

WEDNESDAY (9 JUNE 2021)

TIME	EVENT	HALL
10:15 - 10:30	OPENING SPEECHES Fatoş Yarman Vural, Nafiz Arıca Conference Chairs	MAIN HALL
10:30 - 11:20	KEYNOTE-1 Iwao Hosaka 6G Vision of Japan	MAIN HALL
11:20 - 11:30	BREAK	
11:30 - 12:30	SEMINARS Aykut Erdem Deep Generative Models-1	MAIN HALL
12:30 - 14:00	LUNCH TIME	
14:00 - 14:50	SEMINAR-2 Erkut Erdem Deep Generative Models-2	MAIN HALL
14:50 - 15:00	BREAK	
15:00 - 15:50	SESSION - 1 (10 HALLS)	MEETING HALLS
15:50 - 16:00	BREAK	
16:00 - 16:50	SESSION - 2 (10 HALLS)	MEETING HALLS
16:50 - 17:00	BREAK	
17:00 - 17:50	KEYNOTE-2 David Forstyh Removing and Creating Shading and Shadows without Data	MAIN HALL
17:50 - 18:00	BREAK	
18:00 - 18:50	KEYNOTE-3 Dimitri Van De Ville Graph Signal Processing for Computational Neuroimaging	MAIN HALL

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	"SESSION-1 (15:00 - 15:50)"	"SESSION-2 (16:00 - 16:50)"
HALL-1	Computer Vision and Pattern Recognition Applications (1) Session Chair: Hande Alemdar	Machine Learning Methods and Applications Session Chair: Tuncer Baykaş
HALL-2	Biomedical Imaging and Image Processing (1) Session Chair: Yeşim Serinağaoğlu Doğrusöz	Biomedical Signal Processing (1) Session Chair: Atila Yılmaz
HALL-3	5G and Beyond (1) Session Chair: Gökhan Güvensen	Image/Video Classification, Analysis and Understanding (1) Session Chair: Nazlı İkizler Cinbiş
HALL-4	Audio and Speech Processing Session Chair: Murat Saraçlar	Natural Language Processing (1) Session Chair: Reyhan Yeniterzi
HALL-5	Wireless Communication (1) Session Chair: İbrahim Altuntaş	Optical Communication Session Chair: Özlem Ünverdi
HALL-6	Machine Learning: New Methods, Insights or Theories (1) Session Chair: Ömer Nezih Gerek	Signal Processing Session Chair: Hande Alemdar
HALL-7	Data Sets and Evaluation (1) Session Chair: Süreyya Özögür Akyüz	Modelling Simulation (1) Session Chair: Süreyya Özögür Akyüz
HALL-8	Multi-Input Multi-Output Communication Systems Session Chair: Ahmet Rızaner	Object Recognition Session Chair: Elif Sürer
HALL-9	Information Security (1) Session Chair: Serkan Sarıtaş	Internet of Things Session Chair: Elif Tuğçe Ceran
HALL-10	Signal Processing for Robotics and Autonomous Vehicles (1) Session Chair: Metin Sezgin	Artificial / Deep Learning for Signal Processing Session Chair: Metin Sezgin

THURSDAY (10 JUNE 2021)

TIME	EVENT	HALL
09:30 - 10:20	SEMINARS-3 Sinan Kalkan Yapay Öğrenmede Önyargı ve Tarafsızlık	MAIN HALL
10:20 - 10:30	BREAK	
10:30 - 11:20	SEMINARS-4 Emre Akbaş Modelling Long-range Interactions in Deep Learning: Attention and Transformers	MAIN HALL
11:20 - 11:30	BREAK	
11:30 - 12:30	SEMINARS-5 Nermin Samet Genelleştirilmiş Hough Donusumu Yönteminin Derin Yapay Sinir Ağları ile Görsel Tespit Problemlerine Uygulanması	MAIN HALL
12:30 - 14:00	LUNCH BREAK	
14:00 - 14:50	SESSION - 3 (10 HALLS)	MEETING ROOMS
14:50 - 15:00	BREAK	
15:00 - 15:50	SESSION - 4 (10 HALLS)	MEETING ROOMS
15:50 - 16:00	BREAK	
16:00 - 16:50	KEYNOTE-4 Edmund Yeh Data Centric Networking	MAIN HALL
16:50 - 17:00	BREAK	
17:00 - 17:50	KEYNOTE-5 Dilek Hakkani-Tür Conversational Machines: Towards bridging the chasm between task-oriented and social conversations	MAIN HALL
17:50 - 18:00	BREAK	
18:00 - 19:00	KEYNOTE-5 Tamer Başar Strategic Information Transmission	MAIN HALL
19:00 - 19:30	AWARD CEREMONY	MAIN HALL

THURSDAY (10 JUNE 2021)

	"SESSION-3 (14:00 - 14:50)"	"SESSION-4 (15:00 - 15:50)"
HALL-1	Big Data Analysis Session Chair: Lale Özkahya	Machine Learning for Communication Systems Session Chair: Hakan Cevikalp
HALL-2	Biometrics Session Chair: Berrin Yanıkoğlu	Biomedical Signal Processing (2) Session Chair: Atila Yılmaz
HALL-3	Computer Vision and Pattern Recognition Applications (2) Session Chair: Sinan Kalkan	Machine Learning: New Methods, Insights or Theories (2) Session Chair: Engin Demir
HALL-4	Natural Language Processing (2) Session Chair: Burcu Can	Natural Language Processing (3) Session Chair: Burcu Can
HALL-5	Computational Systems, Modeling and Simulation in Medicine and Biology and e-Health Session Chair: Cem Tekin	Contested Producer Networks Session Chair: Hacer Yalım Keleş
HALL-6	Image/Video Classification, Analysis and Interpretation (2) Session Chair: Bilge Günsel	Image/Video Classification, Analysis and Interpretation (3) Session Chair: Bilge Günsel
HALL-7	Communication Networks (2) Session Chair: Melda Yüksel	Computer Vision and Pattern Recognition Applications (3) Session Chair: Yalın Baştanlar
HALL-8	5G and Beyond (2) Session Chair: Ahmet Yazar	Wireless Communication (2) Session Chair: Cenk Toker
HALL-9	Information Security (2) Session Chair: Zehra Gülru Çam Taşkıran	Modelling Simulation (2) Session Chair: Alper Tunga
HALL-10	Biomedical Imaging and Image Processing (2) Session Chair: Nevzat Gencer	Object Detection and Tracking Session Chair: Yakup Genç

FRIDAY (11 JUNE 2021)

TIME	EVENT	HALL
09:30 - 11:20	SEMINARS-6 Melike Günay Deep Learning with Matlab	MAIN HALL
11:20 - 11:30	BREAK	
11:30 - 12:30	SEMINARS-7 Kemal Öksüz Optimization of Visual Object Detectors	MAIN HALL
12:30 - 13:30	LUNCH BREAK	
13:30 - 14:00	TURKCELL SESSION Nazlı Güney 5G-enabled Vehicular Communications	MAIN HALL
14:00 - 14:50	SESSION - 5 (11 HALL)	MEETING HALLS
14:50 - 15:00	BREAK	
15:00 - 15:50	SESSION - 6 (11 HALL)	MEETING HALLS
15:50 - 16:00	BREAK	
16:00 - 16:50	KEYNOTE-7 Enis Çetin Environment monitoring Using Cameras and Smart Sensors	MAIN HALL
16:50 - 17:00	BREAK	
17:00 - 17:50	KEYNOTE-8 Adrian Stephens How 802.11 got to be influential and the external factors that create opportunities. A little bit of technical history, a little bit of economics.	MAIN HALL
17:50 - 18:00	BREAK	
18:00 - 19:00	KEYNOTE-9 David Law The IEEE 802.3 (TM) Ethernet Standard	MAIN HALL
19:00 - 19:15	CLOSING SPEECHES	MAIN HALL

FRIDAY (11 JUNE 2021)

	SESSION-5 (14:00 - 14:50)	SESSION-6 (15:00 - 15:50)
HALL-1	Image/Video Classification, Analysis and Understanding (4) Session Chair: Uğur Töreyn	Signal Processing for Robotics and Autonomous Vehicles (2) Session Chair: Mehmet Berke Gür
HALL-2	5G and Beyond (3) Session Chair: Asaf Behzat Şahin	Computer Vision and Pattern Recognition Applications (4) Session Chair: Hakan Çevikalp
HALL-3	Biomedical Imaging and Image Processing (3) Session Chair: Duygu Sarıkaya	Optimization Methods for Signal Processing and Artificial / Deep Learning Session Chair: Zafer İçsan
HALL-4	Biomedical Signal Processing (3) Session Chair: Osman Eroğul	Biomedical Signal Processing (4) Session Chair: Osman Eroğul
HALL-5	Signal Processing for Remote Sensing (1) Session Chair: Aydın Alatan	Signal Processing for Remote Sensing (2) Session Chair: Aydın Alatan
HALL-6	Natural Language Processing (4) Session Chair: Cemal Okan Şakar	Natural Language Processing (5) Session Chair: Arzucan Özgür
HALL-7	Wireless Communication (3) Session Chair: Saeid Karamzadeh	Wireless Networks
HALL-8	Machine Learning: New Methods, Insights or Theories (3) Session Chair: Pınar Karagöz	Machine Learning: New Methods, Insights or Theories (4) Session Chair: Hacer Yalın Keleş
HALL-9	Modelling and Simulation (3) and 3D Modeling and Analysis Session Chair: Alper Tunga	Data Sets and Evaluation (2) Session Chair: Ethem Çanakoğlu
HALL-10	Artificial/Deep Learning for Signal Processing (2) Session Chair: Ethem Çanakoğlu	Multiple Access, Resource Management and Scheduling Session Chair: Ömer Melih Gül
HALL-11	Signal Processing Applications Session Chair: Bora Büyüksaraç	Multi Channel Signal Processing Session Chair: Haldun Özaktaş

WEDNESDAY (9 JUNE 2021)

	"SESSION-1 (15:00 - 15:50)"	"SESSION-2 (16:00 - 16:50)"
	Computer Vision and Pattern Recognition Applications (1) Session Chair: Hande Alemdar	Machine Learning Methods and Applications Session Chair: Tuncer Baykaş
	1056 - Semantic Segmentation on Multi-Spectral Images Veysel Aslantas ¹ , Ahmet Nusret Toprak ¹ , Mehmet Elmacı ¹ Erciyes Üniversitesi Kayseri-Turkey ¹	1073 - Protein Interaction Prediction on PHI Networks Using Graph Convolution Networks Mehmet Burak Koca ¹ , İlknur Karadeniz ² , Esmail Nourani ³ , Fatih Erdoğan Sevilgen ¹ Gebze Teknik Üniversitesi Kocaeli-Turkey ¹ Işık Üniversitesi İstanbul-Turkey ² Azarbaijan Shahid Madani University Tebriz-Iran ³
	1075 - Adversarial Domain Adaptation Enhanced via Self-training Fazıl Altinel ¹ , İbrahim Batuhan Akkaya ¹ Aselsan Aş Ankara-Turkey ¹	1237 - Performance Analysis of Machine Learning Algorithms in Detection of COVID-19 from Common Symptoms Hilal Arslan ¹ , Betül Aygun ² Ankara Yıldırım Beyazıt Üniversitesi Ankara-Turkey ¹ İzmir Demokrasi Üniversitesi İzmir-Turkey ²
HALL-1	1086 - EncU-Net: A Modified U-Net for Dermoscopic Image Segmentation Saadet Aytaç Arpacı ¹ , Songül Varlı 1 Yıldız Teknik Üniversitesi İstanbul-Turkey ¹	1338 - Performance comparison of Extreme Learning Machines and other machine learning methods on WBCD data set Ömer Selim Keskin ¹ , Muhammet Fatih Aslan ² , Abdullah Yusefi ³ , Akif Durdu ¹ Konya Teknik Üniversitesi Konya-Turkey ¹ Karamanoğlu Mehmetbey Üniversitesi Karaman-Turkey ² Kabul University Kabul-Afghanistan ³
	1126 - Extended Fully Improved Quadrature Spatial Shift Keying Modulation Halit Örenbaş ¹ , Anıl Oymagil ¹ , Melih Baydar ¹ Huawei Türkiye Ar-Ge Merkezi İstanbul-Turkey ¹	3006 - A hybrid deep learning algorithm for short-term electric load forecasting Kurtulus Bulus ¹ , Kasım Zor ² Centre for Discovery Brain Science, The University of Edinburgh Edinburgh-United Kingdom ¹ Electrical and Electronic Engineering, Adana Alparslan Türkeş Science and Technology University Adana-Turkey ²
	1130 - Classification of Camouflage Images Using Local Binary Patterns (LBP) Erkan Bayram ¹ , Vasif Nabiyev ² Atatürk Üniversitesi Bilgisayar Bilimleri Araştırma Ve Uygulama Merkezi Erzurum-Turkey ¹ Karadeniz Teknik Üniversitesi Bilgisayar Mühendisliği Bölümü Trabzon-Turkey ²	1286 - Analysis of deep learning based path loss prediction from satellite images Muhammad Z. Alam, Hasan F. Ates, Tuncer Baykasy, Bahadır K. Gunturk School of Engineering and Natural Sciences, Istanbul Medipol University, Turkey Department of Electrical-Electronics Engineering, Kadir Has University, Turkey

