

Prof. ALPTEKİN TEMİZEL

Personal Information

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International Researcher IDs

ScholarID: 3grTeasAAAAJ

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Publons / Web Of Science ResearcherID: E-5071-2016

ScopusID: 12761836400

Yoksis Researcher ID: 31897

Education Information

Doctorate, University of Surrey, Department Of Electronic Engineering, Centre For Vision, Speech And Signal Processing, United Kingdom 2001 - 2006

Undergraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1994 - 1999

Foreign Languages

English, C1 Advanced

Research Areas

Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Pattern Recognition and Image Processing

Academic Titles / Tasks

Professor, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, 2019 - Continues

Associate Professor, Middle East Technical University, Graduate School of Informatics, Work Based Learning, 2014 - 2019

Associate Professor, University of Birmingham, School of Engineering, Electronic, Electrical and Systems Engineering, 2016 - 2017

Assistant Professor, Middle East Technical University, Graduate School of Informatics, Work Based Learning, 2007 - 2014

Academic and Administrative Experience

Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, METU CENTER FOR IMAGE ANALYSIS (OGAM), 2021 - Continues
Applied Research Center Board Member, Neuroscience and Neurotechnology Center of Excellence, 2021 - 2023
Head of Department, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, 2018 -
2019
Head of Department, Middle East Technical University, Graduate School of Informatics, Work Based Learning, 2007 -
2016
Head of Department, Middlesex University, Institute Of Work Based Learning Studies, Link Tutor, 2007 - 2016

Advising Theses

Temizel A., Computer-aided estimation of endoscopic activity in ulcerative colitis, Doctorate, G.POLAT(Student), 2023
Sürer E., Temizel A., Multi-modal egocentric activity recognition through decision fusion, Doctorate,
M.ARABACI(Student), 2023
Temizel A., Attack Independent Perceptual Improvement of Adversarial Examples, Postgraduate, B.Tuna(Student), 2022
Temizel A., EMPLOYMENT OF CYCLE-SPINNING IN DEEP LEARNING, Doctorate, Ü.UZUN(Student), 2022
Temizel A., Universal adversarial perturbations using alternating loss functions, Postgraduate, D.ŞEN(Student), 2022
Temizel A., Improving perceptual quality of spatially transformed adversarial examples, Postgraduate, A.AYDIN(Student),
2022
Temizel A., Active learning based synthetic sample selection for endoscopic image classification, Postgraduate,
A.İNCİ(Student), 2022
Temizel A., Improving classification performance of endoscopic images with generative data augmentation, Postgraduate,
Ü.MERT(Student), 2022
Temizel A., Generation and modification of 3D models with deep neural networks, Doctorate, C.ÖNGÜN(Student), 2021
Temizel A., Parallelization of noise subspace-based DOA estimation algorithms on CPU and GPU, Postgraduate,
H.ERAY(Student), 2021
Temizel A., VEHICLE DETECTION ON SMALL SCALE DATA BY GENERATIVE DATA AUGMENTATION, Postgraduate,
H.KUMDAKCI(Student), 2021
Taşkaya Temizel T., Temizel A., A data driven performance evaluation framework for sports analytics, Doctorate,
A.ELVAN(Student), 2021
Temizel A., Perceptual quality preserving adversarial attacks, Postgraduate, B.AKSOY(Student), 2019
Hacıhabiboğlu H., Temizel A., Speaker and posture classification using instantaneous acoustic features of breath signals,
Postgraduate, A.İLERİALKAN(Student), 2019
Sürer E., Temizel A., Multiple Kernel Learning for First-Person Activity Recognition, Postgraduate, F.Özkan(Student),
2017
Sürer E., Temizel A., Accelerating of Line of Sight Analysis Algorithms with Parallel Programming, Postgraduate,
G.Yılmaz(Student), 2017
, Temizel A., Sürer E., Accelerating line of sight analysis algorithms with parallel programming, Postgraduate,
G.YILMAZ(Student), 2017
KALKAN S., TEMİZEL A., Spatial 3D local descriptors for object recognition in RGB-D images, Doctorate,
K.BERKER(Student), 2016
TEMİZEL A., Conjoint individual and group tracking framework with online learning, Doctorate, A.YİĞİT(Student), 2016
TEMİZEL A., TAŞKAYA TEMİZEL T., UBDroid: A tool for monitoring smartphone application usage for user behavior
analysis, Postgraduate, E.AKKURT(Student), 2015
TEMİZEL A., Object tracking with range gated camera system, Doctorate, M.YAĞCIOĞLU(Student), 2015
AKAR G., TEMİZEL A., GPU-enabled real-time panoramic background subtraction, Postgraduate,
S.BÜYÜKSARAÇ(Student), 2015
TEMİZEL A., Automated detection of viewer engagement by head motion analysis, Postgraduate, U.GÜLER(Student),
2015
TEMİZEL A., TAŞKAYA TEMİZEL T., Anomaly detection using sparse features and spatio-temporal hidden Markov model
for pedestrian zone video surveillance, Postgraduate, A.ELVAN(Student), 2014

TEMİZEL A., Hybrid CPU-GPU implementation of tracking-learning-detection algorithm, Postgraduate, İ.GÜRCAN(Student), 2014

ULUSOY İ., TEMİZEL A., Anomaly detection for video surveillance in crowded environments /, Postgraduate, C.ÖNGÜN(Student), 2014

TEMİZEL A., A mobile sensing framework for audience emotion analysis, Postgraduate, E.KEPUCKA(Student), 2014

