Prof. ABDULLAH AYDIN ALATAN

Personal Information

Office Phone: +90 312 210 2351

Fax Phone: +90 312 210 2304

Email: alatan@metu.edu.tr

Web: https://users.metu.edu.tr/alatan

Address: ODTÜ Elektrik ve Elektronik Mühendisliği Bölümü, Balgat 06800 Ankara

International Researcher IDs

ScholarID: h6mCaBoAAAAJ

ORCID: 0000-0001-5556-7301

Publons / Web Of Science ResearcherID: E-3927-2012

ScopusID: 6701890979

Yoksis Researcher ID: 27988

Biography

A. Aydın Alatan was born in Ankara, Turkey in 1968. He received his B.S. degree from Middle East Technical University, Ankara Turkey in 1990, the M.S and DIC degrees from Imperial College of Science, Medicine and Technology, London, UK in 1992, and PhD degree from Bilkent University, Ankara Turkey in 1997, all in Electrical Engineering.

He was a post-doctoral research associate at Center for Image Processing Research at Rensselaer Polytechnic Institute between 1997 and 1998 and at New Jersey Center for Multimedia Research at New Jersey Institute of Technology between 1998 and 2000. In August 2000, he joined faculty of Electrical and Electronics Engineering Department at Middle East Technical University.

He is the founding director for Center for Image Analysis (OGAM).

He is a member of The Science Academy of Turkey.

Education Information

1992 - 1997	Doctorate, Ihsan Dogramaci Bilkent University, Instıtute Of Engıneerıng And Natural Scıences, Elektrik-Elektronik Mühendisliği (Dr), Turkey
1991 - 1992	Postgraduate, Imperial College of Science, Technology and Medicine, Elektrik Ve Elektronik Mühendisliği, United Kingdom
1986 - 1990	Undergraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey

Foreign Languages

English, C1 Advanced

Research Areas

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Pattern Recognition and Image Processing, Engineering and Technology

Academic Titles / Tasks

2010 - Continues	Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering
2004 - 2010	Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering
2000 - 2004	Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering
1998 - 2000	Lecturer PhD, New Jersey Institute of Technology
1997 - 1998	Lecturer PhD, Rensselaer Polytechnic Institute
1993 - 1997	Research Assistant, Ihsan Dogramaci Bilkent University, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng

Academic and Administrative Experience

2014 - Continues	Manager of Research and Application Center, Middle East Technical University
2008 - 2013	Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü

Advising Theses

2023	Alatan A. A., Postgraduate, A.GÖRGÜN(Student), Interpreting convolutional blocks as feature embedding by template matching for image recognition
2023	Alatan A. A., Postgraduate, S.BURAK(Student), Brain-inspired learning for face analysis in artificial neural networks: A multitask and continual learning framework
2023	Alatan A. A., Doctorate, M.ERGÜL(Student), Visual semantic segmentation with diminished supervision
2022	ALATAN A. A., Doctorate, Y.ZİYA(Student), Novel optimization models to generalize deep metric learning
2022	ALATAN A. A., Postgraduate, Ç.CAN(Student), Utilization of dense depth information for monoview object detection and instance segmentation
2022	ALATAN A. A., Postgraduate, U.OĞUZMAN(Student), An analysis of stereo depth estimation utilizing attention mechanisms, self-supervised pose estimators & temporal predictions
2022	ALATAN A. A., Postgraduate, O.SELİM(Student), Utilization of event based cameras for video frame interpolation
2021	ALATAN A. A., Postgraduate, A.KÖKSAL(Student), Moving object detection with supervised learning methods
2021	ALATAN A. A., Postgraduate, K.KARAMAN(Student), Deep metric learning with distance sensitive entangled triplet losses
2021	ALATAN A. A., Postgraduate, İ.EMRE(Student), Semantic color constancy
2021	Kalkan S., Alatan A. A., Postgraduate, İ.HAKKI(Student), An Analysis on the Effect of Dynamic Range on Object Detection with Deep Neural Networks
2021	ALATAN A. A., Postgraduate, U.EFE(Student), A novel learning-based image matching approach based on mutual nearest neighbor search with ratio test

2020	Kalkan S., Alatan A. A., Postgraduate, M.ESAT(Student), EXPLORING DEEP SPATIO-TEMPORAL FUSION ARCHITECTURES TOWARDS LATE TEMPORAL MODELING OF HUMAN ACTION RECOGNITION
2020	Kalkan S., Alatan A. A., Postgraduate, A.EREN(Student), A Thorough Analysis of Unsupervised Depth and Ego-motion Estimation
2020	ALATAN A. A., Postgraduate, E.Can(Student), Visual object tracking using semi supervised convolutional filters
2018	ALATAN A. A., Postgraduate, M.KÜTÜK(Student), Hiperspektral görüntüler için süperpiksel tabanlı hedef tespit yöntemleri
2018	ALATAN A. A., Postgraduate, O.BARUT(Student), Geospatial object recognition using deep networks for satellite images
2018	ALATAN A. A., Postgraduate, E.CAN(Student), Visual object detection and tracking using local convolutional context features and recurrent neural networks
2018	ALATAN A. A., Postgraduate, O.CAN(Student), Metric learning using deep recurrent networks for visual clustering and retrieval
2017	ALATAN A. A., VURAL E., Postgraduate, E.BAYRAM(Student), Spectral graph based approach for analysis of 3D LIDAR point clouds
2017	ALATAN A. A., Postgraduate, A.ÇALIŞKAN(Student), Stratified calibration and group synchronized focal length estimation for structure from motion algorithms
2017	ALATAN A. A., Doctorate, K.GÖKALP(Student), Superpixel based image sequence representation and motion estimation
2017	ALATAN A. A., Doctorate, E.GÜNDOĞDU(Student), Good features to correlate for visual tracking
2015	ALATAN A. A., Postgraduate, İ.BUZCU(Student), Representing images and regions for object recognition
2015	ALATAN A. A., Doctorate, A.SARACOĞLU(Student), Robust content-based copy detection and information theoretic indexing strategies
2015	ALATAN A. A., Postgraduate, B.BEŞBINAR(Student), Hierarchical representations for visual object tracking by detection
2014	ALATAN A. A., Postgraduate, E.BATI(Student), Deep convolutional neural networks with an application towards geospatial object recognition /
2014	ALATAN A. A., Postgraduate, Y.Ziya(Student), Occlusion aware stereo matching with o(1) complexity /
2014	ALATAN A. A., Doctorate, O.SERDAR(Student), Accurate 3D tracking using visual and depth data
2014	ALATAN A. A., Postgraduate, E.TUNALI(Student), Saliency-based visual tracking using correlation filters for surveillance applications /
2014	ALATAN A. A., Postgraduate, Y.ZİYA(Student), Occlusion aware stereo matching with O(1) complexity
2014	ALATAN A. A., Doctorate, B.OĞUZ(Student), Planar 3D scene representations for depth compression
2013	ALATAN A. A., Postgraduate, O.ŞENER(Student), An efficient graph-theoretical approach for interactive mobile image and video segmentation
2013	ALATAN A. A., Doctorate, H.EMRAH(Student), Superpixel based efficient image representation for segmentation and classification
2013	ALATAN A. A., Postgraduate, T.MARPUÇ(Student), Tracking by classification
2013	ALATAN A. A., Doctorate, S.SIRTKAYA(Student), Visual-inertial sensor fusion for 3D urban modeling
2013	ALATAN A. A., Postgraduate, Y.AKSOY(Student), Efficient inertially aided visual odometry towards mobile augmented reality

2013	ALATAN A. A., Doctorate, O.TOPÇU(Student), Occlusion-aware 3-D multiple object tracking for visual surveillance
2012	ALATAN A. A., Doctorate, Y.YAŞAROĞLU(Student), Steganography through perspective invariance
2012	ALATAN A. A., Postgraduate, E.GÜNDOĞDU(Student), Feature detection and matching towards augmented reality applications on mobile devices
2012	ALATAN A. A., Doctorate, C.ÇIĞLA(Student), Real-time stereo to multi-view video conversion
2012	ALATAN A. A., Doctorate, Ö.DENİZ(Student), A complexity-utility framework for optimizing quality of experience for visual content in mobile devices
2012	ALATAN A. A., Postgraduate, D.ARSLAN(Student), Global appearance based airplane detection from satellite imagery
2012	ALATAN A. A., Doctorate, Y.ATASEVEN(Student), Digital surface models from spaceborne images without ground control
2012	ALATAN A. A., Postgraduate, M.ERGÜL(Student), A fully automatic shape based geo-spatial object recognition
2012	ALATAN A. A., Postgraduate, K.ARDA(Student), Vision-assisted object tracking
2012	ALATAN A. A., Postgraduate, G.ÇETİNKAYA(Student), A comparative study on pose estimation algorithms using visual data
2012	ALATAN A. A., Doctorate, M.SOYSAL(Student), Joint utilization of local appearance descriptors and semi-local geometry for multi-view object recognition
2011	ALATAN A. A., Postgraduate, Ç.AYTEKİN(Student), Geo-spatial object detection using local descriptors
2011	ALATAN A. A., Doctorate, N.YALÇIN(Student), Range data recognition: Segmentation, matching, and similarity retrieval
2010	ALATAN A. A., Doctorate, E.ESEN(Student), Quantization based data hiding strategies with visual applications
2010	ALATAN A. A., ÇİLOĞLU T., Postgraduate, A.ERTÜRK(Student), Rotation, scale and rotation invariant automatic target recognition using template matching for satellite imagery
2010	ALATAN A. A., Postgraduate, T.Kağan(Student), Real-time arbitrary view rendering from stereo video and time-of-flight camere
2010	ALATAN A. A., Postgraduate, A.ŞEREF(Student), Shadow detection and compensation in aerial images with an application to building height estimation
2010	ALATAN A. A., HALICI U., Postgraduate, M.ÇETİN(Student), Extraction of buildings in satellite images
2010	ALATAN A. A., Postgraduate, T.KAĞAN(Student), Real-time arbitrary view rendering from stereo video and time-of-flight camera
2009	ALATAN A. A., Postgraduate, K.GÖKALP(Student), Computer simulation and implementation of a visual 3-D eye gaze tracker for autostreoscopic displays
2009	ALATAN A. A., Postgraduate, B.GÜNYEL(Student), Motion Compensated Frame Rate Up Conversion Via Block Based Motion Estimation With Occlusion Handling
2008	ALATAN A. A., Postgraduate, E.EMİR(Student), A comparative performance evaluation of scale invariant interest point detectors for infrared and visual images
2008	ALATAN A. A., Postgraduate, E.VURAL(Student), Robust extraction of sparse 3D points from image sequences
2008	ALATAN A. A., Postgraduate, E.AŞAN(Student), Video shot boundary detection by graph theoretic approaches
2008	ALATAN A. A., Postgraduate, E.TÜRETKEN(Student), Motion segmentation and its applications to depth ordering and frame rate up-conversion
2007	ALATAN A. A., Postgraduate, A.SARACOĞLU(Student), Localization and recognition of text in digital media
2007	ALATAN A. A., Doctorate, A.Koz(Student), Watermarking for 3D represantations