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"SESSION-1 (15:00 - 15:50)"

Biomedical Imaging and Image Processing (1)
Session Chair: Yeşim Serinağaoğlu Doğrusöz

1018 - Comparison of Linear Discriminant Analysis, Support Vector Machines and Naive Bayes Methods in the Classification of Neonatal Hyperspectra Signatures
Mücahit Cihan¹, Murat Ceylan¹ Konya Teknik Üniversitesi Konya-Turkey¹

1034 - Modeling the Photonic Crystal Fiber based Surface Plasmon Resonance Biosensor to Detect Blood Components
Volkan Tanrıverdi¹, Nevzat Gençer¹ Odtü Ankara-Turkey

"SESSION-2 (16:00 - 16:50)"

Biomedical Signal Processing (1)
Session Chair: Atila Yılmaz

1026 - Epileptic Seizure Detection via EEG Signals with Feature Extraction Technique Based on Cubic Spline Interpolation (In English)
Emre Can Kuran¹, Mehmet Bilal Er¹, Umut Kuran¹ Harran Üniversitesi Şanlıurfa-Turkey¹

1111 - IIR Based Digital Filter Design for Denoising the Photoplethysmography Signal
Ömer Eriş¹, Cahit Bilgin², Seval Bulut Eriş¹, Mehmet Recep Bozkurt³
Bursa Uludağ Üniversitesi İnegöl Meslek Yüksekokulu Bursa-Turkey¹ Sakarya Üniversitesi Tıp Fakültesi Sakarya-Turkey² Sakarya Üniversitesi Mühendislik Fakültesi Elektrik Elektronik Mühendisliği Sakarya-Turkey³

HALL-2

1105 - Random Point Sub-sampling in Rigid Registration of 2D Proximal Femur Surfaces¹,
Fuat Bilgili²
Yıldız Teknik Üniversitesi İstanbul-Turkey¹ İstanbul Üniversitesi İstanbul-Turkey²

1107 - Deep Learning Based Cell Segmentation Using Cascaded U-Net Models
Mehmet Emin Bakır¹, Hacer Yalım Keleş¹ Ankara Üniversitesi Ankara-Turkey¹

1123 - Few-Shot Learning for Segmentation of Yeast Cell Microscopy Images¹,
Berna Kiraz², Furkan Eren², Yiğit Uysallı³, Alper Kiraz³
Fatih Sultan Mehmet Vakıf Üniversitesi İstanbul-Turkey¹ Fatih Sultan Mehmet Vakıf Üniversitesi, Optofil Optik Ve Elektronik A.Ş. İstanbul-Turkey² Koç Üniversitesi, Optofil Optik Ve Elektronik A.Ş. İstanbul-Turkey³

1134 - Modeling the Photonic Crystal Fiber based Surface Plasmon Resonance Biosensor to Detect Blood Components¹, Hüseyin Ademgil¹
Lefke Avrupa Üniversitesi Lefke-Northern Cyprus¹

1145 - Neural Network Based Real Time Evaluation for Portable Apnea Device with Three Channels
Onur Peker¹, Atila Yılmaz²
Aselsan Ankara-Turkey¹ Hacettepe Üniversitesi Ankara-Turkey²

1157 - Epileptic Seizure Prediction Using Convolutional Autoencoder Based Deep Learning
Burak Gözütok¹, Ahmet Ademoğlu¹ Boğaziçi Üniversitesi İstanbul-Turkey¹

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"SESSION-1 (15:00 - 15:50)"

5G and Beyond (1) Session Chair: Gökhan Güvensen

1410 - Accurate Modelling of Reconfigurable Intelligent Surfaces in THz Band
Burak Ahmet Çelebi¹, İrem Aras¹, Kaan Emre Özçelik¹, Kürşat Tekbıyık¹, Güneş Kurt¹, Özgür Özdemir¹, Ali Rıza Ekti²
İstanbul Teknik Üniversitesi İstanbul-Turkey¹ Balıkesir Üniversitesi İstanbul-Turkey²

1415 - The Effect of Channel Estimation Error on the Performance of Spatial Media-Based Modulation Systems
Akif Kabacı¹, Mehmet Başaran¹, Hakan Ali Çırpan¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

HALL-3

1416 - Approximation of Correlation Matrix for High Altitude Platform Stations
Aybüke Zeynep Cengiz¹, Semiha Tedik Başaran¹, Güneş Karabulut Kurt¹, Berna Özbek¹, Halim Yanıkömeroğlu²
İzmir Yüksek Teknoloji Enstitüsü İzmir-Turkey¹ Carleton Üniversitesi Ottawa-Canada²

1033 - Spatial Modulation Over Generalized-k Fading Maram
Al-Shawabkeh¹, Kardeş Aslan¹, Tansal Gucluoglu¹
Yıldız Teknik Üniversitesi İstanbul-Turkey¹

1032 Performance of Downlink NOMA Network Using Space-Time Line Coding Technique
Tayfun Yılmaz¹, Ahmet Aytuğ Ayrancı², Hacı İlhan^{2,1}
Kocaeli Üniversitesi Kocaeli-Turkey¹ Yıldız Teknik Üniversitesi İstanbul-Turkey²

"SESSION-2 (16:00 - 16:50)"

Image/Video Classification, Analysis and Understanding (1) Session Chair: Nazlı İkizler Cinbiş

1266 - Surgical Activity Recognition with Transformer Networks
Simge Nur Kabataş¹, Duygu Sarıkaya¹
Gazi Üniversitesi Ankara-Turkey¹

1017 - Local Binary Pattern Based COVID-19 Detection Method Using Chest X-Ray Images
Ferhat Bozkurt¹, Erkan Bayram²
Atatürk Üniversitesi Bilgisayar Müh.Bölümü Erzurum-Turkey¹ Atatürk Üniversitesi Bilgisayar Bilimleri Araştırma Ve Uygulama Merkezi Erzurum-Turkey²

1114 - Covid-19 Detection in Chest X-ray Images with Deep Learning
Zeynep Özdemir¹, Hacer Yalım Keleş¹
Ankara Üniversitesi Ankara Üniversitesi-Turkey¹

1119 - Feature Dimensionality Reduction with Variational Autoencoders in Deep Bayesian Active Learning
Pınar Ezgi Çöl¹, Şeyda Ertekin¹
Orta Doğu Teknik Üniversitesi Ankara-Turkey¹

1136 - Gaussian Filter Based Digital Detail Enhancement in Thermal Images
Hilal Bozkurt¹, Aysun Taşyapı Çelebi¹ Kocaeli Üniversitesi Kocaeli-Turkey¹

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"SESSION-1 (15:00 - 15:50)"

Audio and Speech Processing
Session Chair: Murat Saraçlar

1043 - Audio Melody Extraction from Heterophonic
Turkish Maqam Music
Berrak Öztürk Şimşek¹, Aydın Akan²
İstanbul Kültür Üniversitesi İstanbul-Turkey¹ İzmir
Ekonomi Üniversitesi İzmir-Turkey²

1047 - Intent Classification based on Deep Learning
Language Model in Turkish Dialog Systems
Eyüp Halit Yılmaz¹, Çağrı Toraman¹
Aselsan Araştırma Merkezi Ankara-Turkey¹

"SESSION-2 (16:00 - 16:50)"

Natural Language Processing (1)
Session Chair: Reyvan Yeniterzi

1011 -Auto-tagging of Short Conversational Sentences
using Natural Language Processing Methods
Şükrü Ozan¹, Davut Emre Taşar¹
Adresgezgini AŞ Ar-Ge Merkezi İzmir-Turkey¹

1023 - Detection of Multiword Expressions with Word
Vector Representations
Tansu Taşcıoğlu¹, Senem Kumova Metin¹
İzmir Ekonomi Üniversitesi İzmir-Turkey¹

HALL-4

1125 - Piano Music Generation with a Text Based
Musical Note Representation using LSTM Models
Ahmet Emin Memiş¹, Hacer Yalım Keleş¹
Ankara Üniversitesi Ankara-Turkey¹

1049 - Topic Detection based on Deep Learning
Language Model in Turkish Microblogs
Furkan Şahinuç¹, Çağrı Toraman¹, Aykut Koç¹
Bilkent Üniversitesi Ankara-Turkey¹

1263 - - ZYNQ based DIFAR Sonobuoy Signal Processing
System
Recai Sinekli¹, Mehmet Ali Çavuşlu¹, Burçin Kayalı¹,
Mehmet Muzaffer Kösten¹, Serdar Tuğaç¹, Mehmet Öner¹
Koç Bilgi Ve Savunma Teknolojileri A.Ş. Ankara-Turkey¹

1059 - Complaint Detection and Classification of
Customer Reviews
Ahmet Tuğrul Bayrak¹
Ata Teknoloji Platformu İstanbul-Turkey¹

1342 - A Comparative Study on Different Labelling
Schemes and Cross-Corpus Experiments in Speech
Emotion Recognition
Pınar Baki¹, Berna Erden¹, Serkan Öncül¹
Arçelik A.Ş. İstanbul-Turkey¹

1060 - Enhancing Turkish Sentiment Analysis Using
Pre-Trained Language Models
Ömer Köksal¹
Aselsan Ankara-Turkey¹

WEDNESDAY (9 JUNE 2021)

	"SESSION-1 (15:00 - 15:50)"	"SESSION-2 (16:00 - 16:50)"
	Wireless Communication (1) Session Chair: İbrahim Altunbaş	Optical Communication Session Chair: Özlem Ünverdi
	1022 - High Resolution Video Transmission Using GNU Radio and USRP Ahmet Demir ¹ , Hakan Çevikalp ¹ Eskişehir Osmangazi Üniversitesi Eskişehir-Turkey ¹	1321 - Pulse Generator Applications in Radio Over Fiber Communication Systems N. Özlem Ünverdi ¹ , Uğur Umur Kazancı ¹ Yıldız Teknik Üniversitesi İstanbul-Turkey ¹
	1235 - Four-Element Printed Dipole Array Antenna for UAV Applications Ayşe Müge Zobu ¹ , Birkan Dağdeviren ¹ , Engin Gürhan ¹ Roketsan Ankara-Turkey ¹	1382 - Comparison of Doped Optical Fiber Amplifiers Abdullah Huzeyfe Köse ¹ , Necmiye Özlem Ünverdi ¹ Yıldız Teknik Üniversitesi İstanbul-Turkey ¹
HALL-5	1277 - NOMA-Based Two-Way MBM Mehmet Can ¹ , İbrahim Altunbaş ¹ İstanbul Teknik Üniversitesi İstanbul-Turkey ¹	1423 - Benchmarking on Performances of Active and Passive Optical Networks Ekrem Korkmaz ¹ , Özlem Ünverdi ¹ Yıldız Teknik Üniversitesi Ankara-Turkey ¹
	1299 - Outage Probability of Satellite-Terrestrial Systems with In-Band Full-Duplex Relay Okan Ertürk ¹ , İbrahim Altunbaş ¹ İstanbul Teknik Üniversitesi İstanbul-Turkey ¹	1312 - Modeling of Gigabit Passive Optical Networks Ayşe Burhan Sert ¹ , N.Özlem Ünverdi ¹ Yıldız Teknik Üniversitesi İstanbul-Turkey ¹
	1296 - BER Performances of DF Assisted Relay Selection Algorithms in NOMA Systems Inci Umakoglu ¹ , Mustafa Namdar ¹ , Arif Basgumus ¹ , Ferdi Kara ² , Hakan Kaya ² Kütahya Dumlupınar Üniversitesi Kütahya-Turkey ¹ ¹ Zonguldak Bülent Ecevit Üniversitesi Zonguldak-Turkey ²	1367 - Channel Estimation Using Optical MIMO OFDM Based LED Index Modulation Furkan Batuhan Okumuş ¹ , Erdal Panayır ¹ Kadir Has Üniversitesi İstanbul-Turkey ¹

