

# **2017 25th Signal Processing and Communications Applications Conference (SIU 2017)**

**Antalya, Turkey  
15-18 May 2017**

**Pages 1-574**



**IEEE Catalog Number: CFP17559-POD  
ISBN: 978-1-5090-6495-3**

**Copyright © 2017 by the Institute of Electrical and Electronics Engineers, Inc  
All Rights Reserved**

*Copyright and Reprint Permissions:* Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

***\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

|                         |                   |
|-------------------------|-------------------|
| IEEE Catalog Number:    | CFP17559-POD      |
| ISBN (Print-On-Demand): | 978-1-5090-6495-3 |
| ISBN (Online):          | 978-1-5090-6494-6 |
| ISSN:                   | 2165-0608         |

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

# TABLE OF CONTENTS

|                                                                                                                                              |    |
|----------------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>FLUID FLOW ANALYSIS AND BUFFER MANAGEMENT OF VIDEO PLAYOUT</b> .....                                                                      | 1  |
| <i>Mehmet Akif Yazici</i>                                                                                                                    |    |
| <b>CALL CENTER TEXT MINING APPROACH</b> .....                                                                                                | 5  |
| <i>Ibrahim Onuralp Yigit ; Ahmet Feyzi Ates ; Mehmet Güvercin ; Hakan Ferhatosmanoglu ; Bugra Gedik</i>                                      |    |
| <b>HAZMAT CHARTS DETECTION ON SEARCH AND RESCUE LEAGUE OF ROBOCUP<br/>COMPETITIONS</b> .....                                                 | 9  |
| <i>Furkan Çakmak ; Erkan Uslu ; M. Fatih Amasyali ; Sirma Yavuz</i>                                                                          |    |
| <b>LOCAL ERROR ANALYSIS ARISING FROM THE CONVENTIONAL SCALAR<br/>APPROXIMATION IN WIDE OPTICAL FIELDS</b> .....                              | 13 |
| <i>Onur Kulce ; Levent Onural</i>                                                                                                            |    |
| <b>INSET FED PATCH ANTENNA WITH FIVE SLOTS</b> .....                                                                                         | 17 |
| <i>Abdul Malek Naes ; Ahmad Aljalmoud ; Ahmad Alkhas ; Khaled Tawakol ; Eyad Kokach ; Taha Imeci</i>                                         |    |
| <b>A COMPARISON AMONG INTERFERENCE APPROXIMATION METHODS FOR<br/>OFDM/OQAM</b> .....                                                         | 21 |
| <i>Umut Kayikci ; Emre Aktas</i>                                                                                                             |    |
| <b>CLASSIFICATION OF BAND-SPECIFIC REGIONAL HEMISPHERIC CONNECTIVITY IN<br/>OBSESSIVE COMPULSIVE DISORDER</b> .....                          | 25 |
| <i>Serap Aydın ; Oguz Tan</i>                                                                                                                |    |
| <b>IMAGE ENHANCEMENT WITH OUTLIER DETECTION</b> .....                                                                                        | 29 |
| <i>Yildiray Anagün ; Nihat Adar ; Erol Seke</i>                                                                                              |    |
| <b>MUSIC GENRE CLASSIFICATION WITH WORD AND DOCUMENT VECTORS</b> .....                                                                       | 33 |
| <i>Önder Çoban ; Isil Karabey</i>                                                                                                            |    |
| <b>USING OF S-UTD-CH MODEL IN COVERAGE MAPPING AND COMPARISON WITH FEKO<br/>SOFTWARE</b> .....                                               | 37 |
| <i>Eray Arik ; Mehmet Baris Tabakcioglu</i>                                                                                                  |    |
| <b>SPEAKER RECOGNITION ANTI-SPOOFING USING LINEAR PREDICTION RESIDUAL</b> .....                                                              | 41 |
| <i>Cemal Hanilçi</i>                                                                                                                         |    |
| <b>LOCATION BASED PRICING WITH BLUETOOTH LOW ENERGY IN PUBLIC<br/>TRANSPORTATION</b> .....                                                   | 45 |
| <i>Ercüment Türk ; Sadik Arslan</i>                                                                                                          |    |
| <b>ENSEMBLE LEARNING WITH SURROGATE SPLITS</b> .....                                                                                         | 49 |
| <i>Mehmet Fatih Amasyali</i>                                                                                                                 |    |
| <b>OPTIMUM PHASE NOISE AND ACQUISITION TIME ANALYSIS FOR OFDM RECEIVER<br/>STRUCTURE WITH QPSK SIGNALING</b> .....                           | 53 |
| <i>Hüseyin Aniktar ; Daghan Dogan</i>                                                                                                        |    |
| <b>PRODUCING THE LOCATION INFORMATION WITH THE KALMAN FILTER ON THE GPS<br/>DATA FOR AUTONOMOUS VEHICLES</b> .....                           | 57 |
| <i>Kadir Korkmaz</i>                                                                                                                         |    |
| <b>USING WAVELET TRANSFORM FOR CARDIOTOCOGRAPHY SIGNALS CLASSIFICATION</b> .....                                                             | 61 |
| <i>Zafer Cömert ; Adnan Fatih Kocamaz</i>                                                                                                    |    |
| <b>EFFECTS OF AUTAPTIC COUPLING STRENGTH AND ION CHANNEL BLOCKAGE ON<br/>FIRING REGULARITY IN A HODGKIN-HUXLEY NEURON</b> .....              | 65 |
| <i>Rukiye Uzun ; Mahmut Özer</i>                                                                                                             |    |
| <b>ROAD-TYPES CLASSIFICATION USING AUDIO SIGNAL PROCESSING AND SVM METHOD</b> .....                                                          | 69 |
| <i>Daghan Dogan</i>                                                                                                                          |    |
| <b>OPTIMUM NUMBER OF ANTENNAS FOR ENERGY EFFICIENCY VERSUS USER LOCATION<br/>IN MASSIVE MIMO SYSTEMS</b> .....                               | 73 |
| <i>Mohammed A. Abuibaid ; Sultan Aldirmaz Çolak</i>                                                                                          |    |
| <b>OPTIMIZATION OF SPECTRUM HANDOFF WITH ARTIFICIAL BEE COLONY ALGORITHM</b> .....                                                           | 77 |
| <i>Muhammed Enes Bayrakdar ; Ali Çalhan</i>                                                                                                  |    |
| <b>PERFORMANCE ANALYSIS OF SENSING BASED SPECTRUM HANDOFF PROCESS FOR<br/>CHANNEL BONDING MECHANISM IN WIRELESS COGNITIVE NETWORKS</b> ..... | 81 |
| <i>Muhammed Enes Bayrakdar ; Ali Çalhan</i>                                                                                                  |    |
| <b>SPECTRUM HANDOFF PROCESS WITH AGING SOLUTION FOR SECONDARY USERS IN<br/>PRIORITY BASED COGNITIVE NETWORKS</b> .....                       | 85 |
| <i>Muhammed Enes Bayrakdar ; Ali Çalhan</i>                                                                                                  |    |