2007	ALATAN A. A., Postgraduate, C.ÇIĞLA(Student), Dense depth map estimation for object segmentation in multi-view video
2007	ALATAN A. A., Doctorate, E.İMRE(Student), Prioritized 3D scene reconstruction and rate-distortion efficient representation for video sequences
2007	ALATAN A. A., Postgraduate, O.AKMAN(Student), Multi-camera video surveillance: Detection, occlusion handling, tracking and event recognition
2006	ALATAN A. A., Postgraduate, B.Oğuz(Student), Multi-view video coding via dense depth field
2005	ALATAN A. A., Postgraduate, B.Birant(Student), Moving object identification and event recognition in video surveillance systems
2005	ALATAN A. A., Postgraduate, E.Tola(Student), Multiview 3d reconstruction of a scene containing independently moving objects
2004	ALATAN A. A., Postgraduate, O.Ersoy(Student), Image segmentation with Improved region modeling
2004	ALATAN A. A., Postgraduate, T.Makbule(Student), Automatic target recognition in infrared imagery
2004	ALATAN A. A., Postgraduate, S.Sırtkaya(Student), Moving Object Detction in 2D and 3D Scenes
2004	ALATAN A. A., Postgraduate, İ.Bayram(Student), Interest point matching across arbitrary views
2003	ALATAN A. A., Postgraduate, Y.Yaşaroğlu(Student), Multi-modal video summarization using hidden Markov models for content-based multimedia indexing
2003	ALATAN A. A., Postgraduate, A.Yılmaz(Student), Robust video transmission using data hiding
2003	ALATAN A. A., Postgraduate, Ö.Deniz(Student), Optimal video adaptation for resource constrained mobile devices based on utility theory
2003	ALATAN A. A., Postgraduate, A.Bahtiyar(Student), Holistic face recognition by dimension reduction
2003	ALATAN A. A., Postgraduate, M.Soysal(Student), Combining image features for semantic descriptions
2002	ALATAN A. A., Postgraduate, F.BORAY(Student), Face detection using learning networks.
2002	ALATAN A. A., Postgraduate, A.KOZ(Student), Digital watermarking based on human visual system
2002	ALATAN A. A., Postgraduate, E.TAŞLIDERE(Student), Face detection using a mixture of subspaces.
2002	ALATAN A. A., Postgraduate, S.TEKİNALP(Student), Detecting and recognizing text from video frames.
2001	ALATAN A. A., Postgraduate, B.KEPENEKCİ(Student), Face recognition using Gabor wavelet transform

Research Infrastructure Information

August 2014	Alatan A. A., Görüntü Analizi Uygulama ve Araştırma Merkezi

Published journal articles indexed by SCI, SSCI, and AHCI

I. **TMO-Det: Deep tone-mapping optimized with and for object detection**
Kocdemir I. H., Koz A., AKYÜZ A. O., Chalmers A., ALATAN A. A., Kalkan S.
Pattern Recognition Letters, vol.172, pp.230-236, 2023 (SCI-Expanded)

II. **Ground-based Hyperspectral Image Surveillance System for Explosive Detection: Methods, Experiments, and Comparisons**
Kütük M., Geneci I., Özdemir O. B., Koz A., Esentürk O., Cetin Y. Y., Alatan A. A.
IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, vol.16, pp.8747-8763, 2023

(SCI-Expanded)

III. **Vision-based estimation of the number of occupants using video cameras**
Dino İ., Kalfaoglu E., Iseri O. K., Erdogan B., Kalkan S., Alatan A. A.
Advanced Engineering Informatics, vol.53, 2022 (SCI-Expanded)

IV. **Image-based construction of building energy models using computer vision**
GÜRSEL DİNO İ., Sari A. E., Iseri O. K., Akin S., Kalfaoglu E., Erdogan B., KALKAN S., ALATAN A. A.
AUTOMATION IN CONSTRUCTION, vol.116, 2020 (SCI-Expanded)

V. **Fine-grained recognition of maritime vessels and land vehicles by deep feature embedding**
Solmaz B., Gundogdu E., Yucesoy V., Koc A., Alatan A. A.
IET COMPUTER VISION, vol.12, pp.1121-1132, 2018 (SCI-Expanded)

VI. **Analysis of Airborne LiDAR Point Clouds With Spectral Graph Filtering**
Bayram E., Frossard P., Vural E., Alatan A. A.
IEEE GEOSCIENCE AND REMOTE SENSING LETTERS, vol.15, pp.1284-1288, 2018 (SCI-Expanded)

VII. **Good Features to Correlate for Visual Tracking**
Gundogdu E., Alatan A. A.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.27, pp.2526-2540, 2018 (SCI-Expanded)

VIII. **Extending Correlation Filter-Based Visual Tracking by Tree-Structured Ensemble and Spatial Windowing**
Gundogdu E., Özkan H., Alatan A. A.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.26, pp.5270-5283, 2017 (SCI-Expanded)

IX. **Comparison of 3D local and global descriptors for similarity retrieval of range data**
Bayramoglu N., Alatan A. A.
NEUROCOMPUTING, vol.184, pp.13-27, 2016 (SCI-Expanded)

X. **Joint utilization of local appearance and geometric invariants for 3D object recognition**
Soysal M., Alatan A. A.
MULTIMEDIA TOOLS AND APPLICATIONS, vol.74, pp.2611-2637, 2015 (SCI-Expanded)

XI. **Convexity constrained efficient superpixel and supervoxel extraction**
Tasli H. E., Çiğla C., Alatan A. A.
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.33, pp.71-85, 2015 (SCI-Expanded)

XII. **3D Planar Representation of Stereo Depth Images for 3DTV Applications**
Ozkalayci B. O., Alatan A. A.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.23, pp.5222-5232, 2014 (SCI-Expanded)

XIII. **Multimodal concept detection in broadcast media: KavTan**
SOYSAL M., Logoglu K. B., TEKİN M., ESEN E., SARACOĞLU A., Acar B. O., Ozan E. C., Ates T. K., SEVİMLİ H., SEVİNÇ M., et al.
MULTIMEDIA TOOLS AND APPLICATIONS, vol.72, no.3, pp.2787-2832, 2014 (SCI-Expanded)

XIV. **An efficient recursive edge-aware filter**
Cigla C., Alatan A. A.
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.29, pp.998-1014, 2014 (SCI-Expanded)

XV. **Efficient MRF Energy Propagation for Video Segmentation via Bilateral Filters**
Sener O., Ugur K., Alatan A. A.
IEEE TRANSACTIONS ON MULTIMEDIA, vol.16, pp.1292-1302, 2014 (SCI-Expanded)

XVI. **User assisted disparity remapping for stereo images**
Tasli H. E., Alatan A. A.
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.28, pp.1374-1389, 2013 (SCI-Expanded)

XVII. **Information permeability for stereo matching**
Cigla C., Alatan A. A.
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.28, pp.1072-1088, 2013 (SCI-Expanded)

XVIII. **3-D Rigid Body Tracking Using Vision and Depth Sensors**
Gedik O. S., Alatan A. A.
IEEE TRANSACTIONS ON CYBERNETICS, vol.43, pp.1395-1405, 2013 (SCI-Expanded)

XIX. **Introduction to the Issue on Emerging Techniques in 3-D**
Alatan A. A., Ostermann J., ONURAL L., AlRegib G., Mattoccia S., Yuan C.
IEEE JOURNAL OF SELECTED TOPICS IN SIGNAL PROCESSING, vol.6, no.5, pp.409-410, 2012 (SCI-Expanded)

XX. **Dominant sets based movie scene detection**
SAKARYA U., Telatar Z., ALATAN A. A.
SIGNAL PROCESSING, vol.92, no.1, pp.107-119, 2012 (SCI-Expanded)

XXI. **Comparison of Forbidden Zone Data Hiding and Quantization Index Modulation**
Esen E., Alatan A. A.
DIGITAL SIGNAL PROCESSING, vol.22, pp.181-189, 2012 (SCI-Expanded)

XXII. **Robust Video Data Hiding Using Forbidden Zone Data Hiding and Selective Embedding**
Esen E., Alatan A. A.
IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, vol.21, pp.1130-1138, 2011 (SCI-Expanded)

XXIII. **Joint Utilization of Appearance, Geometry and Chance for Scene Logo Retrieval**
Soysal M., ALATAN A. A.
COMPUTER JOURNAL, vol.54, no.7, pp.1221-1231, 2011 (SCI-Expanded)

XXIV. **Watermarking of Free-view Video**
Koz A., Cigla C., Alatan A. A.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.19, pp.1785-1797, 2010 (SCI-Expanded)

XXV. **Rate-Distortion Efficient Piecewise Planar 3-D Scene Representation From 2-D Images**
Imre E., Alatan A. A., Gueduekbay U.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.18, pp.483-494, 2009 (SCI-Expanded)

XXVI. **Special issue on advances in three-dimensional television and video: Guest editorial**
Gudukbay U., Alatan A. A.
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.24, pp.1-2, 2009 (SCI-Expanded)

XXVII. **Error detection and concealment for video transmission using information hiding**
YILMAZ A., Alatan A. A.
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.23, no.4, pp.298-312, 2008 (SCI-Expanded)

XXVIII. **Oblivious spatio-temporal watermarking of digital video by exploiting the human visual system**
Koz A., Alatan A. A.
IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, vol.18, pp.326-337, 2008 (SCI-Expanded)

XXIX. **Scene representation technologies for 3DTV - A survey**
Alatan A. A., Yemez Y., Gueduekbay U., Zabulis X., Mueller K., ERDEM C. E., WEİGEL C., SMOLİC A.
IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, vol.17, no.11, pp.1587-1605, 2007 (SCI-Expanded)

XXX. **3-d time-varying scene capture technologies - A survey**
STOYKOVA E., Alatan A. A., BENZİE P., GRAMMALİDİS N., MALASSİOTİS S., OSTERMANN J., PİEKH S., Sainov V., THEOBALT C., THEVAR T., et al.
IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, vol.17, no.11, pp.1568-1586, 2007 (SCI-Expanded)

XXXI. **Towards 3-D scene reconstruction from broadcast video**
Imre E., KNORR S., ÖZKALAYCI B., TOPAY U., Alatan A. A., SİKORA T.
SIGNAL PROCESSING-IMAGE COMMUNICATION, vol.22, no.2, pp.108-126, 2007 (SCI-Expanded)

XXXII. **Fast Outlier rejection by using parallax-based rigidity constraint for epipolar geometry estimation**
Tola E., Alatan A. A.
MULTIMEDIA CONTENT REPRESENTATION, CLASSIFICATION AND SECURITY, vol.4105, pp.578-585, 2006 (SCI-Expanded)

XXXIII. **Recognizing events in an automated surveillance system**
Orten B., Alatan A. A., Ciloglu T.
MULTIMEDIA CONTENT REPRESENTATION, CLASSIFICATION AND SECURITY, vol.4105, pp.434-441, 2006 (SCI-