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HALL-6

"SESSION-1 (15:00 - 15:50)"	"SESSION-2 (16:00 - 16:50)"
<p>Machine Learning: New Methods, Insights or Theories (1) Session Chair: Ömer Nezh Gerek</p>	<p>Signal Processing Session Chair: Hande Alemdar</p>
<p>1004 - ARIMA-Based Forecasting of Total COVID-19 Cases in the USA and India Pınar Cihan¹ Tekirdağ Namık Kemal Üniversitesi Tekirdağ-Turkey¹</p>	<p>1282 - The Application of Matrix Pencil Method for Direction Finding Using a Linear Antenna Array Nilay Aytaş¹, Erkan Afacan², Nihat İnanç¹ Kırıkkale Üniversitesi Kırıkkale-Turkey¹ Gazi Üniversitesi Ankara-Turkey²</p>
<p>1016 - Classifying Cancer Types Based on Microarray Gene Expressions using Conformal Prediction Fırat İsmailoğlu¹ Sivas Cumhuriyet Üniversitesi Sivas-Turkey¹</p>	<p>1057 - Investigation of Southern Oscillation Index via Periodogram Analysis and Wigner-Ville Transformation Birsen Güler¹, Yakup Özkazanç¹ Hacettepe Üniversitesi Ankara-Turkey¹</p>
<p>1041 - Synthetic CANBUS Data Generation for Driver Behavior Modeling Esratur Ucuzova¹ ODTÜ Ankara-Turkey¹</p>	<p>1436 - Traffic Prediction on Large Scale Traffic Networks Using ARIMA and K-Means Fatih Acun¹, Ebru Aydın Gol¹ Orta Doğu Teknik Üniversitesi Ankara-Turkey¹</p>
<p>1046 - Attitude Control of a Gun Turret Platform with Reinforcement Learning Burak Han Demirbilek¹, Ahmet Semih Taşbaşı¹, Nazım Kemal Üre² Aselsan Otonomi Ve Mekatronik Teknolojileri Araştırma Müdürlüğü Ankara-Turkey¹ İstanbul Teknik Üniversitesi İstanbul-Turkey²</p>	<p>3007 - Performance Evaluation of 1D DOA Estimation for DECOM and UCLA Using MUSIC Algorithm Peter Nyongesah Obimo¹, Özgür Tamer¹ Dokuz Eylül University İzmir-Turkey¹</p>
<p>1058 - The Effect of Background Subtraction on Abnormal Event Detection in Video Surveillance Erkan Şengönül¹, Refik Samet¹ Ankara Üniversitesi Ankara-Turkey¹</p>	<p>1377 - Number of Sources, Bandwidth, Signal to Noise Ratio and Noise Variance Level Estimation for Narrowband Signals Ekin Nurbaşı¹, Emrah Onat¹, Temel Engin Tuncer² Esen Sistem Entegrasyon Ankara-Turkey¹ ODTÜ Ankara-Turkey²</p>

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"SESSION-1 (15:00 - 15:50)"

Data Sets and Evaluation (1)
Session Chair: Süreyya Özögür Akyüz

1066 - Simplified QMOOD Model Proposal Based on Correlation Analysis in Different Client Applications
Yusuf Özçevik¹
Manisa Celal Bayar Üniversitesi Manisa-Turkey¹

1101 - YFCC-CelebA Face Attributes Datasets
Mehmet Can Yavuz¹, Sara Atito Ali Ahmed¹, Mehmet Efe Kisaaga¹, Hasan Ocak¹, Berrin Yanikoglu¹
Sabancı Üniversitesi İstanbul-Turkey¹

"SESSION-2 (16:00 - 16:50)"

Modelling Simulation (1)
Session Chair: Süreyya Özögür Akyüz

1015 - A New Hybrid Peak Detection Methods for Fiber Bragg Grating Temperature Sensor
Zehra Saraç¹, Burak Kurt², Cihangir Erdemir¹
İstanbul Medeniyet Üniversitesi İstanbul-Turkey¹
İstanbul Medeniyet Üniversitesi İstanbul-Turkey²

1024 - Simulation of Unmanned Aerial Vehicle for Mapping
Burak Turan¹, Sultan Turhan², Elif Bozkaya¹, Ozgun Pinarer²
Milli Savunma Üniversitesi Deniz Harp Okulu İstanbul-Turkey¹
Galatasaray Üniversitesi İstanbul-Turkey²

1076 - Model Based Design of Software Defined and Cognitive Radio and Implementation on an FPGA
Tolga Keleş¹, Siddika Berna Örs Yalçın¹, Yaşar Kemal Alp²
İstanbul Teknik Üniversitesi İstanbul-Turkey¹
Aselsan A.Ş. Ankara-Turkey²

1078 - The Fractional Version of a Multi-Wing Chaotic System and Its Circuit Synthesis
İbrahim Ethem Saçu¹, Nimet Korkmaz¹
Erciyes Üniversitesi Kayseri-Turkey¹

1132 - Design of Adaptive Speed Control System with Model Predictive Control
Serkan Budak¹, Hakan Terzioğlu¹, Cemil Sungur¹
Konya Teknik Üniversitesi Konya-Turkey¹

HALL-7

1155 - SUse of Synthetic Data on Object Detection Applications
Oğuzhan Can¹, Özlem Er¹, Yusuf Kunt¹
Havelsan A.Ş. İstanbul-Turkey¹

1171 - When does Synthetic Data Generation Work?
Ahmet Topal¹, Mehmet Fatih Amasyalı²
İstanbul Teknik Üniversitesi İstanbul-Turkey¹
Yıldız Teknik Üniversitesi İstanbul-Turkey²

WEDNESDAY (9 JUNE 2021)

HALL-8

"SESSION-1 (15:00 - 15:50)"	"SESSION-2 (16:00 - 16:50)"
Multi-Input Multi-Output Communication Systems Session Chair: Ahmet Rızaner	Object Recognition Session Chair: Elif Sürer
3025 - Low-Complexity Deep Learning-Based Beamforming in MISO Systems Nann Win Moe Thet ¹ , Khaled Walid Elgammal ¹ , Mehmet Kemal Ozdemir ¹ , Hasan Fehmi Ates ¹ Istanbul Medipol University Istanbul-Turkey ¹	1099 - Spot Detection on Leaves Murat Gögçe ¹ , Kübra Turgut ¹ , Ali Köksal Hocaoğlu ¹ Gebze Teknik Üniversitesi Kocaeli-Turkey ¹
1389 - A Comparative Study for Downlink Multi-User MIMO Systems Çınar Yalçınduran ¹ , Melda Yüksel ¹ Tobb Ekonomi Ve Teknoloji Üniversitesi Ankara-Turkey ¹	1228 - Weed and Crop Classification with Domain Adaptation for Precision Agriculture Şeydanur Ekinci ¹ , Erchan Aptoula ² Gebze Teknik Üniversitesi Bilgisayar Mühendisliği Kocaeli-Turkey ¹ Gebze Teknik Üniversitesi Bilişim Teknolojileri Enstitüsü Kocaeli-Turkey ²
1092 - Performance of TAS/GSC in Multihop Networks over Nakagami-m Fading Channels Efendi Fidan ¹ , Oğuz Kucur ² Tübitak Ulusal Metroloji Enstitüsü (Tübitak Ume) Kocaeli-Turkey ¹ Gebze Teknik Üniversitesi Kocaeli-Turkey ²	1462 - PCB Component Recognition with Semi-supervised Image Clustering Ahmet Emin Ünal ¹ , Kasım Taşdemir ¹ , Akif Bahçebaşı ¹ Abdullah Gül Üniversitesi Kayseri-Turkey ¹
1115 - A Single User Millimeter Wave Massive MIMO System using Defected Ground Structure and Metasurface Antenna Arrays Mustafa Mulla ¹ , Muhammad Sohail ¹ , Ali Hakan Ulusoy ¹ , Rasime Uyguroğlu ¹ , Ahmet Rızaner ¹ , Hasan Amca ¹ Doğu Akdeniz Üniversitesi Gazi Mağusa-Northern Cyprus ¹	
1248 - Using OMP and SD Algorithms Together in Millimeter Wave Massive MIMO Channel Estimation Mehmet Ali Aygöl ¹ , Mahmoud Nazzal ² , Hüseyin Arslan ³ Tübitak Bilgem İstanbul-Turkey ¹ İstanbul Medipol Üniversitesi İstanbul-Turkey ² University Of South Florida Florida-United States ³	

WEDNESDAY (9 JUNE 2021)

"SESSION-1 (15:00 - 15:50)"

Information Security (1)
Session Chair: Serkan Sarıtaş

1097 - Automatic Generation of Different Malware
Abdullah Emre Çelik¹, İbrahim Alper Doğru¹,
Göksel Uçtu²
Bilgisayar Mühendisliği, Gazi Üniversitesi Teknoloji
Fakültesi, Ankara, Türkiye Ankara-Turkey¹ Bilgi
Güvenliği Mühendisliği, Gazi Üniversitesi, Fen Bilimleri
Enstitüsü, Ankara, Türkiye Ankara-Turkey²

1210 - Identity-Based Encryption in the Internet of
Things
Yasin Genç¹, Erkan Afacan¹
Gazi Üniversitesi Ankara-Turkey¹

1311 - Blockchain Based Network Access Control
(NAC) Management Solution and Architecture
Çağatay Korkuç¹, Tuncay Doğantuna²,
Erkan Afacan³, Gazi Erkan Bostancı⁴
Ereğli Demir Ve Çelik Fabrikaları Taş Zonguldak-
Turkey¹ Tarım Ve Kırsal Kalkınmayı Destekleme
Kurumu Ankara-Turkey² Gazi Üniversitesi Ankara-
Turkey³ Ankara Üniversitesi Ankara-Turkey⁴

1322- Effectiveness Analysis of Public Rule Sets Used
in Snort Intrusion Detection System
İlayda Gündoğdu¹, Ali Aydın Selçuk¹, Süleyman
Özarlan²
Tobb Etü Ankara-Turkey¹ Picus Security Ankara-
Turkey²

1456 - Binary Finite Field Extensions for Diffusion
Matrices over the Finite Field F^2m
Meltem Kurt Pehlivanoğlu¹, Fatma Büyüksaraçoğlu
Sakallı², Muharrem Tolga Sakallı², Sedat Akleylek³
Kocaeli Üniversitesi İzmit-Turkey¹ Trakya Üniversitesi
Edirne-Turkey² On Dokuz Mayıs Üniversitesi Samsun-
Turkey³

"SESSION-2 (16:00 - 16:50)"

Internet of Things
Session Chair: Elif Tuğçe Ceran

1379 - TDOA Based Indoor Localization of Wearable
Smart Devices
Buse Gültekin¹, Volkan Kılıç¹
İzmir Katip Çelebi Üniversitesi İzmir-Turkey¹

1252 - Analysis of the Signal Reception in Mobile
Molecular Communication System by Using Antenna
Furkan Burak Atamış¹, İbrahim Işık²
Malatya İl Emniyet Müdürlüğü Malatya-Turkey¹ İnönü
Üniversitesi Malatya-Turkey²

1375 - Analysis of Visual Sensory System based Edge
Computing Approach in IOT
Emrah Şimşek¹, Barış Özyer¹
Atatürk Üniversitesi Erzurum-Turkey¹

1250 - Modeling of Carbon Nanotube-based Wearable
Textile Temperature Sensor via Artificial Intelligence
Burcu Arman Kuzubaşoğlu¹, Senem Kurşun Bahadır¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

1355 - Prediction, Classification and Recommendation
in e-Health via Contextual Partitioning
Muhammad Anjum Qureshi¹ Bilkent University
Ankara-Turkey¹

HALL-9

WEDNESDAY (9 JUNE 2021)

"SESSION-1 (15:00 - 15:50)"

Signal Processing for Robotics and Autonomous Vehicles (1)

Session Chair: Metin Sezgin

1064 - Performance Comparison of Direct and Feature Based v SLAM Algorithms
Buğra Şimşek¹, M.Sami Satır¹, Hasan Şakir Bilge²
Aselsan A.Ş. Ankara-Turkey¹ Gazi Üniversitesi Ankara-Turkey²

1087 - A Novel Method for Tilt Compensation in Inertial Sensor Systems
Erol Duyamaz¹, Berker Işık¹
Optoel Ankara-Turkey¹

HALL-10

1094 - Simultaneous Localization and Mapping with One Particle
Yasin Yeniaydın¹, Semih Köklücan¹
Tübitak Sage Ankara-Turkey¹