|                                                                                                                           |            |
|---------------------------------------------------------------------------------------------------------------------------|------------|
| <b>A COMPARATIVE NOISE ROBUSTNESS STUDY OF TREE REPRESENTATIONS FOR ATTRIBUTE PROFILE CONSTRUCTION .....</b>              | <b>89</b>  |
| <i>Safak Güner Koç ; Erchan Aptoula ; Petra Bosilj ; Bharath Bhushan Damodaran ; Mauro Dalla Mura ; Sebastien Lefevre</i> |            |
| <b>DETECTION OF KNEE ABNORMALITY FROM SURFACE EMG SIGNALS BY ARTIFICIAL NEURAL NETWORKS .....</b>                         | <b>93</b>  |
| <i>Okan ErKaymaz ; Irem Senyer ; Rukiye Uzun</i>                                                                          |            |
| <b>A HYBRID FINGERPRINT BASED INDOOR POSITIONING WITH EXTREME LEARNING MACHINE .....</b>                                  | <b>97</b>  |
| <i>Sinem Bozkurt Keser ; Ahmet Yazici ; Serkan Günal</i>                                                                  |            |
| <b>INFORMATION RETRIEVAL IN METAL MUSIC SUB-GENRES .....</b>                                                              | <b>101</b> |
| <i>Koray Açici ; Tunç Asuroglu ; Hasan Ogul</i>                                                                           |            |
| <b>EFFECT OF CO-CHANNEL INTERFERENCE IN MARC SYSTEM.....</b>                                                              | <b>105</b> |
| <i>Muhammet Ali Karabulut ; Hacı İlhan</i>                                                                                |            |
| <b>THE FAST OPTIMIZATION OF DIGITAL HOLOGRAPHY SYSTEM .....</b>                                                           | <b>109</b> |
| <i>Gülhan Ustabas Kaya ; Zehra Saraç</i>                                                                                  |            |
| <b>AUTOMATED DETECTION OF CITRUS TREES FROM A DIGITAL SURFACE MODEL .....</b>                                             | <b>113</b> |
| <i>Ali Özgün Ok ; Asli Özdarici Ok</i>                                                                                    |            |
| <b>PERFORMANCE EVALUATION OF SCHEDULERS IN MIMO-OFDMA BASED CELLULAR NETWORKS.....</b>                                    | <b>117</b> |
| <i>Omer Narmanlioglu ; Engin Zeydan</i>                                                                                   |            |
| <b>DEFICIENCY AWARE SUBPATTERN ASSIGNMENT.....</b>                                                                        | <b>121</b> |
| <i>Kemal Öksüz ; Ali Taylan Cemgil</i>                                                                                    |            |
| <b>DICTIONARY LEARNING WITH RESIDUAL CODES.....</b>                                                                       | <b>125</b> |
| <i>Yigit Oktar ; Mehmet Türkan</i>                                                                                        |            |
| <b>TARGET DETECTION IN HYPERSPECTRAL IMAGES USING BASIC THRESHOLDING CLASSIFIER .....</b>                                 | <b>129</b> |
| <i>Mehmet Altan Toksöz ; İlkay Ulusoy</i>                                                                                 |            |
| <b>DEEP DISTANCE METRIC LEARNING FOR MARITIME VESSEL IDENTIFICATION .....</b>                                             | <b>133</b> |
| <i>Erhan Gundogdu ; Berkan Solmaz ; Aykut Koç ; Veysel Yücesoy ; A. Aydın Alatan</i>                                      |            |
| <b>METHOD FOR LEARNING DEEP FEATURES FOR CORRELATION BASED VISUAL TRACKING .....</b>                                      | <b>137</b> |
| <i>Erhan Gundogdu ; A. Aydın Alatan</i>                                                                                   |            |
| <b>SSER ANALYSIS OF AF MIMO TWRNS WITH SINGLE AND MULTIPLE ANTENNA SELECTION SCHEMES.....</b>                             | <b>141</b> |
| <i>Efendi Fidan ; Oguz Kucur</i>                                                                                          |            |
| <b>CONVOLUTIONAL NEURAL NETWORKS-BASED AERIAL TARGET CLASSIFICATION USING MICRO-DOPPLER PROFILES .....</b>                | <b>145</b> |
| <i>Osman Karabayir ; Mehmet Zahid Kartal ; Okan Mert Yücedag</i>                                                          |            |
| <b>QUANTIFYING THE IMPROVEMENT OF MMSE EQUALIZERS BY FASTER SAMPLING RATES.....</b>                                       | <b>149</b> |
| <i>Eren Balevi ; A. Özgür Yılmaz</i>                                                                                      |            |
| <b>H-SHAPE OF A TRAPEZOIDAL NECK HIGH-GAIN PATCH ANTENNA.....</b>                                                         | <b>153</b> |
| <i>Ö. Faruk Yerinde ; O. A. Moussa ; Arif Çelik ; Mehmet Topalömer ; Taha Imeci</i>                                       |            |
| <b>AN OVERVIEW OF NON-CONTACT PHOTOPLETHYSMOGRAPHY.....</b>                                                               | <b>157</b> |
| <i>Halil Demirezen ; Çigdem Eroglu Erdem</i>                                                                              |            |
| <b>A MEDICAL DECISION SUPPORT SYSTEM PROPOSAL SUPPORTED BY GENOMIC ANALYSIS .....</b>                                     | <b>161</b> |
| <i>M. Erdem Çorapçıoglu ; Hasan Ogul</i>                                                                                  |            |
| <b>THE EFFECT OF PRE-PROCESSING STEPS ON GEOMETRIC BASED HYPERSPECTRAL UNMIXING ALGORITHMS.....</b>                       | <b>165</b> |
| <i>Bilal Kocakusaklar ; Burak Alptekin ; Nihan Kahraman</i>                                                               |            |
| <b>ROBUST OBJECT TRACKING USING ALTERNATIVE CORRELATION FILTERS .....</b>                                                 | <b>169</b> |
| <i>Kemal Batuhan Baskurt ; Refik Samet</i>                                                                                |            |
| <b>INTRUSION DETECTION WITH AUTOENCODER BASED DEEP LEARNING MACHINE .....</b>                                             | <b>173</b> |
| <i>Oguz Kaynar ; Ahmet Gürkan Yüksek ; Yasin Görmez ; Yunus Emre Isik</i>                                                 |            |
| <b>PERFORMANCE OF LIMITED FEEDBACK SECURE MISO SYSTEMS IN TEMPORALLY CORRELATED CHANNELS .....</b>                        | <b>177</b> |
| <i>Özgecan Özdoğan ; Berna Özbek ; Günes Karabulut Kurt</i>                                                               |            |
| <b>STATISTICAL COMPARISON OF CLASSIFICATION METHODS IN EEG SIGNALS .....</b>                                              | <b>181</b> |
| <i>Günes Ekim ; Ayten Atasoy ; Nuri İkizler</i>                                                                           |            |