TEMİZEL A., A learning-based method for person re-identification, Postgraduate, B.BUKET(Student), 2013

TAŞKAYA TEMİZEL T., TEMİZEL A., Automated crowd behavior analysis for video surveillance applications, Postgraduate, P.GÜLER(Student), 2012

TEMİZEL A., Classification of migraineurs using functional near infrared spectroscopy data, Postgraduate, Y.SAYITA(Student), 2012

TEMİZEL A., Object tracking system with seamless object handover between stationary and moving camera modes, Postgraduate, D.EMEKSİZ(Student), 2012

TEMİZEL A., Hyperspectral imaging and machine learning of texture foods for classification, Doctorate, M.ATAŞ(Student), 2011

TEMİZEL A., Thermal and visible band image fusion for abandoned object detection, Postgraduate, A.Yiğit(Student), 2010

TEMİZEL A., Thermal and visible band image fusion for abandoned object detection, Postgraduate, A.YİĞİT(Student), 2010

TEMİZEL A., Object tracking for surveillance applications using thermal and visible band video data fusion, Postgraduate, Ç.BEYAN(Student), 2010

TEMİZEL A., Road extraction from high-resolution satellite images, Postgraduate, M.ÖZKAYA(Student), 2009

TEMİZEL A., Adaptive camera tamper detection for video surveillance, Postgraduate, A.SAĞLAM(Student), 2009

TEMİZEL A., Structure-from-motion for systems with perspective and omnidirectional cameras, Doctorate, Y.BAŞTANLAR(Student), 2009

Designed Lessons

Temizel A., Taşkaya Temizel T., Transformers and Attention-Based Deep Networks, Postgraduate, 2023 - 2024

Temizel A., Machine Learning Systems Design and Deployment, Postgraduate, 2021 - 2022

Temizel A., Hacıhabiboğlu H., Multimedia Standards, Postgraduate, 2017 - 2018

Temizel A., Sürer E., Deep Learning: Methods and Applications, Postgraduate, 2017 - 2018

Taught Courses And Trainings

Temizel A., Deep Learning for Computer Vision Hands-on Workshop, 2020 - 2020

Temizel A., Derin Öğrenme Eğitimi, 2019 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Egocentric activity recognition using two-stage decision fusion**
Arabacı M. A., SÜRER E., TEMİZEL A.
Neural Computing and Applications, vol.36, no.36, pp.22889-22903, 2024 (SCI-Expanded)
- II. **Adversarial image generation by spatial transformation in perceptual colorspace**
Aydın A., Temizel A.
PATTERN RECOGNITION LETTERS, vol.174, pp.92-98, 2023 (SCI-Expanded)
- III. **Improving the Computer-Aided Estimation of Ulcerative Colitis Severity According to Mayo Endoscopic Score by Using Regression-Based Deep Learning**
Polat G., Kani H. T., Ergenc I., Alahdab Y. O., Temizel A., Atug O.

INFLAMMATORY BOWEL DISEASES, vol.29, pp.1431-1439, 2023 (SCI-Expanded)

- IV. **Automated question generation and question answering from Turkish texts using text-to-text transformers**
Akyön F. Ç., Çavuşoğlu D., Cengiz C., Altınuç S. O., Temizel A.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.0, no.0, 2022 (SCI-Expanded)
- V. **GPU accelerated 3DES encryption**
Altınok K. F., Peker A., Tezcan C., Temizel A.
CONCURRENCY AND COMPUTATION-PRACTICE & EXPERIENCE, vol.34, no.9, 2022 (SCI-Expanded)
- VI. **Evaluation of Ulcerative Colitis Endoscopic Mayo Score with Artificial Intelligence**
Kani H. T., Ergenç İ., Polat G., Özen Alahdab Y., Temizel A., Atuş Ö.
ENDOSCOPY, vol.54, no.S01, pp.140-141, 2022 (SCI-Expanded)
- VII. **Cycle-Spinning Convolution for Object Detection**
Uzun U., Temizel A.
IEEE ACCESS, vol.10, pp.76340-76350, 2022 (SCI-Expanded)
- VIII. **Multi-modal egocentric activity recognition using multi-kernel learning**
Arabaci M. A., Ozkan F., SÜRER E., Jancovic P., TEMİZEL A.
Multimedia Tools and Applications, vol.80, no.11, pp.16299-16328, 2021 (SCI-Expanded)
- IX. **Evaluation of endoscopic mayo score with an artificial intelligence algorithm**
Kani H. T., Ergenç I., Polat G., Alahdab Y. O., TEMİZEL A., ATUĞ Ö.
JOURNAL OF CROHNS & COLITIS, vol.15, 2021 (SCI-Expanded)
- X. **LPMNet: Latent part modification and generation for 3D point clouds ***
Öngün C., Temizel A.
COMPUTERS & GRAPHICS-UK, vol.96, pp.1-13, 2021 (SCI-Expanded)
- XI. **Deep learning for detection and segmentation of artefact and disease instances in gastrointestinal endoscopy**
Ali S., Dmitrieva M., Ghatwary N., Bano S., Polat G., TEMİZEL A., Krenzer A., Hekalo A., Guo Y. B., Matuszewski B., et al.
Medical Image Analysis, vol.70, 2021 (SCI-Expanded)
- XII. **A Dimension Reduction Approach to Player Rankings in European Football**
Aydemir A. E., Taşkaya Temizel T., Temizel A., Preshlenov K., Strahinov D.
IEEE ACCESS, vol.9, pp.119503-119519, 2021 (SCI-Expanded)
- XIII. **Heterogeneous CPU-GPU tracking-learning-detection (H-TLD) for real-time object tracking**
Gurcan I., Temizel A.
JOURNAL OF REAL-TIME IMAGE PROCESSING, vol.16, no.2, pp.339-353, 2019 (SCI-Expanded)
- XIV. **Individual and group tracking with the evaluation of social interactions**
YİĞİT A., TEMİZEL A.
IET COMPUTER VISION, vol.11, no.3, pp.255-263, 2017 (SCI-Expanded)
- XV. **Density aware anomaly detection in crowded scenes**
GÜNDÜZ A. E., ÖNGÜN C., Temizel T., TEMİZEL A.
IET COMPUTER VISION, vol.10, no.5, pp.374-381, 2016 (SCI-Expanded)
- XVI. **Real-time multi-camera video analytics system on GPU**
Güler P., Emeksiz D., Temizel A., Teke M., Temizel T.
JOURNAL OF REAL-TIME IMAGE PROCESSING, vol.11, no.3, pp.457-472, 2016 (SCI-Expanded)
- XVII. **CoSPAIR: Colored Histograms of Spatial Concentric Surflet-Pairs for 3D object recognition**
Logoglu K. B., Kalkan S., TEMİZEL A.
ROBOTICS AND AUTONOMOUS SYSTEMS, vol.75, pp.558-570, 2016 (SCI-Expanded)
- XVIII. **A multimodal approach for individual tracking of people and their belongings**
Beyan Ç., Temizel A.
IMAGING SCIENCE JOURNAL, vol.63, pp.192-202, 2015 (SCI-Expanded)
- XIX. **A new approach to aflatoxin detection in chili pepper by machine vision**
ATAŞ M., Yardimci Y., TEMİZEL A.

- COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.87, pp.129-141, 2012 (SCI-Expanded)
- XX. **Multi-view structure-from-motion for hybrid camera scenarios**
BAŞTANLAR Y., Temizel A., Yardimci Y., Sturm P.
IMAGE AND VISION COMPUTING, vol.30, no.8, pp.557-572, 2012 (SCI-Expanded)
- XXI. **Adaptive mean-shift for automated multi object tracking**
Beyan C., Temizel A.
IET COMPUTER VISION, vol.6, pp.1-12, 2012 (SCI-Expanded)
- XXII. **High-resolution multispectral satellite image matching using scale invariant feature transform and speeded up robust features**
TEKE M., Vural M. F., Temizel A., Yardimci Y.
JOURNAL OF APPLIED REMOTE SENSING, vol.5, 2011 (SCI-Expanded)
- XXIII. **Fusion of thermal- and visible-band video for abandoned object detection**
Beyan C., Yiğit A., Temizel A.
JOURNAL OF ELECTRONIC IMAGING, vol.20, 2011 (SCI-Expanded)
- XXIV. **Improved SIFT matching for image pairs with scale difference**
BAŞTANLAR Y., Temizel A., Yardimci Y.
ELECTRONICS LETTERS, vol.46, no.5, pp.346-347, 2010 (SCI-Expanded)
- XXV. **Wavelet domain image resolution enhancement**
Temizel A., VLACHOS T.
IEE PROCEEDINGS-VISION IMAGE AND SIGNAL PROCESSING, vol.153, no.1, pp.25-30, 2006 (SCI-Expanded)
- XXVI. **Image resolution upscaling in the wavelet domain using directional cycle spinning**
Temizel A., VLACHOS T.
JOURNAL OF ELECTRONIC IMAGING, vol.14, no.4, 2005 (SCI-Expanded)
- XXVII. **Wavelet domain image resolution enhancement using cycle-spinning**
Temizel A., VLACHOS T.
ELECTRONICS LETTERS, vol.41, no.3, pp.119-121, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **A Machine Learning Ensembling Approach to Predicting Transfer Values**
Aydemir A. E., Temizel T. T., Temizel A.
SN Computer Science, vol.3, no.201, 2022 (Scopus)
- II. **Motion wavelet compression**
Aksay A., AKAR G., Akhan M., Temizel A., Duhamel P.
IEE Colloquium (Digest), no.19, pp.169-172, 2000 (Scopus)

Books & Book Chapters

- I. **Experiences on image and video processing with CUDA and OpenCL**
Temizel A., Halıcı T., Loğoğlu B., Taşkaya Temizel T., Ömrüuzun F., Karaman E.
in: GPU Computing Gems, Wen-Mei Hwu, Editor, Morgan Kaufmann Publishers , California, pp.547-567, 2011

Refereed Congress / Symposium Publications in Proceedings

- I. **TopoMaskV2: Enhanced Instance-Mask-Based Formulation for the Road Topology Problem**
Kalfaoğlu M. E., Öztürk H. İ., Kılınç Ö., Temizel A.
European Conference on Computer Vision, Workshop on Vision-Centric Autonomous Driving (VCAD), Milan, Italy,
30 September 2024