1096 - Indoor Path Finding and Simulation for Smart Wheelchairs
Halil İbrahim Şahin¹, Ahmet Reşit Kavsaçoğlu¹
Karabük Üniversitesi Karabük-Turkey¹

1103 - Design and Implementation of Visual Simultaneous Localization and Mapping (VSLAM) Navigation System
Arda Bekcan¹, Halit Ergezer¹
Çankaya Üniversitesi Ankara-Turkey¹

"SESSION-2 (16:00 - 16:50)"

Artificial / Deep Learning for Signal Processing

Session Chair: Metin Sezgin

1021 - LSTM Based Classification of Targets using FMCW Radar Signals
Oytun Güneş¹, Ömer Morgül¹
Bilkent Üniversitesi Ankara-Turkey¹

1039 - Horizontal Attention Convolution Layer for Stereo Matching
Alper Emlek¹, Murat Peker¹
Niğde Ömer Halisdemir Üniversitesi Niğde-Turkey¹

1063 - Evaluation of Different Machine Learning Algorithms for Classification of Sleep Apnea
Bahar Nazlı¹, Hayriye Altural¹
Kastamonu Üniversitesi Kastamonu-Turkey¹

1172 - Video Colorizing with Automatic Reference Image Selection
Ali Asaf Polat¹, Mehmet Furkan Şahin¹, M. Elif Karslıgil¹

THURSDAY (10 JUNE 2021)

	"SESSION-3 (14:00 - 14:50)"	"SESSION-4 (15:00 - 15:50)"
	Big Data Analysis Session Chair: Lale Özkahya	Machine Learning for Communication Systems Session Chair: Hakan Cevikalp
	1045 - Learning Heuristics for the Maximum Clique Enumeration Problem Using Higher-Order Graph Structures Ali Baran Taşdemir ¹ , Lale Özkahya ¹ Hacettepe Üniversitesi Ankara-Turkey ¹	1276 - Reinforcement Learning-Based Decision-Making for Vehicular Edge Computing Homa Maleki ¹ , Mehmet Başaran ¹ , Lütfiye Durak-Ata ¹ İtÜ İstanbul-Turkey ¹
	1315 - A Dynamic Recurrent Neural Networks-Based Recommendation System for Banking Customers Hasan Avcı ¹ , C. Okan Sakar ¹ Bahçeşehir Üniversitesi İstanbul-Turkey ¹	1154 - LSTM and GRU based Traffic Prediction Using Live Network Data Evren Tuna ¹ , Alkan Soysal ² Turkcell Teknoloji İstanbul-Turkey ¹ Virginia Tech Blacksburg, Va-United States ²
HALL-1	1354 - Interface Software Proposal for Heterogeneous Data Read from a Data Source Ahmet Albayrak ¹ , Adham Jolosi Jolosi Zada ¹ Düzce Üniversitesi Düzce-Turkey ¹	1294 - Machine Learning Assisted Cell Association for Two-Tier Communication Networks Hasan Rıza Uçaş ¹ , Barış Yüksekaya ¹ Hacettepe Üniversitesi Ankara-Turkey ¹
		1460 - The Analysis of Feature Selection with Machine Learning for Indoor Positioning Hurkan Mustafa Aydın ¹ , Muhammad Ammar Ali ¹ , Ece Gelal Soyak ¹ Bahçeşehir Üniversitesi İstanbul-Turkey ¹
	1448 - Performance Assessment of Partially Shaded PV Modules With Microcracks Hikmet Alkılıç ¹ , Mahmut Sami Bükür ² , Süleyman Hanlı ¹ Endüstriyel Elektrik Elektronik San. Tic. Ltd. Şti. Konya-Turkey ¹ Necmettin Erbakan Üniversitesi Konya-Turkey ²	1395 - Machine Learning Aided Demodulator in MISO Beamforming Systems Melis Çetintürk ¹ , Yavuz Adam ¹ , Caner Göztepe ¹ , Güneş Karabulut Kurt ¹ İstanbul Teknik Üniversitesi Ankara-Turkey ¹
	1201 - Anomaly Detection in Location and Trajectory Datasets Mustafa Tolga Datlıca ¹ , Engin Demir ² Atel Ankara-Turkey ¹ Hacettepe Üniversitesi Ankara-Turkey ²	3002 - Fuzzy Linguistic Prolog and Its Application on Route Prioritisation Esra Çakır ¹ , Mehmet Ali Taş ² Galatasaray University İstanbul-Turkey ¹ Turkish-German University İstanbul-Turkey ²

THURSDAY (10 JUNE 2021)

"SESSION-3 (14:00 - 14:50)"

Biometrics Session Chair: Berrin Yanıkoğlu

1120 - Evaluation of Features Used in Electromyography Classification
Ayber Eray Algüner¹, Halit Ergezer¹
Çankaya Üniversitesi Mekatronik Mühendisliği Bölümü
Ankara-Turkey¹

1150 - Touchscreen Swipe Based Biometric Authentication Using Spectral Regression - Kernel Discriminant Analysis
Orhan Sivaz¹, Murat Aykut¹
Karadeniz Teknik Üniversitesi Trabzon-Turkey

1265 - Importance of Image Enhancement Methods for Fingerprint Recognition
Anıl Osman Tur¹, Berkay Selbes¹, Halil İbrahim Öztürk¹, İsmail Karakaya¹, Orkun Öztürk¹, Berkan Demirel¹
Havelsan Ankara-Turkey¹

HALL-2

1279 - Gender Detection with Smartphone Motion Sensors Using Convolutional Neural Networks
Erhan Davarcı¹, Emin Anarım¹
Boğaziçi Üniversitesi İstanbul-Turkey¹

"SESSION-4 (15:00 - 15:50)"

Biomedical Signal Processing (2) Session Chair: Atila Yılmaz

1184 - A CNN-Based Solution for Breast Cancer Detection With Blood Analysis Data: Numeric to Image
Muhammet Fatih Aslan¹, Kadir Sabancı¹, Ewa Ropelewska²
Karamanoğlu Mehmetbey Üniversitesi Karaman-Turkey¹
National Institute Of Horticultural Research Skierniewice-Poland²

1200 - Neural Correlates of Identity Judgments in the Prefrontal Cortex: An Optical Brain Imaging (fNIRS) Study
Tuna Çakar¹, Annette Hohenberger²
Mef Üniversitesi İstanbul-Turkey¹ Metu Ankara-Turkey²

1249 - Neural Network Based Sleep Phases Classification for Resource Constraint Environments
Berkay Köprü¹, Murat Aslan², Alisher Kholmatov²
Koç Üniversitesi İstanbul-Turkey¹ Maxim Integrated İstanbul-Turkey²

1251 - An EEG and Machine Learning based Method for the Detection of Major Depressive Disorder
Elif İzci¹, Mehmet Akif Özdemir¹, Aydın Akan², Mehmet Akif Özçoban³, Mehmet Kemal Arkan⁴
İzmir Katip Çelebi Üniversitesi İzmir-Turkey¹ İzmir Ekonomi Üniversitesi İzmir-² Gaziantep Üniversitesi Gaziantep-³ Üsküdar Üniversitesi İstanbul-⁴

1264 - Automatic Detection Of Seizure Activity From EEG Recordings Of Genetic Rat Model Of Absence Epilepsy
Beşir Özmen¹, Melis Yavuz², Nihan Çarçak³, Medine Gülçebi İdriz Oğlu⁴, Zoltán Molnár⁵, Filiz Onat⁶, Rifat Koray Çiftçi¹
Department Of Biomedical Engineering, Faculty Of Engineering, Tekirdağ Namık Kemal University Tekirdağ-Turkey¹ Department Of Pharmacology, Faculty Of Pharmacy, Acibadem Mehmet Ali Aydınlar University İstanbul-Turkey² Department Of Pharmacology, Faculty Of Pharmacy, İstanbul University İstanbul-Turkey³ Department Of Medical Pharmacology, Faculty Of Medicine Marmara University İstanbul-Turkey⁴ University Of Oxford, Medical Sciences Division, Department Of Physiology, Anatomy And Genetics Oxford-United Kingdom⁵ Department Of Medical Pharmacology, Faculty Of Medicine, Acibadem Mehmet Ali Aydınlar University İstanbul-Turkey⁶

THURSDAY (10 JUNE 2021)

"SESSION-3 (14:00 - 14:50)"

Computer Vision and Pattern Recognition
Applications (2)
Session Chair: Sinan Kalkan

1062 - Developing Affordable Tangible Programming
Alpay Sabuncuoğlu¹, T. Metin Sezgin¹
Koç Üniversitesi Yapay Zeka Merkezi İstanbul-Turkey¹

1348 - An Evaluation of the Layers of a Deep Network on
the Optical Character Recognition Problem
Rahmani Saygın¹, Özge Öztimur Karadağ¹
Alanya Alaaddin Keykubat Üniversitesi Antalya-Turkey¹

3017 - Street Vendor Detection: Helping municipalities
make decisions with actionable insights
Abdullah Tahir¹, Hatice Nur Ağba²
Abdullah Gul University Kayseri-Turkey¹ Abdullah Gul
University Kayseri-Turkey²

HALL-3

1430 - Effect of Centrality Measures for Keyword
Extraction from Turkish Documents
Furkan Göz¹, Alev Mutlu¹, Kerem Küçük¹, Mahir Temur²,
Abdurrahman Gün²
Kocaeli Üniversitesi Kocaeli-Turkey¹ Yapı Kredi Teknoloji
Kocaeli-Turkey²

1432 - A Comparative Analysis for Binary Search
Operators used in Artificial Bee Colony
İbrahim Atlı¹, Rafet Durgut², Mehmet Emin Aydın³
Ankara Yıldırım Beyazıt Üniversitesi Ankara-Turkey³
¹ Karabük Üniversitesi Karabük-Turkey² Uwe Bristol
Bristol-United Kingdom³

"SESSION-4 (15:00 - 15:50)"

Machine Learning: New Methods, Insights or
Theories (2)
Session Chair: Engin Demir

1070 - Investigation of the Noise Sensitivity of Machine
Learning Algorithms on Credit Card Fraud Detection
İlhan Aytutuldu¹, Aslı Aydın²
Gebze Teknik Üniversitesi Kocaeli-Turkey¹ Dogus
Üniversitesi İstanbul-Turkey²

1080 - Reinforcement Learning Algorithms Performance
Comparison on the Game of DeepRTS
Safa Onur Şahin¹, Veysel Yücesoy¹
Aselsan A.Ş. Ankara-Turkey¹

1095 - Comparison of Breast Cancer and Skin Cancer
Diagnoses Using Deep Learning Method
Burcu Bilgiç¹
Atılım Üniversitesi Ankara-Turkey¹

1109 - Comparative Breast Cancer Detection with
Artificial Neural Networks and Machine Learning Methods
Muhammed Coşkun İrmak¹, Mehmet Bilge Han Taş²,
Sedat Turan³, Abdulsamet Haşiloğlu⁴
Van Yüzüncü Yıl Üniversitesi Mühendislik Fak. Bilgisayar
Mühendisliği Van-Turkey¹ Erzincan Binali Yıldırım
Üniversitesi Mühendislik Fak. Bilgisayar Mühendisliği
Erzincan-Turkey² Erzincan Binali Yıldırım Üniversitesi
Refahiye Meslek Yüksekokulu Elektronik Ve Otomasyon
Bölümü Erzincan-Turkey³ Atatürk Üniversitesi
Mühendislik Fak. Bilgisayar Mühendisliği Erzurum-Turkey⁴

1129 - Credit Risk Analysis Using Machine-Learning
Algorithms
Gökhan Alagöz¹, Ethem Çanakoğlu²
Kuveyt Türk Katılım Bankası, Ar-Ge Merkezi Kocaeli-Turkey¹
¹ Bahçeşehir Üniversitesi İstanbul-Turkey²

THURSDAY (10 JUNE 2021)

"SESSION-3 (14:00 - 14:50)"

Natural Language Processing (2) Session Chair: Burcu Can

1106 - Deep Learning Based Query Expansion for Content Relevance Tracking

Beyzanur Saraçlar¹, Birol Kuyumcu¹, Selman Delil¹,
Cüneyt Aksakallı¹
Sefamerve İstanbul-Turkey¹

1166 - Subword Semantic Hashing for Intent Classification in Turkish Language ChatBots
Rumeysa Eliöz¹, Berk Özsoy¹, Abdullah H. Özcan¹, Hüseyin Kara¹, Lütfü Çakıl¹
Golive İstanbul-Turkey¹