Expanded)
XXXIV. **Combining MPEG-7 based visual experts for reaching semantics**
Soysal M., Alatan A.
VISUAL CONTENT PROCESSING AND REPRESENTATION, PROCEEDINGS, vol.2849, pp.66-75, 2003 (SCI-Expanded)
XXXV. **Summarizing video: Content, features, and HMM topologies**
Yasaroglu Y., Alatan A.
VISUAL CONTENT PROCESSING AND REPRESENTATION, PROCEEDINGS, vol.2849, pp.101-110, 2003 (SCI-Expanded)
XXXVI. **Robot mimicking: A visual approach for human machine interaction**
Uskarci A., Alatan A., Dindaroglu M., Ersak A.
COMPUTER AND INFORMATION SCIENCES - ISCIS 2003, vol.2869, pp.474-481, 2003 (SCI-Expanded)
XXXVII. **Multi-modal dialog scene detection using hidden Markov models for content-based multimedia indexing**
Alatan A. A., AKANSU A. N., WOLF W.
MULTIMEDIA TOOLS AND APPLICATIONS, vol.14, no.2, pp.137-151, 2001 (SCI-Expanded)
XXXVIII. **Unequal error protection of SPIHT encoded image bit streams**
Alatan A. A., ZHAO M. Y., AKANSU A. N.
IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, vol.18, no.6, pp.814-818, 2000 (SCI-Expanded)
XXXIX. **Image sequence analysis for emerging interactive multimedia services - The European COST 211 framework**
Alatan A. A., ONURAL L., WOLLBORN M., MECH R., TUNCEL E., Sikora T.
IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, vol.8, no.7, pp.802-813, 1998 (SCI-Expanded)
XL. **Estimation of depth fields suitable for video compression based on 3-D structure and motion of objects**
Alatan A. A., Onural L.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.7, no.6, pp.904-908, 1998 (SCI-Expanded)
XLI. **3-D motion estimation of rigid objects for video coding applications using an improved iterative version of the E-matrix method**
Alatan A. A., Onural L.
IEEE SIGNAL PROCESSING LETTERS, vol.5, no.2, pp.36-38, 1998 (SCI-Expanded)

Books & Book Chapters

I. **3D Watermarking: Techniques and Directions**
KOZ A., Triantafyllidis G., ALATAN A. A.
in: Three-Dimensional Television, Ozaktas H.M., Onural L., Editor, Springer, Berlin, pp.427-470, 2020
II. **Next Generation Frame Rate Conversion Algorithms**
Gedik O. S., Türetken E., Alatan A. A.
in: High-Quality Visual Experience, M. Mrak,M. Grgic,M. Kunt, Editor, Springer, London/Berlin , London, pp.219-244, 2010
III. **Video Adaptation Based on Content Characteristics and Hardware Capabilities**
Önür Ö. D., Alatan A. A.
in: Advances in Semantic Media Adaptation and Personalization, Volume 2, Angelides Marios C,Mylonas Phivos,Wallace Manolis, Editor, CRC, New York , New York, pp.67-95, 2009
IV. **Gibbs Model Based 3D Motion and Structure Estimation for Object-Based Video Coding Applications**
Alatan A. A., Onural L.
in: Video Data Compression for Multimedia Computing, Statistically Based and Biologically Inspired Techniques, Li Hua Harry,Sun Shan Sun,Derin Haluk, Editor, Springer, London/Berlin , New York, pp.355-393, 1997

Refereed Congress / Symposium Publications in Proceedings

I. **BI-DIRECTIONAL TRACKLET EMBEDDING FOR MULTI-OBJECT TRACKING**
BİLGİ H. Ç., ALATAN A. A.
IEEE International Conference on Image Processing, Abu Dhabi, United Arab Emirates, 17 October 2024

II. **Causal Transformer for Fusion and Pose Estimation in Deep Visual Inertial Odometry**
Akman A., ALATAN A. A., KURT Y. B.
ECCV 2024 Workshop on Vision-Centric Autonomous Driving (VCAD), Milan, Italy, 30 September 2024

III. **IG-SLAM: Instant Gaussian SLAM**
Sarıkamış F. A., ALATAN A. A.
ECCV 2024 Workshop on Dense Neural SLAM (NeuSLAM), Milan, Italy, 29 September 2024

IV. **XoFTR: Cross-modal Feature Matching Transformer**
Tuzcuoğlu Ö., Köksal A., Sofu B., Kalkan S., Alatan A. A.
Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition, Washington, United States Of America, 17 - 21 June 2024, pp.4275-4286

V. **Deep Metric Learning with Chance Constraints**
GÜRBÜZ Y. Z., ALATAN A. A., CAN O.
Winter Conference on Applications of Computer Vision, Waikoloa, Hawaii, United States Of America, 4 - 08 January 2024

VI. **Knowledge Distillation Layer that Lets the Student Decide**
GÖRGÜN A., GÜRBÜZ Y. Z., ALATAN A. A.
British Machine Vision Conference (BMVC) 2023, Aberdeen, England, 20 November 2023

VII. **GENERALIZABLE EMBEDDINGS WITH CROSS-BATCH METRIC LEARNING**
GÜRBÜZ Y. Z., ALATAN A. A.
IEEE International Conference on Image Processing, Kuala-Lumpur, Malaysia, 08 October 2023

VIII. **Generalized Sum Pooling for Metric Learning**
GÜRBÜZ Y. Z., ŞENER O., ALATAN A. A.
IEEE/CVF International Conference on Computer Vision (ICCV), Paris, France, 02 October 2023, pp.5462-5473

IX. **E-VFIA: Event-Based Video Frame Interpolation with Attention**
Kiliç O. S., Akman A., Alatan A. A.
2023 IEEE International Conference on Robotics and Automation, ICRA 2023, London, England, 29 May - 02 June 2023, vol.2023-May, pp.8284-8290

X. **Improved Hard Example Mining Approach for Single Shot Object Detectors**
Köksal A., Tuzcuoğlu Ö., Ince K. G., Ataseven Y., Alatan A. A.
2022 IEEE International Conference on Image Processing (ICIP), Bordeaux, France, 16 October 2022

XI. **Object Detection for Autonomous Driving: High-Dynamic Range vs. Low-Dynamic Range Images**
Kocdemir I. H., Akyüz A. O., Koz A., Chalmers A., Alatan A. A., Kalkan S.
24th IEEE International Workshop on Multimedia Signal Processing, MMSP 2022, Shanghai, China, 26 - 28 September 2022

XII. **Feature Embedding by Template Matching as a ResNet Block**
Görgün A., Gürbüz Y. Z., Alatan A. A.
33rd British Machine Vision Conference Proceedings, BMVC 2022, London, England, 21 - 24 November 2022

XIII. **A COGNITIVE CAMERA SYSTEM FOR INCREASING FACE RECOGNITION PERFORMANCE IN BACKLIT CONDITIONS**
Gültekin G. K., Ergül M., Hakyemez A. D., Saranlı A., Alatan A. A., Üstün İ. E.
Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies VI 2022, Berlin, Germany, 5 - 06 September 2022, vol.12275

XIV. **A SMART EMBEDDED IMAGING SYSTEM FOR TRUE COLOR FACE ANALYSIS**
Ustun İ. E., Yeşilyurt A. B., Ergul M., Alatan A. A., Erünver Ö.
Artificial Intelligence and Machine Learning in Defense Applications IV 2022, Berlin, Germany, 6 - 07 September 2022, vol.12276

XV. **DEPTH IS ALL YOU NEED: SINGLE-STAGE WEAKLY SUPERVISED SEMANTIC SEGMENTATION FROM**

IMAGE-LEVEL SUPERVISION

Ergül M., ALATAN A. A.

29th IEEE International Conference on Image Processing, ICIP 2022, Bordeaux, France, 16 - 19 October 2022, pp.4233-4237

XVI. **Semi-Automatic Annotation For Visual Object Tracking**

Ince K. G., Köksal A., Alatan A. A.

2021 IEEE/CVF International Conference on Computer Vision Workshops (ICCVW), Montreal, Canada, 11 - 18 October 2021

XVII. **HDR IMAGE CONSTRUCTION FROM TRIFOCAL MULTIEXPOSURE IMAGES**

KOZ A., Demirkılıç B., Kurt Y. B., AKYÜZ A. O., KALKAN S., ALATAN A. A., Chalmers A.

IEEE MMSP, Tampere, Finland, 06 October 2021

XVIII. **METU LOSS: METRIC LEARNING WITH ENTANGLED TRIPLET UNIFIED LOSS**

KARAMAN K., ALATAN A. A.

IEEE International Conference on Image Processing, ANCHORAGE, United States Of America, 19 September 2021

XIX. **DFM : Effect of Parameter Optimization on Classical and Learning-Based Image Matching Methods**

EFE U., İNCE K. G., ALATAN A. A.

IEEE CVPR Workshop : Image Matching Workshop, VIRTUAL, BİLİNMEYEN ÜLKELER (DİĞER), 25 June 2021

XX. **Effect of Parameter Optimization on Classical and Learning-based Image Matching Methods**

Efe U., Ince K. G., ALATAN A. A.

18th IEEE/CVF International Conference on Computer Vision Workshops, ICCVW 2021, Virtual, Online, Canada, 11 - 17 October 2021, vol.2021-October, pp.2506-2513

XXI. **DFM: A Performance Baseline for Deep Feature Matching**

Efe U., Ince K. G., ALATAN A. A.

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), ELECTR NETWORK, 19 - 25 June 2021, pp.4279-4288

XXII. **DEEP METRIC LEARNING WITH ALTERNATING PROJECTIONS ONTO FEASIBLE SETS**

Can O., Gürbüz Y. Z., ALATAN A. A.

2021 IEEE International Conference on Image Processing, ICIP 2021, Alaska, United States Of America, 19 - 22 September 2021, vol.2021-September, pp.1264-1268

XXIII. **BLIND DEINTERLEAVING OF SIGNALS IN TIME SERIES WITH SELF-ATTENTION BASED SOFT MIN-COST FLOW LEARNING**

CAN O., GÜRBÜZ Y. Z., Yildirim B., ALATAN A. A.

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), ELECTR NETWORK, 6 - 11 June 2021, pp.3295-3299

XXIV. **Late Temporal Modeling in 3D CNN Architectures with BERT for Action Recognition**

KALFAOĞLU M. E., KALKAN S., ALATAN A. A.

ECCV Video Turing Test (VTT) Workshop, 28 August 2020

XXV. **Effect of Annotation Errors on Drone Detection with YOLOv3**

KÖKSAL A., İNCE K. G., ALATAN A. A.

2020 IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), Seattle, WA, USA, United States Of America, 14 - 19 June 2020

XXVI. **Object detection under moving cloud shadows in WAMI**

HATİPOĞLU P., ALBAYRAK T., ALATAN A. A.

ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 1 - 06 June 2020, vol.22020, pp.837-844

XXVII. **Vision-Based Lighting State Detection and Curtain Openness Ratio Prediction**

Kalfaoğlu E., Gürsel Dino I., Işeri O. K., Akın Ş., Sarı A. E., Erdoğan B., Kalkan S., Alatan A. A.