- II. **Ulcerative Colitis Mayo Endoscopic Scoring Classification with Active Learning and Generative Data Augmentation**
Çağlar Ü. M., İnci A., Hanoğlu O., Polat G., Temizel A.
IEEE International Conference on Bioinformatics and Biomedicine (IEEE BIBM 2023), İstanbul, Turkey, 5 - 08 December 2023, pp.462-467
- III. **Sequence Models for Drone vs Bird Classification**
Akyön F. Ç., Akagündüz E., Altınuç S. O., Temizel A.
16th International Conference on Machine Vision (ICMV 2023), Yerevan, Armenia, 15 - 18 November 2023
- IV. **IR Reasoner: Real-time Infrared Object Detection by Visual Reasoning**
Gündoğan M. M., Temizel A.
IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR), Perception Beyond the Visible Spectrum Workshop, Vancouver, Canada, 18 - 22 June 2023, pp.1-8
- V. **TopoMask: Instance-Mask-Based Formulation for the Road Topology Problem via Transformer-Based Architecture**
Kalfaoğlu M. E., Öztürk H. İ., Kılınç Ö., Temizel A.
Computer Vision and Pattern Recognition Conference (CVPR), Workshop on End-to-End Autonomous Driving, 18 June - 18 November 2023
- VI. **State-of-the-Art in Nudity Classification: A Comparative Analysis**
Akyön F. Ç., Temizel A.
International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Workshop on Computational Intelligence for Multimedia Understanding, Rodos, Greece, 4 - 10 June 2023, pp.1-6
- VII. **IR Reasoner: Real-time Infrared Object Detection by Visual Reasoning**
Gündoğan M. M., Aksoy T., TEMİZEL A., HALICI U.
2023 IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops, CVPRW 2023, Vancouver, Canada, 18 - 22 June 2023, vol.2023-June, pp.422-430
- VIII. **Class Distance Weighted Cross-Entropy Loss for Ulcerative Colitis Severity Estimation**
POLAT G., ERGENÇ İ., KANI H. T., ÖZEN ALAHDAB Y., ATUĞ Ö., TEMİZEL A.
26th Annual Conference Medical Image Understanding and Analysis, Cambridge, Canada, 27 July 2022, pp.157-171
- IX. **Class Distance Weighted Cross-Entropy Loss for Ulcerative Colitis Severity Estimation**
Polat G., Ergenç İ., Kani H. T., Özen Alahdab Y., Atug Ö., Temizel A.
26th UK Conference on Medical Image Understanding and Analysis, Cambridge, England, 27 June 2022, pp.1-7
- X. **Slicing Aided Hyper Inference and Fine-tuning for Small Object Detection**
Akyön F., Altınuç S. O., Temizel A.
IEEE International Conference on Image Processing (ICIP), Bordeaux, France, 16 - 19 October 2022, pp.1-6
- XI. **Training Universal Adversarial Perturbations with Alternating Loss Functions**
Şen D., Karlı B. T., Temizel A.
36th AAAI Conference on Artificial Intelligence, Adversarial Machine Learning and Beyond Workshop, Vancouver, Canada, 22 February - 01 March 2022, pp.1-5
- XII. **Improving Perceptual Quality of Adversarial Images Using Perceptual Distance Minimization and Normalized Variance Weighting**
Karlı B. T., Şen D., Temizel A.
36th AAAI Conference on Artificial Intelligence, Adversarial Machine Learning and Beyond Workshop, Vancouver, Canada, 22 February - 01 March 2022, pp.1-5
- XIII. **Imperceptible Adversarial Examples by Spatial Chroma-Shift**
AYDIN A., Sen D., Karli B. T., Hanoglu O., TEMİZEL A.
1st International Workshop on Adversarial Learning for Multimedia, AdvM 2021, co-located with ACM MM 2021, Virtual, Online, China, 20 October 2021, pp.8-14
- XIV. **Evaluation and Analysis of Different Aggregation and Hyperparameter Selection Methods for Federated Brain Tumor Segmentation**
Işık Polat E., Polat G., Koçyiğit A., Temizel A.
Brain Lesion 2021 MICCAI Workshop, Strasbourg, France, 27 September 2021