HALL-4

1181 - Multi-GRU Based Automated Image Captioning for Smartphones
Rumeysa Keskin¹, Özge Taylan Moral¹, Volkan Kılıç¹,
Aytuğ Onan¹
İzmir Katip Çelebi Üniversitesi İzmir-Turkey¹

1133 - Comparative Analysis of Word Vectoring Methods for Malware Detection
Ayşe Bilge Gunduz¹, Ali Gokhan Yavuz¹
Yıldız Teknik Üniversitesi İstanbul-Turkey¹

"SESSION-4 (15:00 - 15:50)"

Natural Language Processing (3) Session Chair: Burcu Can

1207 - Optimal Classifier Selection in Turkish Speech Emotion Detection
Damla Büşra Özsönmez¹, Tankut Acarman¹, İsmail Burak Parlak¹
Galatasaray Üniversitesi İstanbul-Turkey¹

1236 - Performance Evaluation of BERT Vectors on Natural Language Inference Models
İskender Ülgen Oğul¹, Selma Tekir¹
İzmir Yüksek Teknoloji Enstitüsü İzmir-Turkey¹

1287 - The Effect of Transfer Learning on Turkish Text Classification
Gürkan Şahin¹, Banu Diri¹
YtÜ İstanbul-Turkey¹

1303 - Turkish Dataset for Semantic Textual Similarity
Figen Beken Fikri¹, Kemal Oflazer², Berrin Yanıkoğlu¹
Sabancı Üniversitesi İstanbul-Turkey¹ Carnegie Mellon University İn Qatar Doha-Qatar²

1175 - Investigation of Gender Bias in Turkish Word Embeddings
Nurullah Sevim¹, Aykut Koç¹
Bilkent Üniversitesi Ankara-Turkey¹

THURSDAY (10 JUNE 2021)

	"SESSION-3 (14:00 - 14:50)"	"SESSION-4 (15:00 - 15:50)"
	Computational Systems, Modeling and Simulation in Medicine and Biology and e-Health Session Chair: Cem Tekin	Contested Producer Networks Session Chair: Hacer Yalın Keleş
	1355 - Prediction, Classification and Recommendation in e-Health via Contextual Partitioning Muhammad Anjum Qureshi ¹ Bilkent University Ankara-Turkey ¹	1162 - Microscopic Fluorescence In Situ Hybridization (FISH) Image Synthesis with Generative Adversarial Networks Gizem Dursun ¹ , Ufuk Özkaya ¹ Süleyman Demirel Üniversitesi Isparta-Turkey ¹
HALL-5	1110 - Predicting the Survival of Heart Failure Patients in Unbalanced Data Sets Buğra Kaan Türkmenoğlu ¹ , Oktay Yıldız ¹ Gazi Üniversitesi Ankara-Turkey ¹	1241 - Support of Data Augmentation with GAN on Faster R-CNN Based Buried Target Detection Sertan Akçalı ¹ , Fatih Erden ¹ Milli Savunma Üniversitesi Başakşehir-Turkey ¹
	1387 - Classification of Active Sensing Movements via Machine Learning Approaches Sinan Vargeloğlu ¹ , İsmail Uyanık ¹ Hacettepe Üniversitesi Ankara-Turkey ¹	1385 - Using Generative Adversarial Networks for Handling Class Imbalance Problem M. Aslı Aydın ¹ Doğuş Üniversitesi İstanbul-Turkey ¹
	1443 - Prediction of Mortality and Length of Stay with Deep Learning Batuhan Bardak ¹ , Mehmet Tan ¹ Tobb Ekonomi Ve Teknoloji Üniversitesi Ankara-Turkey ¹	1122 - Tympanic Membrane Generation with Generative Adversarial Networks Mustafa Furkan Eseoğlu ¹ , İsmail Koçak ² , M. Elif Karslıgil ¹ Yıldız Teknik Üniversitesi İstanbul-Turkey ¹ Drvoice Clinic İstanbul-Turkey ²

THURSDAY (10 JUNE 2021)

"SESSION-3 (14:00 - 14:50)"

Image/Video Classification, Analysis and Interpretation (2)
Session Chair: Bilge Günsel

1139 - Cleaning Landmark and Geolocation Dataset using Deep Learning Methods
Berk Taşkın¹, M. Elif Karslıgil¹
Yıldız Teknik Üniversitesi İstanbul-Turkey¹

1167 - Surface Defect Detection Using Deep U-Net Network Architectures
Hüseyin Üzen¹, Muammer Turkoglu¹, Davut Hanbay²
Bingöl Üniversitesi Bingöl-Turkey¹ İnönü Üniversitesi Malatya-Turkey²

HALL-6

1183 - Classification of Hyperspectral Images Using 3D CNN Based ResNet50
Hüseyin Fırat¹, Davut Hanbay²
Dicle Üniversitesi Diyarbakır-Turkey¹ İnönü Üniversitesi Malatya-Turkey²

1271 - Anomaly Detection in Wide Area Imagery
Abdullah Hamza Şahin¹, Hasan Fehmi Ateş¹, Bahadır Kürşat Güntürk¹
İstanbul Medipol Üniversitesi İstanbul-Turkey¹

1295 - Melanoma detection from dermoscopy images using Nasnet Mobile with Transfer Learning
Mustafa Çakmak¹, Mehmet Emin Tenekeci¹
Harran Üniversitesi Şanlıurfa-Turkey¹

"SESSION-4 (15:00 - 15:50)"

Image/Video Classification, Analysis and Interpretation (3)
Session Chair: Bilge Günsel

1319 - Effect of Loss Functions on Domain Adaptation in Semantic Segmentation
Hilmi Güven¹, Kirman Serdar¹, Cihan Topal¹
Eskişehir Teknik Üniversitesi Eskişehir-Turkey¹

1325 - Deep Learning-based Semantic Segmentation for Crack Detection on Marbles
Şahin Alp Akosman¹, Mert Öktem¹, Özge Taylan Moral¹, Volkan Kılıç¹
İzmir Katip Çelebi Üniversitesi İzmir-Turkey¹

1339 - Cheating Detection Pipeline for Online Interviews
Azmi Can Özgen¹, Mahiye Uluyağmur Öztürk¹, Orkun Torun¹, Jianguo Yang¹, Mehmet Zahit Alparslan¹
Huawei Turkey R&D Center¹

1381 - Performance Analysis of Machine Learning Models for Object Recognition in Underwater Video Images
Murat Özbayoğlu¹, Barış Özdemir¹, Bora Arslan¹, Özlem Bozkurt¹, Perin Ünal², Özlem Albayrak², Tilbe Alp²
Tobb Etü Ankara-Turkey¹ Teknopar Ankara-Turkey²

1386 - Diet Application That Can Recognize Turkish Foods With Deep Learning
İlayda Şahin¹, Berna Taşel¹, Mehmet Amaç Güvensan¹
Yıldız Teknik Üniversitesi İstanbul-Turkey¹

THURSDAY (10 JUNE 2021)

"SESSION-3 (14:00 - 14:50)"

Communication Networks (2)
Session Chair: Melda Yüksel

1020 - Management of Service Function Chains in Programmable Data Plane
Özgür Yüreken¹
Cumhurbaşkanlığı Dijital Dönüşüm Ofisi, Ankara-Turkey¹

1392 - Downlink Coverage Extension for UAV 5G Micro Base Stations through V2V Communications
Kerem Çağdaş Durmuş¹, Mahmut Demirtaş¹, Hüsne Şahan¹, Sibel Büyük¹, Caner Arslan¹
Ulak Haberleşme A.Ş. İstanbul-Turkey¹

HALL-7

1196 - Maintenance Estimation with Modbus-Based
Aytaç Ceyhan¹, Rüştü Akay¹
Erciyes Üni. Kayseri-Turkey¹

1337 - FPGA Implementation of Precision Time Protocol and Its Performance Analysis Under Traffic Load
Muhammed Emin Yabacioğlu¹, İbrahim Hökelek², Muhammet Selim Demir², Şeref Naci Engin³
Tusaş İstanbul-Turkey¹ Tübitak Kocaeli-Turkey² Yıldız Teknik Üniversitesi İstanbul-Turkey³

1085 - Development of Fine Tracking Unit for Hybrid ATP Mechanism in Free-space Optical Communication
Harun Turan¹, Özgenç Subaşı¹
Tübitak Kocaeli-Turkey¹

1369-Latency Analysis of Switchless ARINC 664 Using Network Calculus
Bekir Gül¹, Ömer Faruk Gemici², İbrahim Hökelek², Muhammet Garip³
Tusaş İstanbul-Turkey¹ Tübitak Bilgem Kocaeli-Turkey² Yıldız Teknik Üniversitesi İstanbul-Turkey³

"SESSION-4 (15:00 - 15:50)"

Computer Vision and Pattern Recognition Applications (3)
Session Chair: Yalın Baştanlar

1146 - Performance of Empirical Mode Decomposition in Automated Detection of Hypertension Using Electrocardiography
Yunus Emre Erdoğan¹, Ali Narin²
Ereğli Demir Çelik A.Ş. Zonguldak-Turkey¹ Bülent Ecevit Üniversitesi Zonguldak-Turkey²

1176 - 3D Shape Completion Using Multilayer Spherical Depth Parameters
Abdüllatif Ağca¹, Fatma Betül Atalay¹
Tobb Etü Ankara-Turkey¹

1242 - TurCoins: Turkish Republic Coin Dataset
Hüseyin Temiz¹, Berk Gökberk², Lale Akarun¹
Boğaziçi Üniversitesi İstanbul-Turkey¹ Mef Üniversitesi İstanbul-Turkey²

1269 - Crowd Counting with Distribution Matching and Dilated Networks
Selman Özleyen¹, Erchan Aptoula¹
Gebze Teknik Üniversitesi Kocaeli-Turkey¹

3020 - Real-time GP-based Wheelchair Corridor Following
Ammar Tello
Ammar Tello¹, A. H. Abdul Hafez¹, Bakr Sarakbi¹
Hasan Kalyoncu University Gaziantep-Turkey¹

THURSDAY (10 JUNE 2021)

	"SESSION-3 (14:00 - 14:50)"	"SESSION-4 (15:00 - 15:50)"
	5G and Beyond (2) OSession Chair: Ahmet Yazar	Wireless Communication (2) Session Chair: Cenk Toker
	1178 - A Single User Millimeter Wave Massive MIMO System using Defected Ground Structure and Metasurface Antenna Arrays Erkan Danacı ¹ , Aliye Kartal Doğan ¹ , Oğuzhan Kızılbey ¹ Tübitak Ume Kocaeli-Turkey ¹	1089 - HQAM Analysis of MRC Diversity Systems over Fisher-Snedecor F Channels Caner Özen ¹ , Mehmet Bilim ¹ Nuh Naci Yazgan Üniversitesi Kayseri-Turkey ¹
	1179 - A Single User Millimeter Wave Massive MIMO System using Defected Ground Structure and Metasurface Antenna Arrays Erkan Danacı ¹ , Handan Sakarya ¹ , Murat Arslan ¹ Tübitak Ume Kocaeli-Turkey ¹	1091 - Calculation of Resonant Frequency and Bandwidth of Rectangular Microstrip Antennas via Genetic Algorithm Zeynep Sıdıka Seven ¹ , Sultan Can ² Ted Üniversitesi Ankara-Turkey ¹ Ankara Üniversitesi Ankara-Turkey ²
HALL-8	1182 - The Effects of Sequential and Multiple Measurement on RF Power Aydın Yüğrük ¹ , Erkan Danacı ² , Aliye Kartal Doğan ² , Alp Oral Salman ³ Spark Kalibrasyon Hizmetleri A.Ş. Ankara-Turkey ¹ Tübitak Ume Kocaeli-Turkey ² Kocaeli Üniversitesi Kocaeli-Turkey ³	1116 - Design of a New UTC-PD to Enhance the BW Value Huriye Gencal ¹ , Turgut Öztürk ¹ Bursa Teknik Üniversitesi Bursa-Turkey ¹
	1231 - Requirement Analysis and Clustering Study for Possible Service Types in 6G Communications Ahmet Yazar ¹ Eskişehir Osmangazi Üniversitesi Eskişehir-Turkey ¹	1192 - Square Spiral Conformal Antenna Design for Capsule Endoscopy Furkan Salih Yamak ¹ , Özgür Özdemir ¹ İstanbul Teknik Üniversitesi İstanbul-Turkey ¹
	1336 - Dual-Fed Wideband MIMO Antenna System Design for 5G Applications with Increased Gain with Superstrate Mehmet Yerlikaya ¹ , Seyfettin Sinan Gültekin ² Karamanoğlu Mehmetbey Üniversitesi Karaman-Turkey ¹ Konya Teknik Üniversitesi Konya-Turkey ²	1471 - BER Analysis on LWT-based MIMO-OFDM Systems using DP antenna Arrays Ömer Faruk Aydın ¹ , Asuman Savaşçıhabeş ¹ Nuh Naci Yazgan Üniversitesi Kayseri-Turkey ¹