The Symposium on Simulation for Architecture and Urban Design (SimAUD), Vienna, Austria, 23 - 25 May 2020

XXVIII. **Target Rediscovery on Long-wave Infrared Hyperspectral Images using Radiance and Emissivity Data**

Koz A., Belenoğlu İ., YÜKSEL S. E., ALATAN A. A.

SET-277 Workshop on Phenomenology and Exploitation of Hyperspectral Sensing within NATO, Brüksel, Belgium, 14 - 15 October 2019

XXIX. **Single Image Noise Level Estimation Using Dark Channel Prior**
Yeşilyurt A. B., EROL A., KAMIŞLI F., ALATAN A. A.
2019 IEEE International Conference on Image Processing (ICIP), Taipei, Taiwan, 22 - 25 September 2019

XXX. **Video Content Analysis-Based Detection of Occupant Presence for Building Energy Modelling**
Gürsel Dino I., Kalfaoğlu E., Sarı A. E., Akın Ş., Işeri O. K., Alatan A. A., Kalkan S., Erdoğan B.
CIB W78: Conference: Advances in ICT in Design, Construction and Management in Architecture, Engineering, Construction and Operations (AECO), Newcastle-Upon-Tyne, United Kingdom, 18 - 20 September 2019

XXXI. **Automated building energy modeling for existing buildings using computer vision**
Gürsel Dino I., Sarı A. E., Kalfaoğlu E., Akın Ş., Işeri O. K., Kalkan S., Alatan A. A., Erdoğan B.
CIB W78: Conference: Advances in ICT in Design, Construction and Management in Architecture, Engineering, Construction and Operations (AECO), Newcastle-Upon-Tyne, United Kingdom, 18 - 20 September 2019

XXXII. **Hyperspectral Target Detection by Using Superpixels and Signature based Methods**
Kütük M., Koz A., Alatan A. A.
2018 9th Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing (WHISPERS), Amsterdam, Netherlands, 23 - 26 September 2018, pp.1-5

XXXIII. **The sixth visual object tracking VOT2018 challenge results**
Kristan M., Leonardis A., Matas J., Felsberg M., Pflugfelder R., Zajc L. Č., Vojíř T., Bhat G., Lukežič A., Eldesokey A., et al.
15th European Conference on Computer Vision, ECCV 2018, Munich, Germany, 8 - 14 September 2018, pp.3-53

XXXIV. **Geospatial Object Detection Using Deep Networks**
Barut O., Alatan A. A.
Conference on Earth Observing Systems XXIV, California, United States Of America, 11 - 15 August 2019, vol.11127

XXXV. **A NOVEL BOVW MIMICKING END-TO-END TRAINABLE CNN CLASSIFICATION FRAMEWORK USING OPTIMAL TRANSPORT THEORY**
GÜRBÜZ Y. Z., Alatan A. A.
26th IEEE International Conference on Image Processing (ICIP), Taipei, Taiwan, 22 - 25 September 2019, pp.3053-3057

XXXVI. **QUADRUPLET SELECTION METHODS FOR DEEP EMBEDDING LEARNING**
Karaman K., Gundogdu E., Koc A., ALATAN A. A.
26th IEEE International Conference on Image Processing (ICIP), Taipei, Taiwan, 22 - 25 September 2019, pp.3452-3456

XXXVII. **Antenna Scan Period Estimation of Radars with Cepstrum and Scoring**
Kalfaoglu M. E., Can O., Yildirim B., ALATAN A. A.
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019

XXXVIII. **IMPROVING PROPOSAL-BASED OBJECT DETECTION USING CONVOLUTIONAL CONTEXT FEATURES**
Kaya E. C., ALATAN A. A.
25th IEEE International Conference on Image Processing (ICIP), Athens, Greece, 7 - 10 October 2018, pp.1308-1312

XXXIX. **OBJECT LOCALIZATION WITHOUT BOUNDING BOX INFORMATION USING GENERATIVE ADVERSARIAL REINFORCEMENT LEARNING**
Halici E., ALATAN A. A.
25th IEEE International Conference on Image Processing (ICIP), Athens, Greece, 7 - 10 October 2018, pp.3728-3732

XL. **CHANGE DETECTION FOR HYPERSPECTRAL IMAGES USING EXTENDED MUTUAL INFORMATION AND OVERSEGMENTATION**
TASKESEN B., KOZ A., Weatherbee O., ALATAN A. A.
Whıspers 2018, Amsterdam, Netherlands, 23 - 26 September 2018

XLI. **HYPERSPECTRAL TARGET DETECTION BY USING SUPERPIXELS AND SIGNATURE BASED METHODS**
Kütük M., Koz A., ALATAN A. A.

Whispers Conference, Amsterdam, Netherlands, 23 - 26 September 2018

XLII. **Face Recognition Based on Embedding Learning**
Karaman K., Koc A., ALATAN A. A.
Conference on Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II, Berlin, Germany, 10 - 11 September 2018, vol.10802

XLIII. **Object localization with reinforcement learning Pekiştirmeli öğrenme ile nesne yeri saptama**
Halici E., ALATAN A. A.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4

XLIV. **A method for quadruplet sample selection in deep feature learning Derin Öznitelik Öğrenme için Dördüz Örnek Seçme Yöntemi**
Karaman K., Gundogdu E., Koc A., Atatan A. A.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May 2018, pp.1-4

XLV. **Adaptive classification of radar pulses with improved fuzzy ARTMAP**
Alatan A. A.
Sinyal İşleme Uygulamaları Kongresi, İzmir, Turkey, 18 - 20 May 2018, pp.1-4

XLVI. **Extended Object Tracking and Shape Classification**
Tuncer B., Kumru M., Alatan A. A., Özkan E.
21st International Conference on Information Fusion (FUSION), Cambridge, Canada, 10 - 13 July 2018, pp.267-274

XLVII. **The Visual Object Tracking VOT2017 Challenge Results**
ALATAN A. A.
The IEEE International Conference on Computer Vision (ICCV) 5th Visual Object Tracking Challenge Workshop VOT2017, Venedlk, Italy, 22 - 29 October 2017, pp.1949-1972

XLVIII. **Roadesic Distance: Flow-Aware Tracklet Association Cost for Wide Area Surveillance**
GÜRBÜZ Y. Z., CAN O., ALATAN A. A.
IEEE International Conference on Image Processing, Pekin, China, 17 - 20 September 2017

XLIX. **A graph signal filtering-based approach for detection of differentedge types on airborne lidar data,**
BAYRAM E., VURAL E., ALATAN A. A.
SPIE Remote Sensing : Lidar Technologies, Techniques,and Measurements, Varşova, Poland, 11 - 14 September 2017

L. **Automatic target recognition and detection in infrared imagery under cluttered background**
GÜNDOĞDU E., KOÇ A., ALATAN A. A.
SPIE Defence Europe: Target and Background Signatures III, Varşova, Poland, 11 - 14 September 2017

LI. **A Graph Signal Filtering Based Approach for Detection of Different Edge Typeson Airborne LiDAR Data**
Bayram E., Vural E., Alatan A. A.
Conference on Lidar Technologies, Techniques, and Measurements for Atmospheric Remote Sensing XIII, Warszawa, Poland, 11 - 12 September 2017, vol.10429

LII. **Association Cost Enforcing Spatial Consistency for Tracklet Merging**
GÜRBÜZ Y. Z., Can O., ALATAN A. A.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

LIII. **Method For Learning Deep Features For Correlation Based Visual Tracking**
Gundogdu E., ALATAN A. A.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

LIV. **Gemi Tanıma İçin Derin Mesafe Metrik Öğrenmesi**
GÜNDOĞDU E., SOLMAZ B., KOÇ A., ALATAN A. A.
2017 25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

LV. **Unsupervised Change Detection in Satellite Images using Oversegmentation and Mutual Information**
Taskesen B., Besbinar B., Koz A., ALATAN A. A.

25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

LVI. **Deep Distance Metric Learning For Maritime Vessel Identification**

Gundogdu E., Solmaz B., Koc A., Yucesoy V., ALATAN A. A.

25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

LVII. **Object Detection with Convolutional Context Features**

Kaya E. C., ALATAN A. A.

25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

LVIII. **The Visual Object Tracking VOT2016 challenge results**

Gündoğdu E., ALATAN A. A.

European Conference on Computer Vision Workshop on VOT 2016, 8 - 10 October 2016

LIX. **SPATIAL WINDOWING FOR CORRELATION FILTER BASED VISUAL TRACKING**

gündoğdu e., ALATAN A. A.

Interational Conference on Image Processing, 25 - 29 September 2016

LX. **OBJECT CLASSIFICATION IN INFRARED IMAGES USING DEEP REPRESENTATIONS**

Gündoğdu E., Koç A., ALATAN A. A.

International Conference on Image Processing, 25 - 29 September 2016

LXI. **FISHER SELECTIVE SEARCH FOR OBJECT DETECTION**

BUZCU I., ALATAN A. A.

International Conference on Image Processing, 25 - 28 September 2016

LXII. **Ensemble Of Adaptive Correlation Filters For Robust Visual Tracking**

Gündoğdu E., Özkan H., ALATAN A. A.

13th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS), 23 - 26 August 2016

LXIII. **REGISTRATION OF MWIR LWIR BAND HYPERSPECTRAL IMAGES**

Koz A., ÇALIŞKAN A., ALATAN A. A.

WHISPERS 2016, 21 - 24 August 2016

LXIV. **TOTAL CARBON MAPPING WITH HYPERSPECTRAL UNMIXING TECHNIQUES**

SOYDAN H., Koz A., DÜZGÜN H. Ş., ALATAN A. A.

WHISPERS 2016, 21 - 24 August 2016

LXV. **AUTOMATIC ROAD DETECTION FROM GRAY LEVEL IMAGES IN WIDE AREA SURVEILLANCE**

OĞUL C., GÜRBÜZ Y. Z., ALATAN A. A.

International Geosicence and Remote Sensing Symposium (IGARSS) 2016, 10 - 17 July 2016

LXVI. **SUPERPIXEL BASED HYPERSPECTRAL TARGET DETECTION**

Çalışkan A., BATI E., Koz A., ALATAN A. A.

International Geosicence and Remote Sensing Symposium (IGARSS) 2016, 10 - 15 July 2016

LXVII. **A LOCAL EXTREMA BASED METHOD ON 2D BRIGHTNESS TEMPERATURE MAPS FOR DETECTION OF ARCHAEOLOGICAL ARTIFACTS**

SOYDAN H., DÜZGÜN H. Ş., ALATAN A. A.

International Geosicence and Remote Sensing Symposium (IGARSS) 2016, 10 - 15 July 2016

LXVIII. **Evaluation of Feature Channels for Correlation Filter Based Visual Object Tracking in Infrared Spectrum**

Gündoğdu E., SOLMAZ B., Koç A., HAMMOUD R., ALATAN A. A.