- XV. **Polyp Detection in Colonoscopy Images using Deep Learning and Bootstrap Aggregation**
IŞIK POLAT E., POLAT G., KAYABAY K., TEMİZEL A.
Endoscopy Detection and Segmentation Workshop (EndoCV2021), IEEE International Symposium on Biomedical Imaging (ISBI), Nice, France, 13 April 2021
- XVI. **Generative Data Augmentation for Vehicle Detection in Aerial Images**
Kumdağcı H., Öngün C., Temizel A.
25th International Conference on Pattern Recognition Workshops, ICPR 2020, Milan, Italy, 10 - 11 January 2021, vol.12668 LNCS, pp.19-31
- XVII. **Ülseratif Kolit Endoskopik Mayo Skorunun Yapay Zeka İle Değerlendirilmesi**
Ergenç İ., Kani H. T., Polat G., Özen Alahdab Y., Temizel A., Atuş Ö.
37. Ulusal Gastroenteroloji Kongresi, 25 - 29 November 2020
- XVIII. **Bit-level Parallelization of 3DES Encryption on GPU**
ALTINOK K. F., PEKER A., TEMİZEL A.
6. Ulusal Yüksek Başarımli Hesaplama Konferansı (BAŞARIM 2020), Ankara, Turkey, 8 - 09 October 2020
- XIX. **Accelerating Translational Image Registration for HDR Images on GPU**
Alpay K. C., Aydemir K. B., Temizel A.
6. Ulusal Yüksek Başarımli Hesaplama Konferansı (BAŞARIM 2020), Ankara, Turkey, 8 - 09 October 2020
- XX. **Performance Analysis of Noise Subspace-based Narrowband Direction-of-Arrival (DOA) Estimation Algorithms on CPU and GPU**
ERAY H., TEMİZEL A.
6. Ulusal Yüksek Başarımli Hesaplama Konferansı (BAŞARIM 2020), Ankara, Turkey, 8 - 09 October 2020
- XXI. **Optimization of XNOR Convolution for Binary Convolutional Neural Networks on GPU**
KAYA M. C., İNCİ A., TEMİZEL A.
6. Ulusal Yüksek Başarımli Hesaplama Konferansı (BAŞARIM 2020), Ankara, Turkey, 8 - 09 October 2020
- XXII. **Attack Type Agnostic Perceptual Enhancement Of Adversarial Images**
Aksoy B., Temizel A.
International Workshop on Adversarial Machine Learning And Security (AMLAS), IEEE World Congress on Computational Intelligence (IEEE WCCI), Glasgow, United Kingdom, 19 July 2020, pp.1
- XXIII. **Endoscopic artefact detection with ensemble of deep neural networks and false positive elimination**
Polat G., Sen D., İnci A., Temizel A.
2nd International Workshop and Challenge on Computer Vision in Endoscopy, EndoCV 2020, Iowa, United States Of America, 03 April 2020, vol.2595, pp.8-12
- XXIV. **Cycle-spinning GAN for raindrop removal from images**
Uzun U., TEMİZEL A.
16th IEEE International Conference on Advanced Video and Signal Based Surveillance, AVSS 2019, Taipei, Taiwan, 18 - 21 September 2019
- XXV. **Optimized GPU Implementation of JPEG 2000 for Satellite Image Decompression**
Ufuk D. U., Temizel A., Özbayođlu A. M.
IEEE International Conference on Computational Science and Engineering, Bucuresti, Romania, 29 - 31 October 2018
- XXVI. **How Clickable Are Your Food Photos?**
KUMDAĞCI h., TAŞKAYA TEMİZEL T., TEMİZEL A.
GPU Technology Conference, Munich, Germany, 9 - 11 October 2018
- XXVII. **The Effects of JPEG and JPEG2000 Compression on Attacks using Adversarial Examples**
Gündüz A. E., Temizel A., Taşkaya Temizel T.
GPU Technology Conference, Munich, Germany, 9 - 11 October 2018
- XXVIII. **Paired 3D Model Generation with Conditional Generative Adversarial Networks**
Öngün C., Temizel A.
3DRW Workshop, European Conference on Computer Vision (ECCV), Munich, Germany, 14 September 2018, vol.0
- XXIX. **Birinci-Şahıs Videolarda Aktivite Tanıma İçin Sıralamalı Takviyeli Çoklu Çekirdek Öğrenmesi**
Özkan F., Sürer E., Temizel A.

IEEE Sinyal İşleme ve İletişim Uygulamaları (SİU) Kurultayı, İzmir, Turkey, 2 - 05 May 2018

- XXX. **Ranking Based Boosted Multiple Kernel Learning For Activity Recognition on First-Person Videos**
Ozkan F., SÜRER E., TEMİZEL A.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XXXI. **Acceleration of Line of Sight Analysis Algorithms with Parallel Programming**
Yılmaz G., Sürer E., Temizel A.
7. Ulusal Savunma Uygulamaları Modelleme ve Simulasyon (USMOS) Konferansı, Ankara, Turkey, 21 - 23 November 2017
- XXXII. **Accelerating Johnson's All-Pairs Shortest Paths Algorithm on GPU**
TAŞTAN O., ERYÜKSEL O. C., TEMİZEL A.
Ulusal Yüksek Başarımlı Hesaplama Konferansı, Turkey, 14 - 15 September 2017
- XXXIII. **First-Person Activity Recognition with Multimodal Features**
Temizel A.
International Workshop on Computational Intelligence for Multimedia Understanding (IWCIM), Hios, Greece, 02 September 2017
- XXXIV. **Boosted multiple kernel learning for first-person activity recognition**
Özkan F., Arabacı M. A., Sürer E., Temizel A.
25th European Signal Processing Conference (EUSIPCO) 2017, Hios, Greece, 28 August - 02 September 2017
- XXXV. **UBDroid Kullanıcı Davranış Analizi için Akıllı Telefon Uygulamaları Kullanım İzleme Aracı**
ÇAVDAR Ş., AKKURT E., ÇAVDAR D., TEMİZEL A., TAŞKAYA TEMİZEL T.
10. Ulusal Yazılım Mühendisliği Sempozyumu (UYMS), Çanakkale, Turkey, 24 - 26 October 2016, vol.0
- XXXVI. **Real time panoramic background subtraction on GPU**
BÜYÜKSARAÇ S., AKAR G., TEMİZEL A.
2016 24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, Turkey, 16 - 19 May 2016
- XXXVII. **SHREC'16 track: Shape retrieval of low-cost RGB-D captures**
Pascoal P. B., Proença P., Gaspar F., Dias M. S., Ferreira A., Tatsuma A., Aono M., Logoglu K. B., Kalkan S., Temizel A., et al.
9th Eurographics Workshop on 3D Object Retrieval, 3DOR 2016, Lisbon, Portugal, 08 May 2016, pp.69-78
- XXXVIII. **Integrated object tracking framework for range gated camera systems**
YAĞCIOĞLU M., YELEN K., TEMİZEL A.
Conference on Long-Range Imaging, Maryland, United States Of America, 19 April 2016, vol.9846
- XXXIX. **UBDroid: Kullanici davranis analizi için akilli telefon uygulamalari kullanim izleme arac**
Çavdar S. K., Akkurt E., Çavdar D., TEMİZEL A., Temizel T. T.
10th Turkish National Software Engineering Symposium, UYMS 2016, Çanakkale, Turkey, 24 - 26 October 2016, vol.1721, pp.382-393
- XL. **Particle filter based Conjoint Individual-Group Tracker (CIGT)**
YİĞİT A., TEMİZEL A.
12th IEEE International Conference on Advanced Video and Signal Based Surveillance, AVSS 2015, Karlsruhe, Germany, 25 - 28 August 2015
- XLI. **Experiment on Generating Pseudo G711 G722 RTP Payload**
ŞİFA SERDAR Ö., TEMİZEL A.
GPU Technology Conference, San-Jose, United States Of America, 17 - 20 March 2015
- XLII. **Tracking Objects Better Faster Longer**
TEMİZEL A.
GPU Technology Conference, San-Jose, United States Of America, 17 - 20 March 2015
- XLIII. **Spatial and Temporal Feature Extraction for Brain Decoding using CUDA**
ÖNAL I., TEMİZEL A., YARMAN VURAL F. T.
GPU Technology Conference, San-Jose, United States Of America, 17 - 20 March 2015
- XLIV. **Pedestrian zone anomaly detection by non-parametric temporal modelling**
Gündüz A. E., Taşkaya Temizel T., Temizel A.