|                                                                                                                                                   |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>MENISCUS SEGMENTATION AND TEAR DETECTION IN THE KNEE MR IMAGES BY FUZZY C-MEANS METHOD .....</b>                                               | <b>185</b> |
| <i>Ahmet Saygili ; Songül Albayrak</i>                                                                                                            |            |
| <b>ESTIMATION OF LOW SUCROSE CONCENTRATIONS BY UV-VIS SPECTROSCOPY AND ARTIFICIAL NEURAL NETWORKS .....</b>                                       | <b>189</b> |
| <i>Bahadır Mezgil ; Duygu Erdogan ; Yesim Alduran ; Ümit Hakan Yıldız ; Ahu Arslan Yıldız ; Yalin Bastanlar</i>                                   |            |
| <b>AIRPORT DETECTION BY COMBINING GEOMETRIC AND TEXTURE FEATURES ON RASAT SATELLITE IMAGES .....</b>                                              | <b>193</b> |
| <i>Ebubekir Temizkan ; Hasan Sakir Bilge</i>                                                                                                      |            |
| <b>CORPORATE FEED RECTANGULAR MPA WITH 9DB GAIN AT 10GHZ RESONANCE FREQUENCY .....</b>                                                            | <b>197</b> |
| <i>Festim Osmani ; Muhammad Arsalan Athar ; Mustafa Çelen ; Zeliha Dönmez ; Zeynep Bostan ; Taha Imeci</i>                                        |            |
| <b>MAXIMUM OVERLAP DISCRETE WAVELET BASED TRANSFORMER DIFFERENTIAL PROTECTION .....</b>                                                           | <b>201</b> |
| <i>Okan Ozgonenel ; Serap Karagol</i>                                                                                                             |            |
| <b>A HYBRID APPROACH TO IMAGE SEGMENTATION: COMBINATION OF BBO (BIOGEOGRAPHY BASED OPTIMIZATION) AND HISTOGRAM BASED CLUSTER ESTIMATION .....</b> | <b>205</b> |
| <i>Enver Küçükkülahlı ; Pakize Erdogmus ; Kemal Polat</i>                                                                                         |            |
| <b>WAVELET-BASED ANOMALY DETECTION ON DIGITAL SIGNALS .....</b>                                                                                   | <b>209</b> |
| <i>Ömer Aydın ; Melek Kurnaz</i>                                                                                                                  |            |
| <b>DETECTING VOIP FUZZING ATTACKS BY USING A HONEYPOT SYSTEM.....</b>                                                                             | <b>212</b> |
| <i>H. Hakan Kiliç ; Ugur Çagal</i>                                                                                                                |            |
| <b>CONE VERTEX ESTIMATION IN POLYHEDRAL CONIC CLASSIFIERS .....</b>                                                                               | <b>216</b> |
| <i>Golara Ghorban Dordinejad ; Hakan Çevikalp</i>                                                                                                 |            |
| <b>A NEW APPROACH TO IMAGE PROCESSING IN DIFFUSE OPTICAL TOMOGRAPHY AND 3-D IMAGE .....</b>                                                       | <b>220</b> |
| <i>Yigit Ali Üncü ; Tanju Mercan ; Murat Canpolat ; Gençay Sevim</i>                                                                              |            |
| <b>DNA SEQUENCE COMPRESSION WITHIN TRADITIONAL TEXT COMPRESSION ALGORITHMS .....</b>                                                              | <b>224</b> |
| <i>Abdulkadir Seker ; Emre Delibas ; Banu Diri</i>                                                                                                |            |
| <b>SYNCHRONIZATION ANALYSIS OF EPILEPSY DATA USING GLOBAL FIELD SYNCHRONIZATION .....</b>                                                         | <b>228</b> |
| <i>Ali Eed Olamat ; Aydın Akan</i>                                                                                                                |            |
| <b>TURKISH TWEET SENTIMENT ANALYSIS WITH WORD EMBEDDING AND MACHINE LEARNING.....</b>                                                             | <b>232</b> |
| <i>Deger Ayata ; Murat Saraçlar ; Arzucan Özgür</i>                                                                                               |            |
| <b>MODELING OF THREE-AXIS GIMBAL SYSTEM ON UNMANNED AIR VEHICLE (UAV) UNDER EXTERNAL DISTURBANCES .....</b>                                       | <b>236</b> |
| <i>Aytaç Altan ; Rifat Hacıoglu</i>                                                                                                               |            |
| <b>A WIDE-BAND AND GOOD GAIN FLATNESS CLASS AB POWER AMPLIFIER DESIGN FOR MOBILE COMMUNICATION .....</b>                                          | <b>240</b> |
| <i>Aysegül Kaplan ; Ahmet Hayrettin Yüzer</i>                                                                                                     |            |
| <b>AUTOMATIC TARGET RECOGNITION IN SAR IMAGES VIA SPARSE REPRESENTATION AND GABOR FILTERS .....</b>                                               | <b>244</b> |
| <i>Ahmet Karagöz ; İrfan Karagöz</i>                                                                                                              |            |
| <b>AMBIGUITY AND GROSS ERROR PROBABILITY CALCULATION FOR DIRECTION FINDING ANTENNA ARRAYS.....</b>                                                | <b>248</b> |
| <i>Fehmi Emre Kadan</i>                                                                                                                           |            |
| <b>EFFECT ON CLASSIFICATION OF WAVELET COMPRESSION ON ECG SIGNAL.....</b>                                                                         | <b>252</b> |
| <i>Özgür Tomak ; Temel Kayıkçıoğlu</i>                                                                                                            |            |
| <b>EFFECT OF PATCH BASED TRAINING ON OBJECT LOCALIZATION WITH CONVOLUTIONAL NEURAL NETWORKS .....</b>                                             | <b>256</b> |
| <i>Semih Orhan ; Yalin Bastanlar</i>                                                                                                              |            |
| <b>IDENTIFICATION AND GRADING OF SPASTICITY BY USING ADABOOST AND K-NN TECHNIQUES.....</b>                                                        | <b>260</b> |
| <i>Yalçın Albayrak ; Gökçen Çetinel ; Sevdâ Gül</i>                                                                                               |            |
| <b>DESIGN OF WIDEBAND MIMO ANTENNA FOR WIRELESS APPLICATIONS.....</b>                                                                             | <b>264</b> |
| <i>Abubeker A. Yussuf ; Selcuk Paker</i>                                                                                                          |            |
| <b>SAR IMAGE TIME SERIES ANALYSIS IN VEGETATION CLASSIFICATION USING GLOBAL AND LOCAL INFORMATION BASED LINEAR DISCRIMINANT ANALYSIS .....</b>    | <b>268</b> |
| <i>Ufuk Sakarya ; Caner Demirpolat</i>                                                                                                            |            |