IEEE CVPR Workshop on Perception Beyond the Visible Spectrum 2016 (PBVS'16), 26 June - 01 July 2016

LXIX. **Infrared Object Classification Using Decision Tree Based Deep Neural Networks**

Gundogdu E., Koc A., ALATAN A. A.

24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1913-1916

LXX. **Visual Object Tracking with Autoencoder Representations**

Besbinar B., ALATAN A. A.

24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.2041-2044

LXXI. **Sparse recursive filtering for O 1 stereo matching**

GÜRBÜZ Y. Z., Çığla C., ALATAN A. A.

International Conference on Image Processing, 27 - 30 September 2015

LXXII. **LASP Local adaptive super pixels**

İNCE K. G., Çığla C., ALATAN A. A.

International Conference on Image Processing, 27 - 30 September 2015

LXXIII. **Hyperspectral anomaly detection method based on autoencoder**

Batı E., ALATAN A. A.

SPIE Remote Sensing, Image and Signal Processing for Remote Sensing Conference, Toulouse, France, 21 - 24 September 2015

LXXIV. **Inshore ship detection in high resolution satellite images Approximation of harbours using sea land segmentation**

BEŞBINAR B., ALATAN A. A.

SPIE Remote Sensing, Image and Signal Processing for Remote Sensing Conference, Toulouse, France, 21 - 24 September 2015

LXXV. **Hydrocarbon microseepage mapping using signature based target detection techniques**

SOYDAN H., KOZ A., DÜZGÜN H. Ş., ALATAN A. A.

SPIE Remote Sensing,Earth Resources and Environmental Remote Sensing/GIS Applications, Toulouse, France, 21 - 24 September 2015

LXXVI. **Hyperspectral Anomaly Detection Method Based on Auto-encoder**

Bati E., Caliskan A., Koz A., ALATAN A. A.

Conference on Image and Signal Processing for Remote Sensing XXI, Toulouse, France, 21 - 23 September 2015, vol.9643

LXXVII. **Hyperspectral Superpixel Extraction Using Boundary Updates Based on Optimal Spectral Similarity Metric**

Çalışkan A., Koz A., ALATAN A. A.

IGARSS 2015, Milan, Italy, 26 - 31 July 2015

LXXVIII. **RGBD Data Based Pose Estimation Why Sensor Fusion**

GEDİK O. S., ALATAN A. A.

18th International Conference on Information Fusion, Washington, United States Of America, 6 - 09 July 2015

LXXIX. **A COMPARATIVE STUDY OF HYPERSPECTRAL ANOMALY AND SIGNATURE BASED TARGET DETECTION METHODS FOR OIL SPILLS**

SOYDAN H., Koz A., DÜZGÜN H. Ş., ALATAN A. A.

IEEE WHISPERS 2015, Tokyo, Japan, 2 - 05 June 2015

LXXX. **Superpixel Based Unsupervised Change Detection of Manmade Targets on Satellite Images**

Buzcu I., ALATAN A. A.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1889-1892

LXXXI. **Sparse Recursive Cost Aggregation Towards O(1) Complexity Local Stereo Matching**

GÜRBÜZ Y. Z., ALATAN A. A., Cigla C.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2290-2293

LXXXII. **Inshore Ship Detection in Multispectral Satellite Images**

Besbinar B., Gurbuz Y. Z., Alatan A. A.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2029-2032

LXXXIII. **Oil Spill Determination with Hyperspectral Imagery: A Comparative Study**

Soydan H., Koz A., Duzgun H. S., ALATAN A. A.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2404-2407

LXXXIV. **Anomaly Based Target Detection in Hyperspectral Images via Graph Cuts**

Bati E., Erdinc A., Cesmeci D., Caliskan A., Koz A., AKSOY S., Erturk S., Alatan A. A.

23nd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2631-2634

LXXXV. OCCLUSION-AWARE HMM-BASED TRACKING BY LEARNING

Marpuc T., ALATAN A. A.

IEEE International Conference on Image Processing (ICIP), Paris, France, 27 - 30 October 2014, pp.4922-4926

LXXXVI. GEOMETRY-CONSTRAINED SPATIAL PYRAMID ADAPTATION FOR IMAGE CLASSIFICATION

Tasli H. E., Sicre R., Gevers T., ALATAN A. A.

IEEE International Conference on Image Processing (ICIP), Paris, France, 27 - 30 October 2014, pp.1051-1055

LXXXVII. UNCERTAINTY MODELING FOR EFFICIENT VISUAL ODOMETRY VIA INERTIAL SENSORS ON MOBILE DEVICES

AKSOY Y., ALATAN A. A.

IEEE International Conference on Image Processing (ICIP), Paris, France, 27 - 30 October 2014, pp.3397-3401

LXXXVIII. E3D-D2D: EMBEDDING IN 3D, DETECTION IN 2D THROUGH PROJECTIVE INVARIANTS

Yasaroglu Y., Alatan A. A.

IEEE International Conference on Image Processing (ICIP), Paris, France, 27 - 30 October 2014, pp.4792-4796

LXXXIX. MRF-BASED PLANAR CO-SEGMENTATION FOR DEPTH COMPRESSION

Ozkalayci B., ALATAN A. A.

IEEE International Conference on Image Processing (ICIP), Paris, France, 27 - 30 October 2014, pp.125-129

XC. OCCLUSION-AWARE 3D MULTIPLE OBJECT TRACKER WITH TWO CAMERAS FOR VISUAL SURVEILLANCE

Topcu O., ALATAN A. A., ERCAN A. Ö.

11th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS), Seoul, South Korea, 26 - 29 August 2014, pp.56-61

XCI. Tubularity Tracking Based Automatic Road Detection from Sattelite Images

GÜRBÜZ Y. Z., ALATAN A. A.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.2190-2193

XCII. 3D TRACKING OF PEOPLE WITH RAO-BLACKWELLIZED PARTICLE FILTERS

Topcu O., ORGUNER U., Alatan A., ERCAN A. Ö.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.670-673

XCIII. Sea Detection on High-Resolution Panchromatic Satellite Images Using Texture and Intensity

Besbinar B., ALATAN A. A.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.2213-2216

XCIV. An automatic geo-spatial object recognition algorithm for high resolution satellite images

Ergul M., ALATAN A. A.

Conference on Electro-Optical Remote Sensing, Photonic Technologies, and Applications VII; and Military Applications in Hyperspectral Imaging and High Spatial Resolution Sensing, Dresden, Germany, 24 - 26 September 2013, vol.8897

XCV. AN EFFICIENT HOLE FILLING FOR DEPTH IMAGE BASED RENDERING

Cigla C., ALATAN A. A.

IEEE International Conference on Multimedia and Expo Workshops (ICMEW), San-Jose, Costa Rica, 15 - 19 July 2013

XCVI. SUPER PIXEL EXTRACTION VIA CONVEXITY INDUCED BOUNDARY ADAPTATION

Tasli H. E., Cigla C., Gevers T., ALATAN A. A.

IEEE International Conference on Multimedia and Expo Workshops (ICMEW), San-Jose, Costa Rica, 15 - 19 July 2013

XCVII. RECOGNITION OF 3D OBJECTS FROM UNCONSTRAINED 2D IMAGES BY USING LOCAL APPEARANCE AND AFFINE GEOMETRY

Soysal M., ALATAN A. A.

IEEE International Conference on Multimedia and Expo Workshops (ICMEW), San-Jose, Costa Rica, 15 - 19 July 2013

XCVIII. **A NOVEL PLANAR LAYERED REPRESENTATION FOR 3DTV AND FREEVIEW TV APPLICATIONS**
Ozkalayci B., ALATAN A. A.
IEEE International Conference on Multimedia and Expo Workshops (ICMEW), San-Jose, Costa Rica, 15 - 19 July 2013

XCIX. **Loosely Coupled Kalman Filtering for Fusion of Visual Odometry and Inertial Navigation**
Sirtkaya S., Seymen B., ALATAN A. A.
16th International Conference on Information Fusion (FUSION), İstanbul, Turkey, 9 - 12 July 2013, pp.219-226

C. **Fusing 2D and 3D Clues for 3D Tracking Using Visual and Range Data**
Gedik O. S., ALATAN A. A.
16th International Conference on Information Fusion (FUSION), İstanbul, Turkey, 9 - 12 July 2013, pp.1966-1973

CI. **Video Mosaicing of Planer Scenes using Extended Kalman Filter**
Bati E., GÜRBÜZ Y. Z., ALATAN A. A.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013

CII. **Geospatial Object Recognition From High Resolution Satellite Imagery**
Ergul M., ALATAN A. A.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013

CIII. **User Assisted Stereo Image Retargetting**
Tasli H. E., Gevers T., ALATAN A. A.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013

CIV. **Region of Interest Detection Based Fast and Robust Geo-Spatial Object Recognition**
GÜRBÜZ Y. Z., ALATAN A. A.
21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013

CV. **Utilization of False Color Images in Shadow Detection**
Aksoy Y., ALATAN A. A.
12th European Conference on Computer Vision (ECCV), Florence, Italy, 7 - 13 October 2012, vol.7584, pp.472-481

CVI. **An Improved Stereo Matching Algorithm with Ground Plane and Temporal Smoothness Constraints**
Cigla C., ALATAN A. A.
12th European Conference on Computer Vision (ECCV), Florence, Italy, 7 - 13 October 2012, vol.7584, pp.134-147

CVII. **INTERACTIVE 2D-3D IMAGE CONVERSION FOR MOBILE DEVICES**
Aksoy Y., Sener O., Alatan A., Ugur K.
19th IEEE International Conference on Image Processing (ICIP), Florida, United States Of America, 30 September - 03 October 2012, pp.2729-2732

CVIII. **A Computationally Efficient Appearance-Based Algorithm for Geospatial Object Detection**
Arslan D., ALATAN A. A.
Conference on Optical Pattern Recognition XXIII, Maryland, United States Of America, 26 - 27 April 2012, vol.8398

CIX. **2D-3D feature association via projective transform invariants for model-based 3D pose estimation**
Gedik O. S., Alatan A. A.
Conference on Three-Dimensional Image Processing (3DIP) and Applications II, California, United States Of America, 24 - 26 January 2012, vol.8290

CX. **Edge-Aware Stereo Matching with O(1) Complexity**
Cigla C., ALATAN A. A.
Conference on Three-Dimensional Image Processing (3DIP) and Applications II, California, United States Of America, 24 - 26 January 2012, vol.8290

CXI. **Lossless Description of 3D Range Models**
Bayramoglu N., ALATAN A. A.
Conference on Visual Information Processing and Communication III, California, United States Of America, 24 - 26 January 2012, vol.8305

CXII. **Efficient Edge-Preserving Stereo Matching**
Cigla C., ALATAN A. A.

IEEE International Conference on Computer Vision (ICCV), Barcelona, Spain, 6 - 13 November 2011

CXIII. **Interactive Object Segmentation for mono and stereo applications: Geodesic Prior Induced Graph Cut Energy minimization**
Tasli H. E., ALATAN A. A.
IEEE International Conference on Computer Vision (ICCV), Barcelona, Spain, 6 - 13 November 2011