Advanced Video and Signal Based Surveillance (AVSS), Seoul, South Korea, 26 - 29 August 2014

- XLV. **Local Anomaly Detection in Crowded Scenes Using Finite-Time Lyapunov Exponent Based Clustering**
Öngün C., Temizel A., Taşkaya Temizel T.
11th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS), Seoul, South Korea, 26 - 29 August 2014, pp.331-336
- XLVI. **Clustering of Local Behaviour in Crowd Videos**
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22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.818-821
- XLVII. **DENSITY ESTIMATION IN CROWD VIDEOS**
Gunduz A. E., Taşkaya Temizel T., Temizel A.
22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.822-825
- XLVIII. **Cryptanalysis of PRESENT via CUDA devices**
TEZCAN C., TEMİZEL A.
GPU Technology Conference (GTC), San-Jose, United States Of America, 24 - 27 March 2014
- XLIX. **Person Re identification by Combining Features in a Learning Based Framework**
OĞUL B., TEMİZEL A.
5th International Conference on Imaging for Crime Detection and Prevention (ICDP 2013), London, United Kingdom, 16 - 17 December 2013
- L. **Real-time global anomaly detection for crowd video surveillance using SIFT**
Güler P., Taşkaya Temizel T., Temizel A.
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- LI. **An Unsupervised Method for Anomaly Detection from Crowd Videos**
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21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013
- LII. **Feature Detection and Tracking for Extraction of Crowd Dynamics**
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- LIII. **A continuous object tracking system with stationary and moving camera modes**
Emeksiz D., Temizel A.
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- LIV. **Fast Omnidirectional Image Unwrapping on GPU**
KEPUCKA E., GÜRCAN İ., TEMİZEL A.
Euromicro International Conference on Parallel, Distributed and Network-Based Computing, Munich, Germany, 15 - 17 February 2012
- LV. **A hybrid multi object tracker using mean-shift and background subtraction Ortalama kayma ve arka plan çıkarımı kullanılarak karma çoklu nesne takipçisi**
Beyan Ç., TEMİZEL A.
2011 IEEE 19th Signal Processing and Communications Applications Conference, SIU 2011, Antalya, Turkey, 20 - 22 April 2011, pp.110-113
- LVI. **Detection of abandoned objects using thermal and visible band tracking Görünür ve termal bant takibi kullanılarak terk edilmiş nesne tespiti**
Beyan Ç., Temizel A.
2011 IEEE 19th Signal Processing and Communications Applications Conference, SIU 2011, Antalya, Turkey, 20 - 22 April 2011, pp.114-117
- LVII. **Mean-Shift Tracking for Surveillance Applications Using Thermal and Visible Band Data Fusion**
Beyan C., Temizel A.
Conference on Airborne Intelligence, Surveillance, Reconnaissance (ISR) Systems and Applications VIII, Florida,