|                                                                                                                       |            |
|-----------------------------------------------------------------------------------------------------------------------|------------|
| <b>AUTOMATED VISUAL CLASSIFICATION OF INDOOR SCENES AND ARCHITECTURAL STYLES.....</b>                                 | <b>272</b> |
| <i>Berkan Solmaz ; Veysel Yücesoy ; Aykut Koç</i>                                                                     |            |
| <b>ENERGY EFFICIENT VIRTUAL NETWORK EMBEDDING IN FEDERATED SOFTWARE DEFINED NETWORKS.....</b>                         | <b>276</b> |
| <i>Mohamed Haji Dahir ; Hadi Alizadeh ; Didem Gözüpek</i>                                                             |            |
| <b>REMOVED OBJECT DETECTION USING ONE CLASS CLASSIFICATION.....</b>                                                   | <b>280</b> |
| <i>Ibrahim Gökhan Aksüren ; Sükrü Biçakçı ; Hasan Hüseyin Sönmez ; Ali Köksal Hocaoglu</i>                            |            |
| <b>HYPERSPECTRAL IMAGE CLASSIFICATION WITH CONVOLUTIONAL NETWORKS TRAINED WITH SELF-DUAL ATTRIBUTE PROFILES .....</b> | <b>284</b> |
| <i>Safak Güner Koç ; Erchan Aptoula</i>                                                                               |            |
| <b>TIME-DOMAIN ENERGETIC PROPERTIES OF THE TM-MODES IN A LOSSY WAVEGUIDE.....</b>                                     | <b>288</b> |
| <i>Fatih Erden ; Ahmet A. Cosan ; Oleg A. Tretyakov</i>                                                               |            |
| <b>SLEEP APNEA DETECTION USING WITH EEG, ECG AND RESPIRATORY SIGNALS.....</b>                                         | <b>291</b> |
| <i>Mehmet Feyzi Aksahin ; Aykut Erdamar ; Atakan Isik ; Asena Karaduman</i>                                           |            |
| <b>EVENT DETECTION FROM SOCIAL MEDIA: 5W1H ANALYSIS ON BIG DATA .....</b>                                             | <b>295</b> |
| <i>Çagla Çiğ Karaman ; Serkan Yaliman ; Salih Atilay Oto</i>                                                          |            |
| <b>FEATURE EXTRACTION WITH CONVOLUTIONAL NEURAL NETWORKS FOR AERIAL IMAGE RETRIEVAL.....</b>                          | <b>299</b> |
| <i>Hakan Çevikalp ; Goları Ghorban Dordinejad ; Merve Elmas</i>                                                       |            |
| <b>NOVELTY DETECTION USING SOFT PARTITIONING AND HIERARCHICAL MODELS.....</b>                                         | <b>303</b> |
| <i>Tolga Ergen ; Kaan Gökçesu ; Mustafa Simsek ; Süleyman S. Kozat</i>                                                |            |
| <b>AN EFFICIENT BANDIT ALGORITHM FOR GENERAL WEIGHT ASSIGNMENTS .....</b>                                             | <b>307</b> |
| <i>Kaan Gökçesu ; Tolga Ergen ; Selami Çiftçi ; Süleyman S. Kozat</i>                                                 |            |
| <b>EVALUATION OF DIFFERENT ALGORITHMS FOR MEASURING THE SIMILARITIES OF TRAJECTORY DATASETS.....</b>                  | <b>311</b> |
| <i>Nurullah Samed Savas ; Fuat Bakkal ; Süleyman Eken ; Ahmet Sayar</i>                                               |            |
| <b>CLASSIFICATION OF POWER QUALITY DISTURBANCES WITH S-TRANSFORM AND ARTIFICIAL NEURAL NETWORKS METHOD .....</b>      | <b>315</b> |
| <i>Seçkin Karasu ; Zehra Saraç</i>                                                                                    |            |
| <b>TERRAIN AIDED NAVIGATION APPLICATION FOR AIRBORNE PLATFORMS.....</b>                                               | <b>319</b> |
| <i>Görkem Kandemir ; Haluk Erdem Bingöl</i>                                                                           |            |
| <b>NEURAL NETWORKS BASED ONLINE LEARNING .....</b>                                                                    | <b>323</b> |
| <i>Tolga Ergen ; Süleyman S. Kozat</i>                                                                                |            |
| <b>RADIOMETRIC CROSS-CALIBRATION OF GÖKTÜRK-2 WITH LANDSAT 8 .....</b>                                                | <b>327</b> |
| <i>Ismail Hakki Demirhan ; Hüsnü Seda Deveci ; Ufuk Sakarya</i>                                                       |            |
| <b>ONLINE DISTRIBUTED NONLINEAR REGRESSION VIA NEURAL NETWORKS .....</b>                                              | <b>331</b> |
| <i>Tolga Ergen ; Süleyman S. Kozat</i>                                                                                |            |
| <b>EXAMINING OF SINGLE SIGN ON PROTOCOLS AND A MODEL OF BUSINESS APPLICATION .....</b>                                | <b>335</b> |
| <i>Halil Arslan ; H. Dogan Karki ; A. Gürkan Yüksek ; Oguz Kaynar</i>                                                 |            |
| <b>CATEGORY-SELECTIVE TOP-DOWN MODULATION IN THE FUSIFORM FACE AREA OF THE HUMAN BRAIN DURING VISUAL SEARCH .....</b> | <b>339</b> |
| <i>Salman Ul Hassan Dar ; Tolga Çukur</i>                                                                             |            |
| <b>LINGUISTIC FEATURES IN TURKISH WORD REPRESENTATIONS.....</b>                                                       | <b>343</b> |
| <i>Onur Güngör ; Eray Yildiz</i>                                                                                      |            |
| <b>BRILLOUIN SCATTERING BASED FIBER OPTIC STRAIN SENSOR.....</b>                                                      | <b>347</b> |
| <i>Murat Yücel ; Murat Yücel ; Murat Torun ; Nail Ferhat Öztürk ; H. Haldun Göktas</i>                                |            |
| <b>FILE REPAIR WITH CLUSTER BASED DISTRIBUTED STORAGE SYSTEM.....</b>                                                 | <b>351</b> |
| <i>Elif Haytaoglu ; Mehmet Emin Dalkılıç</i>                                                                          |            |
| <b>TARGET TRACKING ANALYSIS WITH KALMAN FILTER IN CASE OF MODEL MISMATCH.....</b>                                     | <b>355</b> |
| <i>Aykut G. Gelen ; Ayten Atasoy</i>                                                                                  |            |
| <b>IMPROVEMENT OF SIGNAL TO NOISE RATIO IN FIBER BRAGG GRATING BASED SENSOR SYSTEMS.....</b>                          | <b>359</b> |
| <i>Murat Yücel ; Murat Torun ; Mustafa Burunkaya</i>                                                                  |            |
| <b>ASSESSMENT OF WIRELESS SENSOR NETWORK LIFETIME REDUCTION DUE TO ELIMINATION OF CRITICAL NODE SETS.....</b>         | <b>363</b> |
| <i>Hüseyin Ugur Yildiz ; Bülent Tavli ; Behnam Ojaghi Kahjogh</i>                                                     |            |
| <b>MACHINE LEARNING FOR PRODUCT QUALITY INSPECTION .....</b>                                                          | <b>367</b> |
| <i>Erol Çitak ; Yakup Genç</i>                                                                                        |            |
| <b>A SPECTRUM SHARING PROTOCOL BASED ON PHYSICAL-LAYER NETWORK CODING.....</b>                                        | <b>371</b> |
| <i>Seda Üstünbas ; Ümit Aygölü</i>                                                                                    |            |