CXIV. **Occlusion Handling Frame Rate Up-Conversion**
Ozkalayci B., ALATAN A. A.
7th International Symposium on Image and Signal Processing and Analysis (ISPA), Dubrovnik, Croatia, 4 - 06 September 2011, pp.149-152

CXV. **EXTRACTING EMBEDDED DATA IN 3D MODELS FROM 2D VIEWS USING PERSPECTIVE INVARIANTS**
Yasaroglu Y., ALATAN A. A.
3DTV Conference - The True Vision - Capture, Transmission and Display of 3D Video (3DTV-CON), Antalya, Turkey, 16 - 18 May 2011

CXVI. **REAL-TIME ARBITRARY VIEW RENDERING ON GPU FROM STEREO VIDEO AND TIME-OF-FLIGHT CAMERA**
Ates T. K., ALATAN A. A.
3DTV Conference - The True Vision - Capture, Transmission and Display of 3D Video (3DTV-CON), Antalya, Turkey, 16 - 18 May 2011

CXVII. **A Novel Bag-of-Visual-Words Approach for Geospatial Object Detection**
Aytekin C., ALATAN A. A.
Conference on Optical Pattern Recognition XXII, Florida, United States Of America, 28 - 29 April 2011, vol.8055

CXVIII. **Content based video copy detection with local descriptors Yerel tanimlayicilar ile içerik tabanli video kopya sezimi**
Ateş T. K., Esen E., Saracoğlu A., Soysal M., Turgut Y., Oktay O., ALATAN A. A.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.49-52

CXIX. **Frame-rate increase for multiview video exploiting 3D motion models Çoklu görüntülü videolarda 3B hareket modeli kullanarak kare-hizi Arttirimi**
Gedik O. S., ALATAN A. A.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.848-851

CXX. **Speeding-up Pearson correlation coefficient calculation on graphical processing units Pearson ilinti katsayisi hesaplamasinin grafik işlemci birimleri üzerinde hizlandirilmasi**
Loğoğlu K. B., Ateş T. K.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.840-843

CXXI. **A novel shadow detection and restoration algorithm based on atmospheric phenomena Atmosferik etkilere dayali yeni bir gölge tespiti ve onarimi algoritmasi**
Aytekin Ç., ALATAN A. A.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.874-877

CXXII. **Range image recognition using invariant local features Derinlik görüntülerinin değişimsiz yerel öznitelikler kullanilarak taninmasi**
Bayramoğlu N., ALATAN A. A.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.824-827

CXXIII. **Rotation, scale and translation invariant automatic target recognition based on Fourier-Mellin transform and bispectrum for satellite imagery Uydu görüntüleri için Fourier-Mellin dönüşümü ve bispektrum tabanli dönme, ölçekleme, öteleme değişmezlikli otomatik hedef tanima**
ERTÜRK A., ALATAN A. A., ÇİLOĞLU T.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24

April 2010, pp.550-553

CXXIV. **A complexity-utility framework for modeling decoding complexity towards optimizing subjective quality of video for mobile devices**
Önür Ö. D., ALATAN A. A.
3rd Workshop on Mobile Video Delivery, MoViD 2010, Co-located with ACM Multimedia 2010, Firenze, Italy, 25 October 2010, pp.39-44

CXXV. **Generalized visual concept detection Genelleştirilmiş görsel kavram tanima**
Saracoğlu A., Tekin M., Esen E., Soysal M., Loğoğlu K. B., Ateş T. K., Sevinç A. M., Sevimli H., Acar B. O., Zubari Ü., et al.
18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.621-624

CXXVI. **Shape index SIFT: Range image recognition using local features**
Bayramoğlu N., ALATAN A. A.
2010 20th International Conference on Pattern Recognition, ICPR 2010, İstanbul, Turkey, 23 - 26 August 2010, pp.352-355

CXXVII. **Adult image content classification using global features and skin region detection**
Sevimli H., Esen E., Ateş T. K., Ozan E. C., Tekin M., Loğoğlu K. B., Sevinç A. M., Saracoğlu A., YAZICI A., ALATAN A. A.
25th International Symposium on Computer and Information Sciences, ISCIS 2010, London, England, 22 - 24 September 2010, vol.62 LNEE, pp.253-258

CXXVIII. **Gender classification via gradientfaces**
Loğoğlu K. B., Saracoğlu A., Esen E., ALATAN A. A.
25th International Symposium on Computer and Information Sciences, ISCIS 2010, London, England, 22 - 24 September 2010, vol.62 LNEE, pp.245-251

CXXIX. **Joint utilization of appearance and geometry for scene logo retrieval**
Soysal M., ALATAN A. A.
25th International Symposium on Computer and Information Sciences, ISCIS 2010, London, England, 22 - 24 September 2010, vol.62 LNEE, pp.305-308

CXXX. **FAST STEREO PAIR GENERATION USING SRTM REGISTRATION AND OPTICAL FLOW**
Ataseven Y., ALATAN A. A.
ISPRS Istanbul Workshop on Modeling of Optical Airborne and Spaceborne Sensors, İstanbul, Turkey, 11 - 13 October 2010

CXXXI. **MULTI-RESOLUTION MOTION ESTIMATION FOR MOTION COMPENSATED FRAME INTERPOLATION**
Guenyel B., Alatan A.
IEEE International Conference on Image Processing, Hong Kong, PEOPLES R CHINA, 26 - 29 September 2010, pp.2793-2796

CXXXII. **A NOVEL SHADOW RESTORATION ALGORITHM BASED ON ATMOSPHERIC EFFECTS FOR AERIAL IMAGES**
Aytekin C., ALATAN A. A.
IEEE International Conference on Image Processing, Hong Kong, PEOPLES R CHINA, 26 - 29 September 2010, pp.401-404

CXXXIII. **FRAME-RATE CONVERSION FOR MULTIVIEW VIDEO EXPLOITING 3D MOTION MODELS**
Gedik O. S., ALATAN A. A.
IEEE International Conference on Image Processing, Hong Kong, PEOPLES R CHINA, 26 - 29 September 2010, pp.1797-1800

CXXXIV. **EFFICIENT GRAPH-BASED IMAGE SEGMENTATION VIA SPEEDED-UP TURBO PIXELS**
Cigla C., ALATAN A. A.
IEEE International Conference on Image Processing, Hong Kong, PEOPLES R CHINA, 26 - 29 September 2010, pp.3013-3016

CXXXV. **SRTM REGISTRATION FOR ELECTRO-OPTIC SATELLITE IMAGES WITHOUT GCP**
Ataseven Y., ALATAN A. A.
ISPRS-Technical-Commission III Symposium on Photogrammetric Computer Vision and Image Analysis (PCV), Saint-Andre, Reunion, 1 - 03 September 2010, vol.38, pp.204-208

CXXXVI.   UTILIZATION OF SPATIAL INFORMATION FOR POINT CLOUD SEGMENTATION
Akman O., Bayramoglu N., ALATAN A. A., Jonker P.
4th 3DTV Conference on the True Vision - Capture, Transmission and Display of 3D Video, Tampere, Finland, 7 -
09 June 2010

CXXXVII.   Block Based Video Data Hiding Using Repeat Accumulate Codes and Forbidden Zone Data Hiding
Esen E., ALATAN A. A.
10th Pacific Rim Conference on Multimedia, Bangkok, Thailand, 15 - 18 December 2009, vol.5879, pp.731-742

CXXXVIII.   WATERMARKING FOR DEPTH-IMAGE-BASED RENDERING
Halici E., ALATAN A. A.
16th IEEE International Conference on Image Processing, Cairo, Egypt, 7 - 10 November 2009, pp.4217-4220

CXXXIX.   REGION-BASED MOTION-COMPENSATED FRAME RATE UP-CONVERSION BY HOMOGRAPHY
PARAMETER INTERPOLATION
Turetken E., ALATAN A. A.
16th IEEE International Conference on Image Processing, Cairo, Egypt, 7 - 10 November 2009, pp.381-382

CXL.   Joint Utilization of Appearance and Geometry for Determining Correspondences
Soysal M., ALATAN A. A., Karadeniz T.
24th International Symposium on Computer and Information Sciences, Güzelyurt, Cyprus (Kktc), 14 - 16
September 2009, pp.60-61

CXLI.   Video Shot Boundary Detection by Graph-theoretic Dominant Sets Approach
Asan E., ALATAN A. A.
24th International Symposium on Computer and Information Sciences, Güzelyurt, Cyprus (Kktc), 14 - 16
September 2009, pp.7-11

CXLII.   INTEGRATION OF 2D IMAGES AND RANGE DATA FOR OBJECT SEGMENTATION AND RECOGNITION
Bayramoglu N., Akman O., ALATAN A. A., Jonker P.
12th International Conference on Climbing and Walking Robots the Support Technologies for Mobile Machines
(CLAWAR), İstanbul, Turkey, 9 - 11 September 2009, pp.927-933

CXLIII.   TEMPORALLY CONSISTENT LAYER DEPTH ORDERING VIA PIXEL VOTING FOR PSEUDO 3D
REPRESENTATION
Turetken E., ALATAN A. A.
3DTV Conference - True Vision - Capture, Transmission and Display of 3D Video, Potsdam, Germany, 4 - 06 May
2009, pp.257-258

CXLIV.   Video Shot Boundary Detection by Dominant Sets Approach
Asan E., ALATAN A. A.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009,
pp.918-921

CXLV.   Comparison of Quantization Index Modulation and Forbidden Zone Data Hiding for Compressed
Domain Video Data Hiding
Esen E., Dogan Z., Ates T. K., Alatan A. A.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009,
pp.646-649

CXLVI.   Content Based Copy Detection with Coarse Audio-Visual Fingerprints
Saracoglu A., Esen E., Ates T. K., Acar B. O., Zubari U., Ozan E. C., Ozalp E., Alatan A. A., Ciloglu T.
International Workshop on Content-Based Multimedia Indexing, Chania, Greece, 3 - 05 June 2009, pp.213-218

CXLVII.   Segmentation Driven Semantic Information Inference from 2.5D Data
Bayramoglu N., ALATAN A. A.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009,
pp.826-829

CXLVIII.   TEMPORALLY CONSISTENT DENSE DEPTH MAP ESTIMATION VIA BELIEF PROPAGATION
Cigla C., Alatan A. A.
3DTV Conference - True Vision - Capture, Transmission and Display of 3D Video, Potsdam, Germany, 4 - 06 May
2009, pp.93-96

CXLIX. **Object Segmentation in Multi-view Video via Color, Depth and Motion Cues**
Cigla C., ALATAN A. A.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009,
pp.886-889

CL. **Content Based Video Copy Detection with Coarse Features**
Esen E., Saracoglu A., Ates T. K., Acar B. O., Zubari U., Alatan A. A.
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009,
pp.595-598