United States Of America, 27 - 28 April 2011, vol.8020

- LVIII. **Aflatoxin Contaminated Chili Pepper Detection by Hyperspectral Imaging and Machine Learning**
ATAŞ M., Yardimci Y., TEMİZEL A.
Conference on the Sensing for Agriculture and Food Quality and Safety III, Florida, United States Of America, 26 - 27 April 2011, vol.8027
- LIX. **3D structure extraction with omnidirectional and perspective cameras Tümyönlü ve perspektif kameralar ile 3B yapı çıkarımı**
Baştanlar Y., TEMİZEL A., Yardimci Y.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.395-398
- LX. **Abandoned object detection using thermal and visible band image fusion Termal ve görünür bant imgeleri kullanılarak terk edilen nesne tespiti**
Yigit A., TEMİZEL A.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.617-620
- LXI. **Registration of multi-spectral satellite images with scale-restricted SURF Çoklu bant uydu görüntülerinin ölçek sınırlanmış SURF kullanılarak karşılaştırılması**
Teke M., TEMİZEL A.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.356-359
- LXII. **Effective structure-from-motion for hybrid camera systems**
BAŞTANLAR Y., TEMİZEL A., Yardimci Y., STURM P.
2010 20th International Conference on Pattern Recognition, ICPR 2010, İstanbul, Turkey, 23 - 26 August 2010, pp.1654-1657
- LXIII. **Multi-spectral satellite image registration using scale-restricted surf**
TEKE M., TEMİZEL A.
2010 20th International Conference on Pattern Recognition, ICPR 2010, İstanbul, Turkey, 23 - 26 August 2010, pp.2310-2313
- LXIV. **Classification of aflatoxin contaminated chili pepper using hyperspectral imaging and artificial neural networks**
ATAŞ M., TEMİZEL A., ÇETİN Y.
2010 IEEE 18th Signal Processing and Communications Applications Conference, Diyarbakır, Turkey, Turkey, 22 - 24 April 2010
- LXV. **Real-time Adaptive Camera Tamper Detection for Video Surveillance**
SAĞLAM A., Temizel A.
6th IEEE International Conference on Advanced Video and Signal Based Surveillance, Genoa, Italy, 2 - 04 September 2009, pp.430-435
- LXVI. **Registration of Multispectral Satellite Images with Orientation-Restricted SIFT**
Vural M. F., Yardimci Y., Temizel A.
IEEE International Geoscience and Remote Sensing Symposium, Cape-Town, South Africa, 12 - 17 July 2009, pp.1545-1548
- LXVII. **Multi Modal Satellite Image Registration Using SIFT**
Vural M. F., Yardimci Y., TEMİZEL A.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.666-667
- LXVIII. **Automatic Point Matching and Robust Fundamental Matrix Estimation for Hybrid Camera Scenarios**
Bastanlar Y., TEMİZEL A., Yardimci Y.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.439-442
- LXIX. **On Detection of Edges and Interest Points for Omnidirectional Images in Spherical Domain**
Serce H., Bastanlar Y., TEMİZEL A., Yardimci Y.

IEEE 16th Signal Processing and Communications Applications Conference, Aydın, Turkey, 20 - 22 April 2008, pp.489-492

- LXX. **Image resolution enhancement using wavelet domain hidden Markov Tree and coefficient sign estimation**
Temizel A.
IEEE International Conference on Image Processing (ICIP 2007), San-Antonio, Northern Mariana Islands, 16 - 19 September 2007, pp.2633-2636
- LXXI. **Camera tamper detection using wavelet analysis for video surveillance**
AKSAY A., Temizel A., Cetin A. E.
IEEE Conference on Advanced Video and Signal Based Surveillance, London, Canada, 5 - 07 September 2007, pp.558-560
- LXXII. **Camera Sabotage Discovery for Video Surveillance Applications**
Aksay A., TEMİZEL A., ÇETİN A. E.
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.1142-1143
- LXXIII. **Post processing for wavelet domain HMT image resolution enhancement**
Temizel A.
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.568-571
- LXXIV. **Image resolution enhancement using wavelet domain Hidden Markov Tree and coefficient sign estimation**
Temizel A.
14th IEEE International Conference on Image Processing, ICIP 2007, San Antonio, TX, United States Of America, 16 - 19 September 2007, vol.5
- LXXV. **Wavelet domain image resolution enhancement using cycle spinning and edge modelling**
TEMİZEL A., VLACHOS T.
European Signal Processing Conference (EUSIPCO), 4 - 08 September 2005

Other Publications

- I. **The Effects of JPEG and JPEG2000 Compression on Attacks using Adversarial Examples**
Temizel A., Taşkaya Temizel T., Aydemir A. E.
Technical Report, pp.1-4, 2018

Supported Projects

TEMİZEL A., TAŞKAYA TEMİZEL T., ÇAĞLAR Ü. M., TATLICI U., AYDIN A., DURU A., Project Supported by Higher Education Institutions, Özelleştirilmiş Kayıp Fonksiyonları Kullanarak Büyük Dil Modeli Tabanlı Üretken Veri Artırma, 2024 - Continues

TEMİZEL A., BELEN H. B., TUBITAK Project, Nöron Hasarı İlişkili Hastalıkların Tanı, İzlem Ve Tedavisine Yönelik Biyobelirteç Ve İleri Teknolojik Uyarı Sistemlerinin Geliştirilmesi, 2023 - 2027

Ulusoy I., Halıcı U., Bayram B., Ankaralı M. M., Temizel A., Gençer N. G., Akar G., Ertekin Bolelli Ş., Turgut A. E., Son Ç. D., et al., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, NÖROM Nörobilim ve Nöroteknoloji Mükemmeliyet Merkezi, 2020 - 2023

TEMİZEL A., TUBITAK Project, Increasing Visual Quality of Deep Learning Adversarial Examples, 2020 - 2022

TEMİZEL A., ÖNGÜN C., POLAT G., Project Supported by Higher Education Institutions, Çekişmeli Üretici Ağlar Kullanılarak 3 Boyutlu Sentetik Veri Üretimi, 2020 - 2022

Alatan A. A., Kamışlı F., Akyüz A. O., Temizel A., Halıcı U., Ulusoy İ., Saranlı A., Akar G., Böncü E. S., Çakırgöz Ç. C., Project Supported by Defense Industry, Kent Güvenlik Yönetim Sistemleri için Bilişsel Kamera Geliştirilmesi Projesi , 2018 - 2019

TEMİZEL A., SÜRER E., Project Supported by Higher Education Institutions, Karma Gerçeklikte Etkileşim: Karakter Tasarımı ve Animasyonu, 2017 - 2017