THURSDAY (10 JUNE 2021)

"SESSION-3 (14:00 - 14:50)"

Information Security (2)
Session Chair: Zehra Gülru Çam Taşkıran

1005 - Inverse Document Frequency-based Sensitivity Score for Privacy Analysis
Önder Çoban¹, Ali İnan², Selma Ayşe Özel¹
Cukurova Üniversitesi Adana-Turkey¹ Adana Alparslan Türkeş Bilim Ve Teknoloji Üniversitesi Adana-Turkey²

1031 - Chaotic Oscillator Based True Random Number Generator
Ahmet Can Özçelik¹, Zehra Gülru Çam Taşkıran¹
Yıldız Teknik Üniversitesi İstanbul-Turkey¹

1040 - Evaluation of the Hash Value Size Effect used in Fragile Watermarking Methods on the Salt and Paper Noise Adding Attack Detection
Ertugrul Gul¹, Serkan Ozturk¹
Erciyes Üniversitesi Kayseri-Turkey¹

1463 - Improved Physical Layer Security in Visible Light Communications by Using Focused Light Emitters
Oğuz Gürcüoğlu¹, Mehmet Can Erdem¹, H. Ozan Çirkinoğlu², Onur Ferhanoğlu¹, Guneş Zeynep Karabulut Kurt¹, Erdal Panayırıcı³
İstanbul Teknik Üniversitesi İstanbul-Turkey¹ Eindhoven University Of Technology İstanbul Teknik Üniversitesi-Turkey² Kadir Has Üniversitesi İstanbul Teknik Üniversitesi-Turkey³

1259 - HF Modem for Secure Voice Communication and Its Real-time Performance Analysis
Hilal Turfan¹, Ömer Faruk Gemici¹, Muhammet Selim Demir¹, İbrahim Hökelek¹
Tübitak Bilgem Kocaeli-Turkey¹

"SESSION-4 (15:00 - 15:50)"

Modelling Simulation (2)
Session Chair: Alper Tunga

1205 - Collecting Parts by Indoor Mapping Method
Müzeyyennur Yılgin¹, Demet Erol¹, Oktay Yıldız¹
Gazi Üniversitesi Ankara-Turkey¹

1221 - Inverter based OTA Design Using gm/ID Transistor Sizing Technique
Mesut Atasoyu¹
Artvin Coruh Uni. Artvin-Turkey¹

1244 - Analysis of The Using 2D Material in Multilayer Surface Plasmon Resonance Based Fiber Optic Biosensor Design
Gökbeş Berat Özçiftçi¹, Timuçin Emre Tabaru², Ömer Galip Saraçoğlu¹
Erciyes Üniversitesi Elektrik-Elektronik Müh. Böl. Kayseri-Turkey¹ Erciyes Üniversitesi Klinik Müh. Araş. Ve Uyg. Mer. Kayseri-Turkey²

1280 - Mathematical Modeling of Threats in Electronic Warfare Systems
Elif Ayyüce Muslu¹
Ankara Yıldırım Beyazıt Üniversitesi Ankara-Turkey¹

1217 - Comparisons of Smartphone Induced SAR in Computational Human Models
Ahmet Turgut¹, Begüm Korunur Engiz¹
Omü Samsun-Turkey¹

HALL-9

THURSDAY (10 JUNE 2021)

"SESSION-3 (14:00 - 14:50)"

Biomedical Imaging and Image Processing (2) Session Chair: Nevzat Gencer

1135 - Reconstruction of Multiple Inhomogeneities for Circular Model in Electric Impedance Tomography
Hatice Manisalı¹, Atila Yılmaz¹
Hacettepe Üniversitesi Ankara-Turkey¹

1156 - Deep Learning Model Development with U-net Architecture for Glottis Segmentation
Yasar Said Derdiman¹, Turgay Koc 1
Suleyman Demirel University Isparta-Turkey¹

1246 - Multi-Image Reconstruction in Multi-Contrast MRI
Muzaffer Özbey¹, Tolga Çukur¹
Bilkent Üniversitesi Ankara-Turkey¹

1288 -Synergistic Reconstruction-Synthesis of Multi-Contrast MRI using Transfer Learning Method
İrem Kaftan¹, Özgür Bora Gevrek¹, Tolga Çukur¹
Bilkent Üniversitesi Ankara-Turkey¹

1334 - Comparison of Data-Driven and Morphological Features for Cell Segmentation in Histopathological Images
Omer Faruk Karaaslan¹, Gokhan Bilgin¹
Yıldız Teknik Üniversitesi İstanbul-Turkey¹

"SESSION-4 (15:00 - 15:50)"

Object Detection and Tracking Session Chair: Yakup Genç

1012 - Nuclei Detection on Breast Cancer Histopathology Images Using RetinaNet
Engin Bozaba¹, Gizem Solmaz¹, Çisem Yazıcı¹, Gülşah Özsoy¹, Fatma Tokat², Leonardo O. Iheme¹, Sercan Çayır¹, Samet Ayaltı¹, Cavit Kerem Kayhan², Ümit İnce³
Virasoft Inc. İstanbul-Turkey¹ Acibadem University School Of Medicine İstanbul-Turkey² Acibadem University, Pathology Laboratory İstanbul-Turkey³

1051 - Performance Comparison of Target Tracking Filters in Underwater Multipath Environments
Ali İhsan Güllü¹, Ahmet Güneş¹
Gebze Teknik Üniversitesi Kocaeli-Turkey¹

1380 - Comparison of Object Tracking Methods and Performance Analysis of Kernelized Correlation Filter with Different Appearance Models
Elnura Musaoğlu¹, Ceyda Nur Öztürk¹
Uludağ Üniversitesi Bursa-Turkey

1118 - Deep Learning Based Image Segmantation and Classification for Fashion Detection on Smartphones
Emre Üzüm¹
İzmir Katip Çelebi Üniversitesi İzmir-Turkey¹

HALL-10

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Image/Video Classification, Analysis and Understanding (4)
Session Chair: Uğur Töreyn

1453 - Unsupervised Discovery of Fingerspelled Letters in Sign Language Videos
Feyza Duman¹, Tanya Deniz İpek¹, Murat Saraçlar¹
Boğaziçi Üniversitesi İstanbul-Turkey¹

1457 - Ayrılabilir Çekirdekler ile Tümlev İmge temelli Hızlı Evrişim İşlemleri
Orhan Akbulut¹, Tolga Tunçel²
Kocaeli Üniversitesi Kocaeli-Turkey¹ İstanbul Esenyurt Üniversitesi İstanbul-Turkey²

1467 - Anomaly Detection In Compressed Video
Sümeyye Çavaş¹, Behçet Uğur Töreyn¹, Muhammet Berat Sebuloğlu¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

1212 - Detection of Covid-19 from Computed Tomography Images with DenseNet Based Deep Learning Models
Alican Ala¹, Özlem Polat¹
Sivas Cumhuriyet Üniversitesi Sivas-Turkey¹

3012 - Improved YOLOv4 for Aerial Object Detection
Sharoze Ali¹, Arslan Siddique¹, Hasan Fehmi Ateş¹, Bahadır Kursat Gunturk¹
Istanbul Medipol University İstanbul-Turkey¹

SESSION-6 (15:00 - 15:50)

Signal Processing for Robotics and Autonomous Vehicles (2)
Session Chair: Mehmet Berke Gür

1301 - Machine Learning and Image Processing Based Autonomous Vehicle Design
Yunus Emre Kar¹, Arif Basgumus¹, Mustafa Namdar¹
Kütahya Dumlupınar Üniversitesi Kütahya-Turkey¹

1308 - Designing and Implementing Secure Automotive Network for Autonomous Cars
Mehmet Murat Enes Soltekin¹, Ömer Demirci¹, Sıddıka Berna Örs Yalçın¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

1326 - Position Based Visual Servoing with Artificial Neural Networks for Quadrotor-type Unmanned Aerial Vehicles
Aybüke Ünlü¹, Tolga Yüksel¹
Bilecik Şeyh Edebali Üniversitesi Bilecik-Turkey¹

1343 - Control System Design for Autonomous Formation Flight
Ömer Abdo¹, Tevfik Erkin², Harun Çelik²
Necmettin Erbakan Üniversitesi Konya-Turkey¹ Erciyes Üniversitesi Kayseri-Turkey²

1469 - Modeling and Simulations for Magnetic Manipulation of Micro Objects with a Visual Control System
Alp Recep Dayan¹, Serhat Yeşilyurt¹
Sabancı Üniversitesi İstanbul-Turkey¹

HALL-1

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

5G and Beyond (3)
Session Chair: Asaf Behzat Şahin

1363- Metamaterial Based MIMO Antenna Design for 5G Communication Systems
Canan İnan¹, Umut Köse¹, Aktül Kavas¹
Fatih Sultan Mehmet Vakıf Üniversitesi İstanbul-Turkey¹

1350 - An Artificial Intelligence Based Efficient Digital Predistortion Method for 5G NR Communication Systems
Desdina Kof¹, Ali Arsal¹
Ulak Haberleşme A.Ş. Ankara-Turkey¹

SESSION-6 (15:00 - 15:50)

Computer Vision and Pattern Recognition Applications (4)
Session Chair: Hakan Çevikalp

1419 - Plant Recognition based on Deep Belief Network Classifier and Combination of Local Features
Hülya Yalçın¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

1422 - Visual Analysis of Plant Growth using Transfer Learning
Hülya Yalçın¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

HALL-2

1412 - NOMA-based Radio Resource Allocation for Machine Type Communications in 5G and Beyond Cellular Networks
Sümeyra Aldemir¹, Furkan Batuhan Okumuş¹, Yalçın Şadi¹, Serhat Erküçük¹
Kadir Has Üniversitesi İstanbul-Turkey¹

1281 - Video Anomaly Detection with Autoregressive Modelling of Covariance Features
Ali Enver Bilecen¹, Alp Özalp¹, Muhammet Sami Yavuz¹, Hüseyin Özkan¹
Sabancı Üniversitesi İstanbul-Turkey¹

1427 - Investigation of Faster Than Nyquist Transmission For Terahertz Communication Using Harmonic Receiver
Özgün Ersoy¹, Murat Can Karakoç¹, Asaf Behzat Şahin¹
Ankara Yıldırım Beyazıt Üniversitesi Ankara-Turkey¹

1309 - Pneumonia Detection from Pediatric Lung X-Ray Images with Convolutional Neural Network Method
Yasin Demir¹, Özkan Bingöl¹
Gümüşhane Üniversitesi Gümüşhane-Turkey¹

1426 - A Mock Circulatory Network Testbed for Molecular Communications
Barış Büyüktaş¹, Oğuzhan Yetimoğlu¹, Abdurrahman Dilmaç¹, Zeliha Cansu Canbek¹, H. Birkan Yılmaz¹
Boğaziçi Üniversitesi İstanbul-Turkey¹

1396 - Driving Pattern Recognition Algorithm Using Fast Fourier Transform
İven Güzel¹, Murat Göl¹
ODTÜ Ankara-Turkey¹

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Biomedical Imaging and
Image Processing (3)
Session Chair: Duygu Sarıkaya

1349 - Cardiothoracic Ratio Calculation and Cardiomegaly
Detection Based on Object Detection
Zelal Çiçek Taçyıldız¹, Ersin Kılıç¹, Abdulkadir Budak¹,
Hakan Karataş¹
Akgün Yazılım Ankara-Turkey¹

1358 - A CNN Based Super-Resolution Technique for
Magnetic Particle Imaging System Matrix
Barış Aşkın¹, Alper Güngör¹, Damla Alptekin Soydan², Can
Barış Top², Tolga Çukur¹
Bilkent Üniversitesi Ankara-Turkey¹ Aselsan Ankara-
Turkey²

1390 - Derin Sinir Ağları Kullanarak Medikal Görüntü
Bölütme
Musa Aydın¹
Fatih Sultan Mehmet Vakıf Üniversitesi İstanbul-Turkey¹

1397 - Medical Image Segmentation Using
Deep Neural Networks
Kutay Karakamış¹, İlkyay Öksüz¹, Caner Özer¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

1439 - A Block Based Forgery Detection System on
Biomedical Images
Bilgehan Gürünlü¹, Serkan Öztürk²
Kahramanmaraş Sütçü İmam Üniversitesi
Kahramanmaraş-Turkey¹ Erciyes Üniversitesi Kayseri-
Turkey²