|                                                                                                                                              |            |
|----------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>MALWARE DETECTION SYSTEM BASED ON MACHINE LEARNING METHODS FOR ANDROID OPERATING SYSTEMS.....</b>                                         | <b>375</b> |
| <i>Anil Utku ; Ibrahim Alper Dogru</i>                                                                                                       |            |
| <b>ANALYSIS OF TURKISH PARLIAMENT RECORDS IN TERMS OF PARTY COHERENCE .....</b>                                                              | <b>379</b> |
| <i>Ersin Esen ; Savas Özkan</i>                                                                                                              |            |
| <b>QUADRATURE SPATIAL MODULATION FOR LARGE SCALE MIMO SYSTEMS .....</b>                                                                      | <b>383</b> |
| <i>Zehra Yiggit ; Ertugrul Basar</i>                                                                                                         |            |
| <b>AUTOMATIC SCORING OF WRINKLES ON THE FOREHEAD.....</b>                                                                                    | <b>387</b> |
| <i>Büsra Çanak ; Mustafa E. Kamasak</i>                                                                                                      |            |
| <b>DETERMINATION OF R-PEAKS IN ECG SIGNAL USING HILBERT TRANSFORM AND PAN-TOMPKINS ALGORITHMS.....</b>                                       | <b>391</b> |
| <i>Aykut Diker ; Engin Avcı ; Mehmet Gedikpinar</i>                                                                                          |            |
| <b>USE OF CLUSTERING ALGORITHMS AND EXTREME LEARNING MACHINE IN DETERMINING ARRHYTHMIA TYPES.....</b>                                        | <b>395</b> |
| <i>Ebru Sayilgan ; Özlem Karabiber Cura ; Yalçın Isler</i>                                                                                   |            |
| <b>FAST CLOUD DETECTION USING LOW-FREQUENCY COMPONENTS OF SATELLITE IMAGERY .....</b>                                                        | <b>399</b> |
| <i>D. Utku Ufuk ; Caner Demirpolat ; M. Fatih Demirci</i>                                                                                    |            |
| <b>OUTAGE PERFORMANCE OF PARTIAL ANTENNA SELECTION IN THE FULL-DUPLEX DECODE-AND-FORWARD RELAY NETWORKS .....</b>                            | <b>403</b> |
| <i>Mesut Toka ; Oguz Kucur</i>                                                                                                               |            |
| <b>RSS BASED LOCALIZATION OF AN EMITTER USING A SINGLE MINI UAV .....</b>                                                                    | <b>407</b> |
| <i>Seçkin Uluskan ; Mustafa Gökçe ; Tansu Filik</i>                                                                                          |            |
| <b>VIRTUALIZED CLOUD VIDEO SERVICES .....</b>                                                                                                | <b>411</b> |
| <i>Selin Yilmaz ; Kemal E. Sahin ; K. Tolga Bagci ; A. Murat Tekalp</i>                                                                      |            |
| <b>A SOUND DATABASE DEVELOPMENT FOR ENVIRONMENTAL SOUND RECOGNITION.....</b>                                                                 | <b>415</b> |
| <i>Yüksel Arslan ; Hüseyin Canbolat</i>                                                                                                      |            |
| <b>VOICE BASED USER VERIFICATION FOR VISUALLY IMPAIRED PERSONS IN LEARNING MANAGEMENT SYSTEMS.....</b>                                       | <b>419</b> |
| <i>Esra Çoban Budak ; Baris Yazar ; Nilüfer Yurtay ; Gökçen Çetinel ; Yusuf Budak</i>                                                        |            |
| <b>STATISTICAL INVESTIGATION OF HEART RATE VARIABLE DERIVED FROM PHOTOPLETHYSMOGRAPHY SIGNAL IN SLEEP STAGING PROCESS.....</b>               | <b>423</b> |
| <i>Muhammed Kürsad Uçar ; Mehmet Recep Bozkurt ; Cahit Bilgin</i>                                                                            |            |
| <b>HYPERSPECTRAL IMAGE CLASSIFICATION WITH HYBRID KERNEL EXTREME LEARNING MACHINE .....</b>                                                  | <b>427</b> |
| <i>Ugur Ergul ; Gokhan Bilgin</i>                                                                                                            |            |
| <b>STATISTICAL ANALYSIS OF HEART RATE VARIABILITY DURING ABNORMAL RESPIRATORY EVENTS IN OBSTRUCTIVE SLEEP APNEA PATIENTS .....</b>           | <b>431</b> |
| <i>Muhammed Kürsad Uçar ; Mehmet Recep Bozkurt ; Cahit Bilgin</i>                                                                            |            |
| <b>THE EFFECT OF PUMP LASER WAVELENGTH AT 980 NM BAND ON THE PERFORMANCE OF EDFA.....</b>                                                    | <b>435</b> |
| <i>Firat Ertay Durak ; Ahmet Altuncu</i>                                                                                                     |            |
| <b>MODELING OF THE EQUATORIAL ELECTROJET AS A MULTILAYER COMMUNICATION CHANNEL AND INVESTIGATION OF ITS EFFECTS ON EM RADIO SIGNALS.....</b> | <b>439</b> |
| <i>Burak Tüysüz ; Julio Urbina</i>                                                                                                           |            |
| <b>PREDICTION OF COMPLEX-VALUED SIGNALS BY USING COMPLEX-VALUED LMK ALGORITHM .....</b>                                                      | <b>443</b> |
| <i>Engin Cemal Mengüç ; Nurettin Acir</i>                                                                                                    |            |
| <b>COOPERATIVE ADAPTIVE CRUISE CONTROL USING VISIBLE LIGHT COMMUNICATION .....</b>                                                           | <b>447</b> |
| <i>Ali Demir ; Mustafa Can Macit</i>                                                                                                         |            |
| <b>CLASSIFICATION OF LOCAL SAR FEATURES WITH CONVOLUTIONAL NEURAL NETWORK.....</b>                                                           | <b>451</b> |
| <i>Sertaç Arisoy ; Koray Kayabol</i>                                                                                                         |            |
| <b>GENE SELECTION AND CLASSIFICATION OF PANCREATIC MICROARRAY DATASETS .....</b>                                                             | <b>455</b> |
| <i>Abubakhari Sserwadda ; Ömer Sinan Saraç</i>                                                                                               |            |
| <b>CLASSIFICATION OF EXTRASYSTOLE HEART SOUNDS WITH MFCC FEATURES BY USING ARTIFICIAL NEURAL NETWORK.....</b>                                | <b>459</b> |
| <i>Huseyin Coskun ; Ömer Deperlioglu ; Tuncay Yigit</i>                                                                                      |            |
| <b>SECURITY ISSUES OF BIG DATA APPLICATIONS SERVED BY MOBILE OPERATORS .....</b>                                                             | <b>463</b> |
| <i>Cem Dincer ; Gamze Akpolat ; Engin Zeydan</i>                                                                                             |            |