TEMİZEL A., TÜBİTAK Project, Birinci Şahıs Edimlerinin Video ve Ses Analizi ile Kestirimi, 2016 - 2017

TEMİZEL A., KUTLU F., ÇİMEN E., ÖNGÜN C., Project Supported by Higher Education Institutions, Çok-Kipli Analiz ile Birinci Şahıs Eylem Kestirimi, 2015 - 2015

TEMİZEL A., Project Supported by Higher Education Institutions, Termal Görünür Bant Kameraları Kullanılarak Şüpheli Paket Tespit Sistemi, 2009 - 2009

Memberships / Tasks in Scientific Organizations

Association for the Advancement of Artificial Intelligence (AAAI), Member, 2022 - 2023, United States Of America

Association of Computing Professionals (ACM), Member, 2021 - 2022, United States Of America

Scientific Refereeing

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, Journal Indexed in SCI-E, March 2021

Scientific Consultations

Isomer Bilişim - RadiusAI, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, Turkey, 2022 - Continues

ArgosAI, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, Turkey, 2022 - 2024

Innova IT Solutions, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, Turkey, 2021 - 2023

ETB Elektronik, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, Turkey, 2021 - 2021

RETİNA DATA, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, Turkey, 2019 - 2020

FAME CRYPT, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, Turkey, 2019 - 2019

MILSOFT, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Modeling and Simulation, Turkey, 2019 - 2019

ESEN Sistem Entegrasyon, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Work Based Learning, Turkey, 2018 - 2019

FAME CRYPT, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Work Based Learning, Turkey, 2018 - 2018

TÜBİTAK-UZAY, Scientific Consultancy, Middle East Technical University, Graduate School of Informatics, Work Based Learning, Turkey, 2017 - 2018

Tasks In Event Organizations

Temizel A., Taşkaya Temizel T., Zitzlsberger G., Mastering Transformers: From Building Blocks to Real-World Applications, Workshop Organization, Turkey, Eylül 2023

Temizel A., Chen V., Deep Learning for Computer Vision Applications, Workshop Organization, Taipei, Taiwan, Eylül 2019

Temizel A., Deep Learning Workshop, Workshop Organization, Ankara, Turkey, Şubat 2019

Temizel A., Deep Learning Fundamentals for Computer Vision, Workshop Organization, Ankara, Turkey, Eylül 2018

Temizel A., Deep Learning Fundamentals Workshop, Workshop Organization, Ljubljana, Slovenia, Şubat 2018

Mobility Activity

Erasmus Programme, Lecturing, National University of Taiwan, Taiwan, 2019 - 2019

Erasmus Programme, Lecturing, University of Ljubljana, Slovenia, 2018 - 2018

Metrics

Publication: 109

Citation (WoS): 721

Citation (Scopus): 1189

H-Index (WoS): 14

H-Index (Scopus): 16

Congress and Symposium Activities

Uluslararası 3. El-Cezeri İnovasyon Ve Proje Pazarı, Invited Speaker, Siirt, Turkey, 2019

Eurasia Graphics, Invited Speaker, Gaziantep, Turkey, 2018

EUSIPCO satellite workshop- International Workshop on Computational Intelligence for Multimedia Understanding (IWCIM), Invited Speaker, Hios, Greece, 2017

Invited Talks

Nesne Tespiti Probleminde Güncel İlerlemeler, Workshop, TÜBİTAK ULAKBİM, Turkey, November 2022

3rd Workshop on High Performance Computing & Applications, Workshop, Orta Doğu Teknik Üniversitesi, Turkey, March 2022

Sabancı Üniversitesi-Bilim Akademisi Yapay Öğrenme Yaz Okulu 2021, Workshop, Sabancı Üniversitesi, Turkey, June 2021

Yapay Zeka ve Görüntü İşleme Günleri, Seminar, Ankara Üniversitesi, Turkey, May 2019

Deep Learning in Computer Vision , Seminar, IEEE AP/MTT/EMC/ED Turkey , Turkey, December 2018

First-Person Activity Recognition using Video and Audio Features, Seminar, University of Ljubljana, Slovenia, February 2018

Awards

Kalfaoğlu M. E., Öztürk H. İ., Kılınç Ö., Temizel A., CVPR 2023 Workshop On End-To-End Autonomous Driving - OpenLane Topology Challenge, Ieee/Cvf Conference On Computer Vision And Pattern Recognition 2023, June 2023

Işık Polat E., Polat G., Koçyiğit A., Temizel A., Federated Tumor Segmentation Challenge (FeTS), Mıccai 2021, The 24Th International Conference On Medical Image Computing And Computer Assisted Intervention, September 2021

Polat G., Işık Polat E., Kayabay K., Temizel A., Endoscopy Computer Vision Challenge Polyp Detection Task, Ieee International Symposium On Biomedical Imaging (Isbi2021), April 2021

Polat G., Şen D., İnci A., Temizel A., Endoscopic Artefact Detection Challenge, Ieee International Symposium On Biomedical Imaging, April 2020

Temizel A., Taşkaya Temizel T., Gündüz A. E., Computer Vision Award, Isra Vision Ag, May 2015

Non Academic Experience

ODTÜ

University of Birmingham

ODTÜ

Visioprime (İngiltere)

Business Organization (private), Visioprime Ltd

University of Hertfordshire (İngiltere)

Başkent Üniversitesi

TÜBİTAK-BİLTEN