SESSION-6 (15:00 - 15:50)

Optimization Methods for Signal Processing and
Artificial / Deep Learning
Session Chair: Zafer İşcan

1378 - Localization by using Deep Neural Networks for
Long Range Target
Ekin Nurbaş¹, Emrah Onat¹
Esen Sistem Entegrasyon Ankara-Turkey¹

1399 - Investigating the preprocessing methods in ECG
Analysis
Ege Kardeş¹, Göktuğ Ekinci¹, Hazal Güvenkaya¹, Pınar
Karagöz¹
Orta Doğu Teknik Üniversitesi Ankara-Turkey¹

1470 - Tree-Structured Binary Neural Networks
Ayşe Serbetçi¹, Yusuf Sinan Akgül¹
Gebze Teknik Üniversitesi Kocaeli-Turkey¹

1333 - Area Optimized FPGA Implementation of Slant
Range Calculation Using Haversine Formula
Berker Işık¹
Optoel Mühendislik Ankara-Turkey¹

1447 - Partially Observable Markov Model Based
Multi-Armed Bandits Structured Radar Emission
Management Algorithm
Nuri Baran Ayana¹, Duygu Acar¹, Hasan İhsan Turhan¹,
Mübeccel Demirekler²
Aselsan Ankara-Turkey¹ Odtü Ankara-Turkey²

HALL-3

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Biomedical Signal Processing (3)
Session Chair: Osman Eroğul

1267 - Adaptive Boosting of DNN Ensembles for Brain-Computer Interface Spellers
Osman Berke Guney¹, Emirhan Koc¹, Can Aksoy¹, Yigit Catak¹, Suayb S. Arslan², Huseyin Ozkan¹
Sabanci University İstanbul-Turkey¹ Mef University İstanbul-Turkey²

1273 - Inverse Radon Transform based Reconstruction with Measurement Data in Magnetic Particle Imaging
Berkan Kılıç¹, Damla Alptekin Soydan¹, Alper Güngör¹, Can Barış Top¹
Aselsan Ankara-Turkey¹

1290 - Correction of Tactile Stimulator Artifacts from Epidural Field Potentials Recorded in Rat S1 Cortex
Deniz Kılınc Bülbül¹, Burak Güçlü¹
Boğaziçi Üniversitesi İstanbul-Turkey¹

1324 - Representation of Cognitive States by Shannon Entropy
Gönül Günal Değirmendereli¹, Fatoş T. Yarman Vural¹
ODTÜ Ankara-Turkey¹

1373 - Gender Recognition from PPG Signals of People with Different Blood Pressure
Tuğba Aydemir¹, Mehmet Şahin¹, Önder Aydemir²
Recep Tayyip Erdoğan Üniversitesi Rize-Turkey¹
Karadeniz Teknik Üniversitesi Trabzon-Turkey²

SESSION-6 (15:00 - 15:50)

Biomedical Signal Processing (4)
Session Chair: Osman Eroğul

1398 - Clustering Surface EMG Measurements with Similar Timing Patterns
Duru Berfin Su¹, Bora Büyüksaraç¹, Burcu Tunç¹
Bahçeşehir Üniversitesi İstanbul-Turkey¹

1437 - Classification of Systolic Murmurs by Using Improved Mel-Wavelet Segmentation
İbrahim Özkan¹, Atilla Yılmaz¹
Hacettepe Üniversitesi Ankara-Turkey¹

1452 - Phase Consistency Analysis of the Brain Functional Connectivity Networks
Hüden Neşe¹, Ali Bayram², Emre Harı², Elif Kurt², Ahmet Ademoğlu¹, Tamer Demiralp²
Boğaziçi Üniversitesi İstanbul-Turkey¹ İstanbul Üniversitesi İstanbul-Turkey²

3003 - Epilepsy Detection Using a Novel Self Similarity Index Combined with Support Vector Machine
Cigdem Polat Dautov¹, Mehmet Sıraç Özerdem²
Rochester Institute of Technology Northridge-United States¹ Dicle University Diyarbakir-Turkey²

3014 - Semi-Supervised Segmentation of Multi-vendor and Multi-center Cardiac MRI
Mahyar Bolhassani¹, Ilkay Oksus²
İstanbul Technical University İstanbul-Turkey¹ İstanbul Technical University İstanbul-Turkey²

HALL-4

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Signal Processing for Remote Sensing (1)
Session Chair: Aydın Alatan

1014 - Crop Classification from Multi-Temporal and Multi-spectral Remote Sensing Images
Fırat Kızılırmak¹, Erchan Aptoula²
Sabancı Üniversitesi İstanbul-Turkey¹ Gebze Teknik Üniversitesi Kocaeli-Turkey²

1055 - Obstacle Mitigation by Non-negative Matrix Factorization for Through Obstacle Target Imaging
Deniz Kumlu¹, Işın Erer¹, Selçuk Pakar¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

SESSION-6 (15:00 - 15:50)

Signal Processing for Remote Sensing (2)
Session Chair: Aydın Alatan

1255 - SAR Image Reconstruction from 1-Bit Quantized Data with Sign-Flip Errors
Mehmet Demir¹
Gaziantep Üniversitesi Gaziantep-Turkey¹

1402 - Determination Of The Impact Distance Applied On Long Fuel Distribution Pipes Using Wireless Sensors And Lora Radio
Cem Şişman¹, Selim Sağır¹, İsmail Kaya¹
Karadeniz Teknik Üniversitesi Trabzon-Turkey

HALL-5

1104 - Identification of Moving Ground Targets by a Low Cost, Portable Radar System
Işın Erer¹, Deniz Kumlu¹, Selçuk Pakar¹
İstanbul Teknik Üniversitesi İstanbul-Turkey¹

1411 - Estimation of Specific Differential Phase Shift Using Signal Processing Techniques
Yusuf Önür¹
Tobb Etü Ankara-Turkey¹

1222 - Performance Evaluation of Semi-Global Approaches for the Dense Image Matching of Stereo Satellite Images
Şahım Giray Kıvanç¹, Ali Özgün Ok², Fatih Nar¹, Baha Şen¹
Aybu Ankara-Turkey¹ Hacettepe Üniversitesi Ankara-Turkey²

1442 - Unsupervised Hyperspectral Anomaly Detection with Convolutional Neural Networks
Fatma Nur Yılmaz¹, Sertaç Arısoy¹, Koray Kayabol¹
Gebze Teknik Üniversitesi İstanbul-Turkey¹

1224 - LSTM AutoEncoders Applied to Semi-Supervised Crop Classification
Hatice Kübra Teloğlu¹, Erchan Aptoula²
Gebze Teknik Üniversitesi Bilgisayar Mühendisliği Kocaeli-Turkey¹ Gebze Teknik Üniversitesi Bilişim Teknolojileri Enstitüsü Kocaeli-Turkey²

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Natural Language Processing (4)
Session Chair: Cemal Okan Şakar

1323 - KWord Sense Disambiguation using KeNet
Meltem Çetiner¹, Ahmet Yıldırım¹, Bahadır Onay¹, Cüneyt Öksüz¹
Idea Teknoloji Çözümleri İstanbul-Turkey¹

1340 - Sentiment Analysis of Customer Comments in Banking using BERT-based Approaches
Melik Masarifoglu¹, Umit Tigrak¹, Sefa Hakyemez¹, Guven Gul¹, Erdal Bozan¹, Ali Hakan Buyuklu², Arzucan Ozturk³
Fibabanka İstanbul-Turkey¹ Yıldız Teknik Üniversitesi İstanbul-Turkey² Bogazici Üniversitesi İstanbul-Turkey³

1341 - Deep Neural Network Based Log Analysis
Hasan Burak Ketmen¹, Barış Bulut¹
Enforma Bilişim A.Ş. İstanbul-Turkey¹

1356 - A search tool in Turkish using contextual vectors
Ahmet Yıldırım¹, Meltem Çetiner¹, Cüneyt Öksüz¹, Bahadır Onay¹
Idea Teknoloji Çözümleri İstanbul-Turkey¹

1362 - Turkish Named Entity Recognition for Search Engine Queries
Berkay Topçu¹, İlknur Durgar El-Kahlout¹
Turkcell Teknoloji İstanbul-Turkey¹

SESSION-6 (15:00 - 15:50)

Natural Language Processing (5)
Session Chair: Arzucan Özgür

3024 - Twitter Dataset and Evaluation of Transformers for Turkish Sentiment Analysis
Abdullatif Köksal¹, Arzucan Özgür²
Boğaziçi University İstanbul-Turkey¹ Boğaziçi University İstanbul-Turkey²

1366 - Zero-Shot Turkish Text Classification
Ahmet Birim¹, Mustafa Erden¹, Levent Arslan¹
Sestek İstanbul-Turkey¹

1401 - Turkish Medical Text Classification Using BERT
Azer Çelikten¹
Manisa Celal Bayar Üniversitesi Manisa-Turkey¹

1454 - Turkish Keyphrase Extraction from Web Pages with BERT
Emre Tolga Ayan¹, Rabia Arslan¹, Muhammed Said Zengin¹, Hacı Ali Duru¹, Sedat Salman¹, Batuhan Bardak¹
Stm Ankara-Turkey¹

1283 - Journal Finder for TRDIZIN: Baseline Study
Mert Demirkan¹, Atilla Özgür², Hamit Erdem¹
Başkent Üniversitesi Ankara-Turkey¹ Jacobs University Bremen-Germany²

HALL-6

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Wireless Communication (3)
Session Chair: Saeid Karamzadeh

1226 - Extended Fully Improved Quadrature Spatial Shift Keying Modulation
Yasin Celik¹, Sultan Çolak Aldırmaz²
Aksaray Üniversitesi Aksaray-Turkey¹ Kocaeli Üniversitesi Kocaeli-Turkey²

1230 - Transmit Antenna Grouping Quadrature Spatial Modulation for MIMO Systems
Mehmet Akif Kurt¹, Ertuğrul Başar¹
Koç Üniversitesi İstanbul-Turkey¹

SESSION-6 (15:00 - 15:50)

Wireless Networks
Session Chair: Tamer Dag

3005 - Increasing Energy Efficiency of WSNs Through Optimization of Mobile Base Station Locations
Sahar S. A. Abbas¹, Tamer Dag², Tansal Gucluoglu³
Department of Electronic and Communication Engineering - Yildiz Technical University Istanbul-Turkey¹
Department of Computer Engineering - Kadir Has University Istanbul-Turkey² Department of Electronic and Communication Engineering - Yildiz Technical University Istanbul-Turkey³

3009 - An Improved Hybrid Stable Election Routing Protocol for Large Scale WSNs
Lana Ibrahim Saeed Hamad¹, Tamer Dağ², Tansal Güçlüoğlu³
Yildiz Technical University Istanbul-Turkey¹ Kadir Has University Istanbul-Turkey² Yildiz Technical University Istanbul-Turkey³

HALL-7

1260 - CPW-Fed Microstrip Monopole Antenna Design with 5.5 GHz Notch-band Filtering Characteristic for Ultra-Wideband Communications
Kutlu Küçükvural¹, Mustafa H. B. Uçar¹, Gonca Çakır¹
Kocaeli Üniversitesi Kocaeli-Turkey¹

3026 - Near Field Focused Microstrip Patch Antenna Array Characteristics Enhancement With Parasitic Patch Element
Muhammad Sohail¹, Rasime Uyguroğlu²
Eastern Mediterranean University Gazi Mağusa-Turkey¹ Eastern Mediterranean University Gazi Mağusa-Turkey²

1357 - Nb-Iot Npusch Tip 1 Kanalı İçin Özgün Bir Dtx Algılama Yaklaşımı
Özge Özaltın¹, Burak Dağdeviren¹, Ali Yeşil¹, Emre Bilican¹
Ulak Haberleşme A.Ş. İstanbul-Turkey¹
İngilizce başlık: A Novel DTX Detection Approach for NB-IoT NPUSCH Format¹ Receiver

1346 - Underwater Testbed for Molecula Communication
Oğuzhan Yetimoğlu¹, Abdurrahman Dilmaç¹, Zeliha Cansu Canbek¹, H. Birkan Yılmaz¹
Boğaziçi Üniversitesi İstanbul-Turkey¹

1361 - A Novel DTX Detection Receiver Architecture for NB-IOT NPUSCH Format 1
Özge Özaltın¹, Burak Dağdeviren¹, Ali Yeşil¹, Emre Bilican¹
Ulak Haberleşme A.Ş. İstanbul-Turkey¹