|                                                                                                                                           |            |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>HYBRID TECHNIQUE FOR ROBUST IMAGE WATERMARKING USING DISCRETE TIME<br/>FOURIER TRANSFORM .....</b>                                     | <b>467</b> |
| <i>Omar Abodena ; Mary Agoyi ; Erbug Celebi</i>                                                                                           |            |
| <b>SIGN SENTENCE RECOGNITION WITH SMART WATCHES .....</b>                                                                                 | <b>471</b> |
| <i>Deniz Ekiz ; Gamze Ege Kaya ; Serkan Bugur ; Sila Güler ; Buse Buz ; Bilgin Kosucu ; Bert Arnrich</i>                                  |            |
| <b>RECTANGULAR SHAPED MICROSTRIP PATCH ANTENNA WITH MULTIPLE SLITS AND<br/>SLOTS .....</b>                                                | <b>475</b> |
| <i>Mohamad Kannan Idris ; Bushra Sarwar ; Yamna Rehman ; Taha Imeci</i>                                                                   |            |
| <b>ON IDENTIFYING LEAVES: A COMPARISON OF CNN WITH CLASSICAL ML METHODS.....</b>                                                          | <b>479</b> |
| <i>Mohamed Abbas Hedjazi ; Ikram Kourbane ; Yakup Genc</i>                                                                                |            |
| <b>SPEECH-BASED EMOTION RECOGNITION AND NEXT REACTION PREDICTION .....</b>                                                                | <b>483</b> |
| <i>Fatemeh Noroozi ; Neda Akrami ; Gholamreza Anbarjafari</i>                                                                             |            |
| <b>COLOUR IMAGE WATERMARKING BASED ON WAVELET AND QR DECOMPOSITION.....</b>                                                               | <b>487</b> |
| <i>Pejman Rasti ; Gholamreza Anbarjafari ; Hasan Demirel</i>                                                                              |            |
| <b>AUTONOMOUS MOBILE ROBOT EXPLORATION IN NEGATIVE OBSTACLE<br/>ENVIRONMENT .....</b>                                                     | <b>491</b> |
| <i>Numan Keskin ; Erkan Uslu ; Furkan Çakmak ; Nihal Altuntas ; M. Fatih Amasyali ; Sirma Yavuz</i>                                       |            |
| <b>AN EFFICIENT EQUALIZATION TECHNIQUE FOR MULTI-LEVEL CELL FLASH MEMORY<br/>STORAGE SYSTEMS .....</b>                                    | <b>495</b> |
| <i>Reza A. Ashrafi ; Ali E. Pusane</i>                                                                                                    |            |
| <b>NOVEL SCORE NORMALIZATION METHODS FOR KEYWORD SEARCH .....</b>                                                                         | <b>499</b> |
| <i>Batuhan Gündoğdu ; Murat Saraçlar</i>                                                                                                  |            |
| <b>AN ENERGY EFFICIENT ADDITIVE NEURAL NETWORK .....</b>                                                                                  | <b>503</b> |
| <i>Arman Afrasiyabi ; Baris Nasir ; Ozan Yildiz ; Fatos T. Yarman Vural ; A. Enis Cetin</i>                                               |            |
| <b>DETERMINATION OF BENIGN AND MALIGN LESIONS BY FUSION OF THE DIFFERENT<br/>PHASES OF LIVER MR .....</b>                                 | <b>507</b> |
| <i>Saim Ervural ; Murat Ceylan</i>                                                                                                        |            |
| <b>FORMANT ANALYSIS OF VOWELS IN KURDISH LANGUAGE .....</b>                                                                               | <b>511</b> |
| <i>Özlem Batur Dinler ; Fatih Karabiber</i>                                                                                               |            |
| <b>CIRCULAR PATCH ANTENNA WITH CIRCULAR AND RECTANGULAR SLOTS.....</b>                                                                    | <b>515</b> |
| <i>Nurettin Baha Togcuoglu ; Yunus Albayrak ; Mustafa Niyazi Saylik ; Melik Ahmet Daye ; Mustafa Bal ; Mustafa Imeci ; Taha Imeci</i>     |            |
| <b>A NEW APPEARANCE BASED AND USER INDEPENDENT EYE STATE DETECTION<br/>METHOD USING EIGENEYES .....</b>                                   | <b>519</b> |
| <i>Çağatay Murat Yilmaz ; Cemal Köse</i>                                                                                                  |            |
| <b>ACCELERATING NEXT GENERATION SEQUENCING READ ERRORS CORRECTION WITH<br/>CUDA .....</b>                                                 | <b>523</b> |
| <i>Ummu Habibe Unal ; Ibrahim Savran</i>                                                                                                  |            |
| <b>THE UTILITY OF FNIRS SIGNALS VERSUS SELF-REPORT FOR CLASSIFICATION OF<br/>FIBROMYALGIA SYNDROME .....</b>                              | <b>527</b> |
| <i>Aykut Eken ; Didem Gökçay ; Bora Baskak ; Aysegül Baltacı ; Murat Kara</i>                                                             |            |
| <b>FAST IMAGE SEARCHING IN LARGE SCALE IMAGE DATABASE .....</b>                                                                           | <b>531</b> |
| <i>Osman Durmaz ; Hasan Sakir Bilge</i>                                                                                                   |            |
| <b>PARALLEL LINE MICROSTRIP LOW PASS FILTER DESIGN .....</b>                                                                              | <b>535</b> |
| <i>Mahmut Bera Günaslan ; Göksel Çankaya ; Kaan Irken ; Taha Imeci ; Oguzhan Salih Güngör</i>                                             |            |
| <b>AN INVESTIGATION OF LEAST SQUARES BASED METHODS FOR SOURCE<br/>LOCALIZATION FROM TIME DIFFERENCE OF ARRIVAL MEASUREMENTS .....</b>     | <b>539</b> |
| <i>Nusret Çelenk ; Çağatay Candan</i>                                                                                                     |            |
| <b>A BAYESIAN CHANGE POINT MODEL FOR EPILEPTIC SEIZURE DETECTION .....</b>                                                                | <b>543</b> |
| <i>Çağatay Yildiz ; Haluk O. Bingöl ; Gülçin Irım-çelik ; Berrin Aktekin ; Canan Aykut-Bingöl</i>                                         |            |
| <b>MICROSTRIP DUAL-BANDPASS FILTER DESIGN .....</b>                                                                                       | <b>547</b> |
| <i>Bora Eren ; Burhan Akyüz ; Mustafa Dikkafa ; Özgür Alaca ; Taha Imeci ; Oguzhan Salih Güngör</i>                                       |            |
| <b>SHORT TO MID-RANGE NIGHT FIRE DETECTION .....</b>                                                                                      | <b>551</b> |
| <i>Ahmet Kerim Aggirman ; Kasim Tasdemir</i>                                                                                              |            |
| <b>DESIGN AND EXPERIMENTAL EVALUATION OF A DISTRIBUTED TIME<br/>SYNCHRONIZATION TECHNIQUE FOR MULTI-HOP WIRELESS SENSOR NETWORKS.....</b> | <b>555</b> |
| <i>Muhammed Fatih Inanç ; Bülent Tavli</i>                                                                                                |            |
| <b>COMPARISON OF PASSIVE POSITION LOCALIZATION METHODS BASED ON DIRECTION<br/>FINDING .....</b>                                           | <b>559</b> |
| <i>Umay Ezgi Deniz ; Erem Erdem</i>                                                                                                       |            |