CLI. **WATERMARKING FOR IMAGE-BASED RENDERING VIA HOMOGRAPHY-BASED VIRTUAL CAMERA LOCATION ESTIMATION**
Koz A., Cigla C., ALATAN A. A.
15th IEEE International Conference on Image Processing (ICIP 2008), California, United States Of America, 12 - 15
October 2008, pp.1284-1287

CLII. **Multi Camera Visual Surveillance for Motion Detection Occlusion Handling Tracking and Event Recognition**
akman o., ALATAN A. A., ÇİLOĞLU T.
Workshop on Multi-camera and Multi-modal Sensor Fusion Algorithms and Applications - M2SFA2 2008, 5 - 08
October 2008

CLIII. **A fast method for animated TV logo detection**
Esen E., Soysal M., Ates T. K., Saracoglu A., ALATAN A. A.
International Workshop on Content-Based Multimedia Indexing, London, Canada, 18 - 20 June 2008, pp.220-221

CLIV. **Exploitation of multi-camera configurations for visual surveillance**
Akman O., ALATAN A. A., ÇİLOĞLU T.
International Workshop on Content-Based Multimedia Indexing, London, Canada, 18 - 20 June 2008, pp.125-130

CLV. **Outlier removal for sparse 3D reconstruction from video**
VURAL E., ALATAN A. A.
3DTV Conference - True Vision - Capture, Transmission and Display of 3D Video, İstanbul, Turkey, 28 - 30 May
2008, pp.321-324

CLVI. **Boundary Matching Based Translucent TV Logo Detection**
Ates T. K., Esen E., Saracoglu A., Alatan A. A.
IEEE 16th Signal Processing and Communications Applications Conference, Aydın, Turkey, 20 - 22 April 2008,
pp.193-196

CLVII. **Region-Based Image Segmentation via Graph Cuts**
Cigla C., Alatan A. A.
IEEE 16th Signal Processing and Communications Applications Conference, Aydın, Turkey, 20 - 22 April 2008,
pp.22-25

CLVIII. **REGION-BASED IMAGE SEGMENTATION VIA GRAPH CUTS**
Cigla C., Alatan A. A.
15th IEEE International Conference on Image Processing (ICIP 2008), California, United States Of America, 12 - 15
October 2008, pp.2272-2275

CLIX. **Depth assisted object segmentation in multi-view video**
Cigla C., Alatan A. A.
3DTV Conference - True Vision - Capture, Transmission and Display of 3D Video, İstanbul, Turkey, 28 - 30 May
2008, pp.165-168

CLX. **Video adaptation based on content characteristics and hardware capabilities**
Onur O. D., ALATAN A. A.
2nd International Workshop on Semantic Media Adaptation and Personalization (SMAP 2007), London, Canada,
17 - 18 December 2007, pp.15-20

CLXI. **Region-based dense depth extraction from multi-view video**
Cigla C., Zabulis X., ALATAN A. A.
IEEE International Conference on Image Processing (ICIP 2007), San-Antonio, Northern Mariana Islands, 16 - 19

September 2007, pp.2465-2466

CLXII. **Rate-distortion based piecewise planar 3d scene geometry representation**
Imre E., ALATAN A. A., GÜDÜKBAY U.
IEEE International Conference on Image Processing (ICIP 2007), San-Antonio, Northern Mariana Islands, 16 - 19
September 2007, pp.2365-2367

CLXIII. **3-D structure assisted reference view generation for H.264 based multi-view video coding**
Gedik O. S., Oezkalayci B., ALATAN A. A.
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007,
pp.798-801

CLXIV. **Rate-distortion guided piecewise planar 3D scene representation**
Imre E., ALATAN A. A., Gueduekbay U.
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007,
pp.225-227

CLXV. **Multi-view video coding via dense depth estimation**
Oezkalayci B., Gedik O. S., ALATAN A. A.
1st International Conference on 3DTV, Kos Isl, Greece, 7 - 09 May 2007, pp.310-313

CLXVI. **Piecewise-planar 3D reconstruction in rate-distortion sense**
Imre E., Gueduekbay U., ALATAN A. A.
1st International Conference on 3DTV, Kos Isl, Greece, 7 - 09 May 2007, pp.350-351

CLXVII. **Segment-based stereo-matching via plane and angle sweeping**
Cigla C., Zabulis X., Alatan A. A.
1st International Conference on 3DTV, Kos Isl, Greece, 7 - 09 May 2007, pp.265-268

CLXVIII. **Free-view watermarking for free-view television**
Koz A., Cigla C., ALATAN A. A.
IEEE International Conference on Image Processing (ICIP 2006), Georgia, United States Of America, 8 - 11 October
2006, pp.1405-1406

CLXIX. **Forbidden zone data hiding**
Esen E., Alatan A. A.
IEEE International Conference on Image Processing (ICIP 2006), Georgia, United States Of America, 8 - 11 October
2006, pp.1393-1394

CLXX. **Prioritized sequential 3D reconstruction in video sequences with multiple motions**
Imre E., Knorr S., ALATAN A. A., Sikora T.
IEEE International Conference on Image Processing (ICIP 2006), Georgia, United States Of America, 8 - 11 October
2006, pp.2969-2970

CLXXI. **Efficient Bayesian track-before-detect**
Tekinalp S., ALATAN A. A.
IEEE International Conference on Image Processing (ICIP 2006), Georgia, United States Of America, 8 - 11 October
2006, pp.2793-2794

CLXXII. **A modular scheme for 2D/3D conversion of TV broadcast**
Knorr S., Imre E., Oezkalayci B., ALATAN A. A., Sikora T.
3rd International Symposium on 3D Data Processing, Visualization and Transmission, North-Carolina, United States
Of America, 14 - 16 June 2006, pp.703-710

CLXXIII. **Prioritized sequential 3D reconstruction in video sequences of dynamic scenes degrees**
Imre E., Alatan A., Knorr S., Sikora T.
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.916-917

CLXXIV. **A new concept in data hiding: Forbidden zone**
Esen E., Alatan A. A.
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.85-88

CLXXV. **Automatic video text localization and recognition**
Saracoglu A., Alatan A. A.
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.964-967

CLXXVI. **Dense depth map estimation for multiple view coding**

Ozkalayci B., ALATAN A. A.

IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.531-532

CLXXVII. **Event detection in automated surveillance systems**

Orten B. B., Alatan A. A., Ciloglu T.

IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.810-813

CLXXVIII. **Oblivious video watermarking using temporal sensitivity of HVS**

Koz A., Alatan A.

IEEE International Conference on Image Processing (ICIP 2005), Genoa, Italy, 11 - 14 September 2005, pp.729-732

CLXXIX. **Video adaptation for transmission channels by utility modeling**

Onur O., Alatan A. A.

IEEE International Conference on Multimedia and Expo (ICME), Amsterdam, Netherlands, 6 - 08 July 2005, pp.1401-1404

CLXXX. **Data hiding using trellis coded quantization**

Esen E., Alatan A.

International Conference on Image Processing (ICIP 2004), Singapore, Singapore, 24 - 27 October 2004, pp.59-62

CLXXXI. **Oblivious video watermaking using temporal sensitivity of HVS**

Koz A., Alatan A.

IEEE 12th Signal Processing and Communications Applications Conference, Kusadasi, Turkey, 28 - 30 April 2004, pp.284-287

CLXXXII. **Trellis coded quantization for data hiding**

Esen E., Alatan A., Askar M.

International Conference on Computer as a Tool, Ljubljana, Slovenia, 22 - 24 September 2003, pp.384-388

CLXXXIII. **Utilization of texture, contrast and color homogeneity for detecting and recognizing text from video frames**

Tekinalp S., Alatan A.

IEEE International Conference on Image Processing, Barcelona, Spain, 14 - 17 September 2003, pp.505-508

CLXXXIV. **Error concealment of video sequences by data hiding**

Yilmaz A., Alatan A.

IEEE International Conference on Image Processing, Barcelona, Spain, 14 - 17 September 2003, pp.679-682

CLXXXV. **A MPEG-7 compliant video management system: BilVMS**

Esen E., Onur O., Soysal M., Yasaroglu Y., Tekinalp S., Alatan A.

4th European Workshop on Image Analysis for Multimedia Interactive Services, Queen Mary, ENGLAND, 9 - 11 April 2003, pp.77-80

CLXXXVI. **Temporal watermarking of digital video**

Koz A., Alatan A.

4th European Workshop on Image Analysis for Multimedia Interactive Services, Queen Mary, ENGLAND, 9 - 11 April 2003, pp.271-274

CLXXXVII. **Combined concealment, synchronization, and error detection using data hiding**

Yilmaz A., Esen E., Alatan A.

4th European Workshop on Image Analysis for Multimedia Interactive Services, Queen Mary, ENGLAND, 9 - 11 April 2003, pp.242-245

CLXXXVIII. **Foveated image watermarking**

Koz A., Alatan A.

IEEE International Conference on Image Processing, New-York, United States Of America, 22 - 25 September 2002, pp.657-660

CLXXXIX. **Automatic multi-modal dialogue scene indexing**

Alatan A.

International Conference on Image Processing (ICIP 2001), Thessaloniki, Greece, 7 - 10 October 2001, pp.374-377

CXC. **Comparative analysis of hidden Markov models for multi-modal dialogue scene indexing**

Alatan A. A., Akansu A., Wolf W.

IEEE International Conference on Acoustics, Speech, and Signal Processing, İstanbul, Turkey, 5 - 09 June 2000, pp.2401-2404

CXCI. **Dynamic UEP of embedded image bit streams over noisy channels**
Zhao M., Alatan A. A., Akansu A.
IEEE International Conference on Acoustics, Speech, and Signal Processing, İstanbul, Turkey, 5 - 09 June 2000, pp.2095-2098

CXCII. **Compressed domain MPEG-2 video editing with VBV requirement**
Egawa R., Alatan A. A., Akansu A.
IEEE International Conference on Image Processing (ICIP 2000), Vancouver, Canada, 10 - 13 September 2000, pp.1016-1019

CXCIII. **Robust signal compression using joint fixed- and variable-length coding**
Alatan A. A., Woods J.
IEEE International Symposium on Information Theory, SORRENTO, Italy, 24 - 30 June 2000, pp.405

CXCIV. **Low-level motion activity features for semantic characterization of video**
Peker K., Alatan A. A., Akansu A.
1st IEEE International Conference on Multimedia and Expo (ICME2000), New-York, United States Of America, 30 July - 02 August 2000, pp.801-804

CXCV. **On the choice of transforms for data hiding in compressed video**
Ramkumar M., Akansu A., Alatan A. A.
IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 99), Arizona, United States Of America, 15 - 19 March 1999, pp.3049-3052

CXCVI. **Joint utilization of fixed and variable-length codes for improving synchronization immunity for image transmission**
Alatan A. A., Woods J.
IEEE International Conference on Image Processing, Illinois, United States Of America, 4 - 07 October 1998, pp.319-323

CXCVII. **A rule-based method for object segmentation in video sequences**
Alatan A. A., Tuncel E., Onural L.
International Conference on Image Processing, Santa-Barbara, Honduras, 26 - 29 October 1997, pp.522-525

