probability**
ÜSTÜBİOĞLU B., ULUTAŞ G., NABIYEV V., ULUTAŞ M.
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.919-922
- XXX. **Jpeg Ataklara Dayanıklı Hibrit Görüntü Doğrulama Yaklaşımı**
ÜSTÜBİOĞLU B., NABIYEV V., ULUTAŞ G., ULUTAŞ M.
IEEE 22nd Signal Processing and Communications Applications Conference (SIU 2014), 23 - 25 April 2014
- XXXI. **Performance Analysis in Common Color Spaces of 2D Gaussian Color Model for Skin Segmentation**
KETENCİ S., ÜSTÜBİOĞLU B.
IEEE Region 8 Conference EuroCon 2013, Roma, Italy, 1 - 04 July 2013
- XXXII. **Yüz Benzerliğinin Otomatik Tespiti**
ÜSTÜBİOĞLU B., NABIYEV V., ÜSTÜBİOĞLU A.
5. Mühendislik ve Teknoloji Sempozyumu, 2012, Ankara, Turkey, 26 - 27 April 2012, pp.60-62
- XXXIII. **Similarity assessment with local binary patterns**
NABIYEV V., ÜSTÜBİOĞLU B.
Signal Processing and Communications Applications Conference (SIU), Ankara, Turkey, 18 - 20 April 2012, pp.1-4
- XXXIV. **Biyometrik Görüntülerin Ağ Üzerinden Güvenli Şekilde İletilmesi**
ÜSTÜBİOĞLU B., NABIYEV V., ÜSTÜBİOĞLU A.
Çankaya Üniversitesi 4. Mühendislik ve Teknoloji Sempozyumu, Ankara, Turkey, 28 - 29 April 2011, pp.50-52
- XXXV. **A novel keypoint based forgery detection method based on local phase quantization and SIFT**
ÜSTÜBİOĞLU B., MUZAFFER G., ULUTAŞ G., NABIYEV V., ULUTAŞ M.
ELECO 2015 - 9th International Conference on Electrical and Electronics Engineering, IEEE, Bursa, Turkey, 26 - 28 October 1915, pp.185-189

Supported Projects

ULUTAŞ G., TUBITAK Project, Pasif Video Doğrulama Sistemi, 2015 - 2017

Metrics

Publication: 57
Citation (WoS): 167
Citation (Scopus): 224
H-Index (WoS): 7
H-Index (Scopus): 9

Scholarships

Teknoloji Liderleri Lisansüstü Burs Programı, Special Institutions and Organizations, 2011 - Continues