|                                                                                                                                                  |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>COGNITIVE LEARNER: AN ENSEMBLE LEARNING ARCHITECTURE FOR COGNITIVE STATE CLASSIFICATION .....</b>                                             | <b>563</b> |
| <i>Hazal Mogultay ; Fatos Tunay Yarman Vural</i>                                                                                                 |            |
| <b>THE IMPACT OF MOBILE PROCESSOR CRYPTOGRAPHIC ACCELERATION ON DATA TRANSFER.....</b>                                                           | <b>567</b> |
| <i>Hüseyin Özdemir Kulaoglu ; Devrim Seral</i>                                                                                                   |            |
| <b>ACTION RECOGNITION WITH SKELETAL VOLUME AND DEEP LEARNING.....</b>                                                                            | <b>571</b> |
| <i>Ali Seydi Keçeli ; Aydın Kaya ; Ahmet Burak Can</i>                                                                                           |            |
| <b>FPAI IMPLEMENTATION OF CNN BASED CHAOS GENERATOR.....</b>                                                                                     | <b>575</b> |
| <i>Enis Günay ; Kenan Altun</i>                                                                                                                  |            |
| <b>IMAGEHAWK SEARCH ENGINE: CONTENT BASED IMAGE RETRIEVAL SYSTEM.....</b>                                                                        | <b>579</b> |
| <i>Hakan Cevikalp ; Sahin Isik</i>                                                                                                               |            |
| <b>FORECASTING THE ANNUAL ELECTRICITY CONSUMPTION OF TURKEY USING A HYBRID MODEL .....</b>                                                       | <b>583</b> |
| <i>Gökhan Aydogdu ; Oktay Yildiz</i>                                                                                                             |            |
| <b>A NEW APPROACH BASED ON DIFFERENTIAL EVOLUTION ALGORITHM FOR HARMONIC ESTIMATION PROBLEMS .....</b>                                           | <b>587</b> |
| <i>Serdar Koçkanat ; Yasin Kabalci ; Ersan Kabalci</i>                                                                                           |            |
| <b>FPGA IMPLEMENTATION OF A WIDEBAND GAUSSIAN RANDOM NUMBER GENERATOR WITH LOW RESOURCE UTILIZATION .....</b>                                    | <b>591</b> |
| <i>Cansu Sen ; Soner Yesil</i>                                                                                                                   |            |
| <b>IDENTIFICATION OF SHARES CONTAINING OFFENSIVE CHARGE IN SOCIAL MEDIA.....</b>                                                                 | <b>595</b> |
| <i>Hamdullah Karamollaoglu ; Ibrahim Alper Dogru ; Anil Utku</i>                                                                                 |            |
| <b>FEASIBILITY OF UMTS SIGNAL FOR PASSIVE RADAR .....</b>                                                                                        | <b>599</b> |
| <i>Gökhan Soysal ; Baris Satar ; Yetkin Ersoy</i>                                                                                                |            |
| <b>MICROSTRIP PATCH ANTENNA ARRAY: IMPROVED SLITTED RECTANGULAR DESIGN .....</b>                                                                 | <b>603</b> |
| <i>Muhammed Efe Altuntas ; Sedat Kaya ; Mehmet Emin Orhan ; Yetkin Hellaç ; Hakan Bayrak ; Mustafa Imeci ; Oguzhan Salih Güngör ; Taha Imeci</i> |            |
| <b>DETECTION OF ANTIPODAL AND BIORTHOGONAL CHIRP SIGNALS IN LAPLACIAN NOISE.....</b>                                                             | <b>606</b> |
| <i>Zekeriya Sari ; Mehmet Emre Çek</i>                                                                                                           |            |
| <b>SCENE DETECTION VIA DEPTH MAPS OF 3 DIMENSIONAL VIDEOS.....</b>                                                                               | <b>610</b> |
| <i>Hüseyin Bayrak ; Gökçe Nur Yilmaz</i>                                                                                                         |            |
| <b>BIT ALLOCATION WITH VISUAL ATTENTION AND VISUAL DISTORTION SENSITIVITY .....</b>                                                              | <b>614</b> |
| <i>Mesut Pak ; Ulug Bayazit</i>                                                                                                                  |            |
| <b>EFFECTS OF SELECTIVE FORWARDING ATTACKS ON WIRELESS SENSOR NETWORK EFFICIENCY .....</b>                                                       | <b>618</b> |
| <i>Seyyit Alper Sert ; Adnan Yazici ; Ahmet Cosar</i>                                                                                            |            |
| <b>ENERGY-AWARE ACCESS POINT SELECTION FOR SMARTPHONES.....</b>                                                                                  | <b>622</b> |
| <i>Mehmet Fatih Tuysuz ; Murat Ucan</i>                                                                                                          |            |
| <b>DESIGN AND IMPLEMENTATION OF AN OUTDOOR LINE FOLLOWER ROBOT FOR ROBOCUP SEARCH AND RESCUE LEAGUE .....</b>                                    | <b>626</b> |
| <i>Mustafa Burak Dilaver ; Erkan Uslu ; Furkan Çakmak ; Nihal Altuntas ; M. Fatih Amasyali ; Sirma Yavuz</i>                                     |            |
| <b>INTEGER 1-BIT TRANSFORM METHOD AND ITS HARDWARE ARCHITECTURE FOR LOW-COMPLEXITY BLOCK-BASED MOTION ESTIMATION .....</b>                       | <b>630</b> |
| <i>Seda Yavuz ; Aysun Tasyapi Çelebi ; Anil Çelebi ; Oguzhan Urhan</i>                                                                           |            |
| <b>SEGMENTATION OF BLOOD VESSELS IN 2D RETINAL IMAGES WITH GRAPHICAL PROCESSING UNITS .....</b>                                                  | <b>634</b> |
| <i>Zülbiye Akça ; Baha Sen ; Eren Akça</i>                                                                                                       |            |
| <b>MULTIWAVELET FEATURE SETS FOR ECG BEAT CLASSIFICATION .....</b>                                                                               | <b>638</b> |
| <i>Çagla Sarvan ; Nalan Özkurt</i>                                                                                                               |            |
| <b>A FAST 3D EXPLORATION ALGORITHM FOR AUTONOMOUS AERIAL ROBOTS.....</b>                                                                         | <b>642</b> |
| <i>Salih Marangoz ; Ezgi Ekin Ergün ; Erkan Uslu ; Furkan Çakmak ; Nihal Altuntas ; Mehmet Fatih Amasyali ; Sirma Yavuz</i>                      |            |
| <b>BURIED TARGET DETECTION WITH GROUND PENETRATING RADAR USING DEEP LEARNING METHOD.....</b>                                                     | <b>646</b> |
| <i>Enver Aydın ; Seniha Esen Yüksel</i>                                                                                                          |            |
| <b>IMPLEMENTATION OF WAVELET TRANSFORM EXTRASYSTOLE HEART SOUND WITH CONVOLUTION METHOD FOR FEATURE EXTRACTION.....</b>                          | <b>650</b> |
| <i>Huseyin Coskun ; Ömer Deperlioglu ; Tuncay Yigit</i>                                                                                          |            |