CXCVIII. **Three-D motion and dense structure estimation using convex**
Alatan A. A., Erdem A., Onural L.
1997 Conference on Visual Communications and Image Processing, San-Jose, Costa Rica, 12 - 14 February 1997, vol.3024, pp.1122-1131

CXCIX. **Joint estimation and optimum: Encoding of depth field for 3-D object-based video coding**
Alatan A. A., Onural L.
International Conference on Image Processing (ICIP-96), Lausanne, Switzerland, 16 - 19 September 1996, pp.871-874

CC. **Object based 3-D motion and structure estimation**
Alatan A. A., Onural L.
International Conference on Image Processing, Washington, Kiribati, 23 - 26 October 1995

CCI. **GIBBS RANDOM-FIELD MODEL-BASED 3-D MOTION ESTIMATION FROM VIDEO SEQUENCES**
ALATAN A. A., ONURAL L.
Conference on Visual Communications and Image Processing 94, Illinois, United States Of America, 25 - 29 September 1994, vol.2308, pp.626-637

CCII. **GIBBS RANDOM FIELD MODEL BASED 3-D MOTION ESTIMATION BY WEAKENED RIGIDITY**
ALATAN A. A., ONURAL L.
1994 IEEE International Conference on Image Processing (ICIP-94), Texas, United States Of America, 13 - 16 November 1994, pp.790-794

Supported Projects

2022 - 2024	INTEGRATION OF IMAGE PROCESS ALGORITHMS INTO NAVIGATION APPLICATIONS PROJECT, Project Supported by Defense Industry
2022 - 2023	On-Board Image Processing Phase II, Project Supported by Private Organizations in Other Countries
2021 - 2023	Yenilikçi Yazılımlar Yarışıyor (Y3) 3. Dönem Gezingecik Projesi, Project Supported by Defense Industry
2020 - 2023	ASSUREDNAV, Project Supported by Defense Industry
2020 - 2022	H3DR Camera: Smart embedded camera with multi-exposure & multi-view capability for autonomous vehicles, TÜBİTAK International Bilateral Joint Cooperation Program Project
2015 - 2022	Uydu Görüntülerinin Otomatik Analizi ile Afet Hasar Tespiti ve Kanunsuz Sınır Geçişlerinin Önlenmesi, Project Supported by Higher Education Institutions
2021 - 2021	Geniş Alan Gözetleme Sistemi Performans Geliştirme ve 7 24 Termal Görüntü Alımı, Project Supported by Other Private Institutions
2021 - 2021	Bilişsel Kamera-2, Project Supported by Defense Industry
2020 - 2021	MİNİ/MİKRO İNSANSIZ HAVA ARACI TESPİT ALGORİTMASI (Faz-3), Project Supported by Other Private Institutions
2020 - 2021	OBImPro On-Board Image Processing System (Phase1), Project Supported by Private Organizations in Other Countries
2020 - 2021	H3DR Camera, Civil Society Organizations of Other Countries Supported Project
2019 - 2021	Y3 (Yenilikçi Yazılımlar Yarışıyor) 2020, Project Supported by Defense Industry
2019 - 2021	AKILLI MÜHİMMATLAR İÇİN GÖRSEL ANALİZ PROJESİ, Project Supported by Defense Industry
2020 - 2020	Video Hedef Tespit Algoritması Geliştirmesi, Project Supported by Defense Industry
2020 - 2020	MİNİ MİKRO İNSANSIZ HAVA ARACI TESPİT ALGORİTMASI GELİŞTİRME (Faz2), Project Supported by Defense Industry
2020 - 2020	Radar İşaretleri Tespit Parametre Ölçümü (Uzatma), Project Supported by Defense Industry
2020 - 2020	Geniş Alan Gözetleme Sistemi Performans Geliştirme ve 7 24 Termal Görüntü Alımı, Project Supported by Other Private Institutions
2020 - 2020	Kamerali Trafik Durumu Duyargası, Project Supported by Other Private Institutions
2019 - 2020	GÖRÜNTÜ İŞLEME İLE KAÇAK KULLANIM TESPİT VE TÜKETİM TAHMİN SİSTEMİ, Company
2019 - 2019	Video Hedef Tespit Algoritması Geliştirmesi, Project Supported by Defense Industry
2018 - 2019	Yenilikçi Yazılımlar Yarışıyor (Y3) ArGe Projesi, Project Supported by Defense Industry
2018 - 2019	Kent Güvenlik Yönetim Sistemleri için Bilişsel Kamera Geliştirilmesi Projesi , Project Supported by Defense Industry
2016 - 2019	Radar İşaretleri TespitParametre Ölçümü, Project Supported by Defense Industry
2017 - 2018	Hiperspektral Kimyasal Madde Görüntüleme ve Otomatik Tespit Projesi, Project Supported by Other Private Institutions
2017 - 2017	GAG Eyleme Dönük Mekansal İstihbarat, Project Supported by Other Private Institutions
2016 - 2017	HİPERSPEKTRAL KİMYASAL MADDE GÖRÜNTÜLEME VE OTOMATİK TESPİT PROJESİ, Project Supported by Other Private Institutions
2016 - 2017	HİPERSPEKTRAL KİMYASAL MADDE GÖRÜNTÜLEME VE OTOMATİK TESPİT PROJESİ, Project Supported by Other Private Institutions
2016 - 2017	Derin Öğrenme Tabanlı Görüntü Analizi Algoritmaları Geliştirme Projesi, Project Supported by Other Private Institutions
2016 - 2016	İGT TUYGUN PROJESİ ALGORİTMA GELİŞTİRME FAALİYETLERİ HİZMETİ, Project Supported by Other Private Institutions
2015 - 2016	GENİŞ ALAN HAVADAN GÖZETLEME STABİLİZE EO IR KAMERA SİSTEMİ, Project Supported by Other Private Institutions
2015 - 2016	DERİN ÖĞRENME TABANLI GÖRÜNTÜ ANALİZİ ALGORİTMALARI GELİŞTİRME PROJESİ FAZ 1, Project Supported by Other Private Institutions

2014 - 2016	YENİ NESİL ÖĞRENME ALGORİTMALARI İLE OTOMATİK VİDEO HAREKET SINIFLANDIRMA SİSTEMİ, Project Supported by Other Private Institutions
2014 - 2015	İGT TUYGUN HİPERSPEKTRAL GÖRÜNTÜ ANALİZİ VE HEDEF TESPİTİ AR GE FAALİYETLERİ PROJESI, Project Supported by Other Private Institutions
2005 - 2009	KARİYER: Video Görsel Artıklıklarını Kullanarak Gürbüz 3-B Sahne Geri Çatımı, TUBITAK Project

Patent

2024	Nesne Algılama Yöntemi, Patent, CHAPTER H Electricity, The Invention Registration Number: 2021 021550 , Standard Registration, 2024
2024	Method and Apparatus for Frame Interpolation, Patent, CHAPTER H Electricity, The Invention Registration Number: EP2214137 , Standard Registration, 2024
2024	Derin öznitelik eşleştirme yöntemi., Patent, CHAPTER H Electricity, The Invention Registration Number: 2021 009617 , Standard Registration, 2024
2022	Korelasyon Filtresi Tabanlı Görsel Takip için bir Yöntem, Patent, CHAPTER H Electricity, The Invention Registration Number: 2019 17539 , Standard Registration, 2022
2022	A High Performance Object Detection System using HDR Images Obtained from LDR Cameras in Autonomous Vehicles, Patent, CHAPTER H Electricity, The Invention Recourse Number: PCT/TR2022/051657 , Standard Registration, 2022
2021	Method for Correlation based Visual Tracking, Patent, CHAPTER H Electricity, Standard Registration, 2021
2020	Hatipoğlu U. P., Alatan A. A., Albayrak R. T., An Object Detection Method, Patent, CHAPTER H Electricity, The Invention Recourse Number: PCT/TR2020/051025 , Standard Registration, 2020
2020	Bir hedef tanımlama yöntemi, Patent, CHAPTER H Electricity, The Invention Registration Number: 201607090 , Standard Registration, 2020
2017	ALATAN A. A., Information permeability based disparity estimation in stereo video, Patent, CHAPTER H Electricity, Standard Registration, 2017
2017	ALATAN A. A., Bir dönmeye bağışık hedef takip sistemi, Patent, CHAPTER G Physics, Standard Registration, 2017
2017	ALATAN A. A., Method and apparatus for the detection and classification of occlusion regions, Patent, CHAPTER H Electricity, Standard Registration, 2017
2015	ALATAN A. A., Method for Estimating motion vectors for frame interpolation, Patent, CHAPTER H Electricity, Standard Registration, 2015
2002	Alatan A. A., Rule-based moving object segmentation, Patent, CHAPTER H Electricity, The Invention Registration Number: US6337917 , Standard Registration, 2002

Contractual Researches

2010 - Continues	RTUK-KAVTAN
2018 - 2018	HAVELSAN A.Ş.
2017 - 2018	HAVELSAN A.Ş. ARGE PROJESI
2017 - 2018	ASELSAN A.Ş. ARGE YENİLİK TASARIM PROJE
2015 - 2017	ASELSAN ARGE PROJE (3-Boyutlu Güvenlik Görüntüleme Radarı Projesi - Elektromanyetik Modelleme, Simulasyon ve Çözüm Yöntemleri Geliştirilmesi), Aselsan A.Ş.
2016 - 2016	ARGE YENİLİK PROJESI
2016 - 2016	RHEİS ARGE YENİLİK TASARIM PROJE
2016 - 2016	Araştırma Merkezi Projesi (Yıl 2)
2016 - 2016	IGT TUYGUN PROJESI (Ek)
2015 - 2016	ASELSAN A.Ş. PROJESI
2015 - 2016	ESEN SİSTEM ENT. LTD. DANISMANLIK

2014 - 2015	HAVELSAN A.Ş. PROJESİ
2013 - 2013	ASELSAN A.Ş. PROJESİ
2012 - 2012	ASELSAN A.Ş. PROJESİ
2010 - 2010	TÜBİTAK UZAY DANIŞMANLIK
2009 - 2010	KAVTAN
2009 - 2010	ASELSAN A.Ş.
2009 - 2009	ASELSAN A.Ş.
2009 - 2009	TÜBİTAK-UZAY
2008 - 2009	ASELSAN

Activities in Scientific Journals

| 2014 - Continues | Ieee Transactions On Image Processing, Assistant Editor/Section Editor |

Memberships / Tasks in Scientific Organizations

| 2017 - Continues | Bilim Akademisi Derneği, Board Member |
| 2014 - Continues | Bilim Akademisi Derneği, Member |

Metrics

Publication: 247
Citation (WoS): 2230
Citation (Scopus): 3561
H-Index (WoS): 21
H-Index (Scopus): 25

Awards

| September 2020 | CVPR 2020 Anti-UAV Workshop & Challenge Best Paper Award, Computer Vision Foundation (Cvf) Cvpr Workshop |
| June 2017 | Visual Object Tracking 2017 Winning Tracker, Slovenya |