3019 - Average Bandwidth-Cost vs. Storage Trade-Off For Bs-Assisted Distributed Storage Networks
Massoud Pourmandi¹, Suayb S. Arslan², Ali Emre Pusane³, Elif Haytaoglu⁴, Ayse Ceyda Tengiz⁵
Bogazici University Istanbul-Turkey¹ Mef University Istanbul-Turkey² Bogazici University Istanbul-Turkey³ Pamukkale University Denizli-Turkey⁴ Uskudar University Istanbul-Turkey⁵

1262 - An Uplink CoMP Transmission Scheme
Emre Bilican¹, Özge Özaltın¹, Ali Yeşil¹, Burak Dağdeviren¹
Ulak Haberleşme A.Ş. İstanbul-Turkey¹

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Machine Learning: New Methods,
Insights or Theories (4)
Session Chair: Pınar Karagöz

1138 - A Virtual Assistant for Predicting Defective
Software Module
Necip Gözüaçık¹, Altan Parlak¹
Netrd İstanbul-Turkey¹

1141 - A New Optimization Algorithm Based on Plasma
Treatment
Selçuk Aslan¹, Sercan Demirci²
Nevşehir Hacı Bektaş Veli Üniversitesi Nevşehir-Turkey¹
Ondokuz Mayıs Üniversitesi Samsun-Turkey²

1142 - Transductive Polyhedral Conic Classifiers
Halil Sağlamlar¹, Hakan Çevikalp¹
Eskişehir Osmangazi Üniversitesi Eskişehir-Turkey¹

1149 - Comparison of Different Machine and Deep
Learning Techniques to Predict Air Quality Index: A Case
of Kocaeli Province
Zeynep Bilen¹, Ferhat Bozkurt¹
Atatürk Üniversitesi Bilgisayar Mühendisliği Bölümü
Erzurum-Turkey¹

1168 - Perlin Random Erasing for Data Augmentation
Murat Saran¹, Fatih Nar², Ayşe Nurdan Saran¹
Çankaya Üniversitesi Ankara-Turkey¹ Ankara Yıldırım
Beyazıt Üniversitesi Ankara-Turkey²

1218 - A Comparative Study for Employee Churn
Prediction
Musa Berat Bahadır¹, Ahmet Tuğrul Bayrak¹, Güven
Yüçetürk¹, Pınar Ergun¹
Ata Teknoloji Platformu İstanbul-Turkey¹

SESSION-6 (15:00 - 15:50)

Machine Learning: New Methods,
Insights or Theories (4)
Session Chair: Hacer Yalım Keleş

1247 - The Effect of Feature Selection on Credit Card
Fraud Detection Success
Ensar Bayhan¹, A. Gökhan Yavuz¹, M. Amaç Güvensan¹,
M. Elif Karsligil¹
Yıldız Teknik Üniversitesi İstanbul-Turkey¹

1258 - Learning System Dynamics via Deep Recurrent
and Conditional Neural Systems
Mehmet Pekmezci¹, Emre Uğur², Erhan Öztıp¹
Özyeğin Üniversitesi İstanbul-Turkey¹ Boğaziçi
Üniversitesi İstanbul-Turkey²

1297 - A Chatbot for Preliminary Patient Guidance System
Ferhat Tuncel¹, Basri Mumcu¹, Senem Tanberk¹
Netrd İstanbul-Turkey¹

1310 - Classification of White Blood Cells Using CNN and
Con-SVM
Ahmet Ekiz¹, Kaplan Kaplan¹, Hüseyin Metin Ertunç¹
Kocaeli Üniversitesi Kocaeli-Turkey¹

1372 - Turkey Long-Term Energy Consumption Prediction
Using Whale Optimization Algorithm
Merve Babaoğlu¹, Bülent Haznedar²
Artuklu Üniversitesi Mardin-Turkey¹ Hasan Kalyoncu
Üniversitesi Gaziantep-Turkey²

1444 - Ensemble Based Feature Selection
With Hybrid Model
Ceylan Demir¹, Süreyya Özögür-Akyüz¹, İzzet Göksel²
Bahçeşehir Üniversitesi İstanbul-Turkey¹ İstanbul Teknik
Üniversitesi İstanbul-Turkey²

HALL-8

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Modelling and Simulation (3) and 3D Modeling and Analysis

Session Chair: Alper Tunga

1330 - Modeling and Simulation of the Control Performance of a Reaction Wheel Pendulum
Vahid Tavakol Aghaei¹, Buse Ilayda Komurcu¹, Didar Saka¹, Gizem Kizilca¹, Bahar Aydoğan¹, Seda Erener¹
Bau Istanbul-Iran¹

1374 - Modeling Brushless Direct Current Motor Of A Guided System

Selçuk Kıyılı¹, Hasan Şakir Bilge²

Tübitak Ankara-Turkey¹ Gazi Üniversitesi Ankara-Turkey²

SESSION-6 (15:00 - 15:50)

Data Sets and Evaluation (2)
Session Chair: Ethem Çanakoğlu

1194 - Ship Transit Time Estimation
Özlem Er¹, Oğuzhan Can¹, Yusuf Kunt¹
Havelsan A.Ş. İstanbul-Turkey¹

1197 - Investigation of the Effect of Edge Detection Algorithms in the Detection of Covid-19 Patients with Convolutional Neural Network-Based Features on Chest X-Ray Images

Derya Narin¹, Tuğba Özge Onur¹

Zonguldak Bülent Ecevit Üniversitesi Zonguldak-Turkey¹

HALL-9

1384 - BroomyCell: An Introductory Educational Software for Neuroscience

Zübeyir Özcan¹, Ömer Yıldırım², Temel Kayıkçıoğlu¹

Elektrik-Elektronik Mühendisliği Bölümü, Karadeniz Teknik Üniversitesi Trabzon-Turkey¹ Elektrik-Elektronik Mühendisliği Bölümü, Gümüşhane Üniversitesi Gümüşhane-Turkey²

1198 - Performance Comparison of Machine Learning Models for Diabetes Prediction

Pınar Cihan¹, Hakan Coşkun¹

Tekirdağ Namık Kemal Üniversitesi Tekirdağ-Turkey¹

1420 - Covid-19 SEIQR Spread Mathematical Model Çağlar Çağlar Akman¹, Okan Demir², Tolga Sönmez¹
Havelsan Ankara-Turkey¹ Signalton Ankara-Turkey²

1289 - Driver Identification Using Vehicle Diagnostic Data with Fully Convolutional Neural Network
Caner Aslan¹, Yakup Genç¹
Gebze Teknik Üniversitesi Kocaeli-Turkey¹

1243 - GRJointNET: Synergistic Completion and Part Segmentation on 3D Incomplete Point Clouds
Melisa Taşpınar¹, Yiğit Gürses¹, Mahmut Yurt¹, Sedat Ozer¹
Bilkent Üniversitesi Ankara-Turkey¹

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Artificial/Deep Learning for Signal Processing (2)
Session Chair: Ethem Çanaköglü

1173 - Antenna Scanning Type Classification with
Autoencoder Based Deep Clustering
Emirhan Özmen¹, Yakup Özkazanç²
Aselsan Inc Ankara-Turkey¹ Hacettepe Üniversitesi
Ankara-Turkey²

1214 - Lightweight Deep Model for Brain Tumor
Segmentation
Coşku Öksüz¹, Oğuzhan Urhan², Mehmet Kemal Güllü³
Kastamonu Üniversitesi Kastamonu-Turkey¹ Kocaeli
Üniversitesi Kocaeli-Turkey² Bakırçay Üniversitesi İzmir-
Turkey³

1220 - ATM Allocation Using Decision Tree-Based
Algorithms
Hazel Hasret Yurdakul¹, Kerem Kaşıkçı¹, İlhan Çağatay¹,
Melih Güven¹, Murat Koraş¹, Barış Akgün², Mehmet
Gönen²
Qnb Finansbank Ar&Ge İstanbul-Turkey¹ Koç Üniversitesi
İstanbul-Turkey²

1351 - An Energy Efficient FPGA-based Convolutional
Neural Network Implementation
Hasan Irmak¹, Nikolaos Alachiotis¹, Daniel Ziener²
University Of Twente Enschede-The Netherlands¹
Ilmenau University Of Technology Ilmenau-Germany²

1368 - Prediction of Failures in Wind Turbines
Mustafa Acar¹, Hasan Burak Ketmen¹, Barış Bulut¹
Enforma Bilişim A.Ş. İstanbul-Turkey¹

SESSION-6 (15:00 - 15:50)

Multiple Access, Resource Management and Scheduling
Session Chair: Ömer Melih Gül

1067 - Metaheuristic Algorithms for Independent and
Static Task Scheduling in Cloud Computing
Osman Gökalp¹
İzmir Katip Çelebi Üniversitesi İzmir-Turkey¹

1165 - Fair Data Collection in Wireless Networks
Ömer Melih Gül¹
ODTÜ Ankara-Turkey¹

1328 - Energy-efficiency maximization for multi-antenna
OFDMA networks
İlhan Baştürk¹
Manisa Celal Bayar Üniversitesi Manisa-Turkey¹

1274 - QoS Evaluation and Availability Analysis of Load
Balancer in Fog Computing
Mehmet Aldağ¹, Yönel Kırşal¹, Sadık Ülker¹
Lefke Avrupa Üniversitesi Lefke-Cyprus¹

1025 - Fuzzy Logic based Handover Management in
Small Cell Networks
Murtaza Cicioğlu¹
Bursa Uludağ Üniversitesi Bilgisayar Mühendisliği Bursa-
Turkey¹

1459-Average Throughput Performance of Greedy Policy
in Cognitive Radio Enabled Vehicular Networks
Omer Melih Gul¹
Odtü Ankara-Turkey¹

HALL-10

FRIDAY (11 JUNE 2021)

SESSION-5 (14:00 - 14:50)

Signal Processing Applications
Session Chair: Bora Büyüksaraç

3027 - An FPGA Implementation of a RISC-V based SoC system for image processing applications
Erfan Gholizadehazari¹, Tuba Ayhan², Berna Örs³
Istanbul Technical University Istanbul-Turkey¹ MEF University Istanbul-Turkey² Istanbul Technical University Istanbul-Turkey³

1431 - Hardware Accelerators for Cloud Computing: Features and Implementation
Anıl Tıriloğlu¹, Ömer Bayram Demir², Alper Yazar¹, Ece Güran Schmidt²
Aselsan Ankara-Turkey¹ Orta Doğu Teknik Üniversitesi Ankara-Turkey²

SESSION-6 (15:00 - 15:50)

Multi Channel Signal Processing
Session Chair: Haldun Özaktaş

1195 - Color to Grayscale Image Conversion Using High Dimensional Model Representation
Ayça Ceylan¹, Burcu Tunga¹, Evrim Korkmaz Özyay²
Istanbul Teknik Üniversitesi Istanbul-Turkey¹ Beykent Üniversitesi Istanbul-Turkey²

1245 - Hyperspectral Image Denoising with Enhanced Multivariance Product Representation
Evrime Korkmaz Özyay¹, Burcu Tunga²
Beykent Üniversitesi Istanbul-Turkey¹ Istanbul Teknik Üniversitesi Istanbul-Turkey²

HALL-11

1211 - Comparative Analysis of Adaptive Streaming with CBR and VBR Encoded Scalable Videos
Mehmet Çalı¹, Nükhet Özbek²
İYTE İzmir-Turkey¹ Ege Üniversitesi İzmir-Turkey²

1347 - Comparison of the State-of-the-Art Image and Video Quality Assessment Metrics
Emre Akkaya¹, Nükhet Özbek¹
Ege Üniversitesi İzmir-Turkey¹

3013 - Robust and high-capacity audio watermarking based on chirp z-transform
Omar Abodena¹
University of Gharyan Gharyan-Libya¹

1272 - Capon's Beamformer and Minimum Mean Square Error Beamforming Techniques in Direction of Arrival Estimation
Berkan Kılıç¹, Orhan Arıkan²
Aselsan Ankara-Turkey¹ Bilkent Üniversitesi Ankara-Turkey²

1445 - Passive Direction Finding Using Correlative Interferometer
Hakan Şengül¹
Tübitak Ankara-Turkey¹

1455 - A Comparison of Direction of Arrival Estimation Performance for Phased-MIMO Systems
Muhammet Umut Bahçeci¹, Alper Güngör¹, Çağrı Çetintepe¹, Temel Engin Tuncer²
Aselsan Araştırma Merkezi Ankara-Turkey¹ Orta Doğu Teknik Üniversitesi Ankara-Turkey²