|                                                                                                               |            |
|---------------------------------------------------------------------------------------------------------------|------------|
| <b>LIDAR AIDED HYPERSPECTRAL IMAGES SEGMENTATION USING SCHROEDINGER EIGENMAPS.....</b>                        | <b>654</b> |
| <i>Orhan Torun ; Seniha Esen Yüksel</i>                                                                       |            |
| <b>IONOGRAM GENERATION IN HF BAND BY USING THREE DIMENSIONAL RAY TRACING .....</b>                            | <b>658</b> |
| <i>Mehmet Kabasakal ; Cenk Tokar</i>                                                                          |            |
| <b>A TWO-STAGE DEINTERLEAVING TECHNIQUE FOR CLUSTERING OF RADAR PULSES .....</b>                              | <b>662</b> |
| <i>Kenan Gençol</i>                                                                                           |            |
| <b>A STUDY ON TURKISH TEXT — DEPENDENT SPEAKER RECOGNITION .....</b>                                          | <b>666</b> |
| <i>Havva Çeliktas ; Cemal Hanilçi</i>                                                                         |            |
| <b>UNCLASSIFIED WHEAT IDENTIFICATION WITH BAG OF CONTOUR FRAGMENTS .....</b>                                  | <b>670</b> |
| <i>Ahmet Okan Onarcan ; Kemal Özkan ; Murat Olgun</i>                                                         |            |
| <b>SUPERIMPOSED WAVEFORMS FOR USERS WITH HIGH DATA RATE AT 5G WIRELESS NETWORKS.....</b>                      | <b>674</b> |
| <i>Evren Çatak ; Lütfiye Durak-Ata</i>                                                                        |            |
| <b>OUTLIER DETECTION ON POWER CONSUMPTION VIA NON-NEGATIVE TENSOR FACTORIZATION MODELS .....</b>              | <b>678</b> |
| <i>M. Burak Kurutmaz ; A. Taylan Cemgil ; Ahmet Cezayirli ; Ezgi Bingöl ; Sait Sener</i>                      |            |
| <b>CONTINUOUS WAVELET TRANSFORM BASED METHOD FOR DETECTION OF AROUSAL.....</b>                                | <b>682</b> |
| <i>Tugçe Kantar ; Aykut Erdamar</i>                                                                           |            |
| <b>BALLISTIC TARGET TRACKING USING MULTIPLE MODEL KALMAN FILTER WITH A PRIORI BALLISTIC INFORMATION .....</b> | <b>686</b> |
| <i>Firat Kumru ; Tamer Akça ; Emre Altuntas</i>                                                               |            |
| <b>MULTI TOPOLOGY ROUTING BASED FAILURE PROTECTION FOR SOFTWARE DEFINED 5G NETWORKS.....</b>                  | <b>690</b> |
| <i>Selçuk Cevher ; Ibrahim Hökelek</i>                                                                        |            |
| <b>DETECTION OF K-COMPLEXES IN SLEEP EEG WITH SUPPORT VECTOR MACHINES .....</b>                               | <b>694</b> |
| <i>Tugçe Kantar ; Aykut Erdamar</i>                                                                           |            |
| <b>PLANT SPECIES ESTIMATION FROM FIELD IMAGES .....</b>                                                       | <b>698</b> |
| <i>Sinasi Durmus ; Ulug Bayazit</i>                                                                           |            |
| <b>TOWARDS QOS-AWARE SCHEDULING IN SOFTWARE-DEFINED STORAGE NETWORKS.....</b>                                 | <b>702</b> |
| <i>Engin Zeydan ; Omer Narmanlioglu</i>                                                                       |            |
| <b>ACTION RECOGNITION WITH PROTOTYPES .....</b>                                                               | <b>706</b> |
| <i>Özge Yalçinkaya ; Pinar Duygulu</i>                                                                        |            |
| <b>MODAL BEAMFORMING FOR CIRCULAR ACOUSTIC VECTOR SENSOR ARRAYS.....</b>                                      | <b>710</b> |
| <i>Berke Gür</i>                                                                                              |            |
| <b>SPEECH RECORD SPEED UP WITH MACHINE LEARNING TECHNIQUES .....</b>                                          | <b>714</b> |
| <i>Pinar Delul Çelen ; Firat Hardalaç</i>                                                                     |            |
| <b>INPAINTING BY DEEP AUTOENCODERS USING AN ADVISOR NETWORK .....</b>                                         | <b>718</b> |
| <i>Ugur Demir ; Gözde Ünal</i>                                                                                |            |
| <b>ALTO-ASSISTED CDN-BASED VIDEO STREAMING OVER SDN.....</b>                                                  | <b>722</b> |
| <i>Cihat Çetinkaya ; Müge Sayit</i>                                                                           |            |
| <b>SNR IMPROVEMENT IN ELECTRONIC SUPPORT MEASURES SYSTEMS VIA PULSE INTEGRATION .....</b>                     | <b>726</b> |
| <i>Gökhan Gök ; Yasar Kemal Alp</i>                                                                           |            |
| <b>VEGETATION DETECTION WITH SPATIAL SEGMENTATION AND SPECTRAL INDICES .....</b>                              | <b>730</b> |
| <i>Berkan Demirel ; Yunus Emre Esin ; Ömer Özdi</i>                                                           |            |
| <b>FLOW RE-ROUTING BASED TRAFFIC ENGINEERING FOR SDN NETWORKS.....</b>                                        | <b>734</b> |
| <i>Hasan Anil Akyildiz ; Ibrahim Hökelek ; Ece Saygun ; Hakan Ali Çirpan</i>                                  |            |
| <b>SECURITY VULNERABILITIES OF AUTONOMOUS PLATOONS .....</b>                                                  | <b>738</b> |
| <i>Seyhan Uçar ; Sinem Çöleri Ergen ; Öznur Özkasap</i>                                                       |            |
| <b>AUTOMATED NUCLEI DETECTION IN SEROUS EFFUSION CYTOLOGY BASED ON MACHINE LEARNING .....</b>                 | <b>742</b> |
| <i>Elif Saykal ; Hülya Dogan ; Murat Ekinci ; Mustafa Emre Ercin ; Safak Ersöz</i>                            |            |
| <b>FORMING REPRESENTATIVE SIGNATURE FOR VEGETATION DETECTION IN HYPERSPECTRAL IMAGES .....</b>                | <b>746</b> |
| <i>Ömer Özdi ; Yunus Emre Esin ; Berkan Demirel</i>                                                           |            |
| <b>A WEB APPLICATION FOR CONTENT BASED GEOGRAPHIC IMAGE RETRIEVAL.....</b>                                    | <b>750</b> |
| <i>Naime Çelik ; Hasan Ogul</i>                                                                               |            |
| <b>DETERMINATION OF EFFECTIVE CHANNELS IN BRAIN-COMPUTER INTERFACE APPLICATIONS .....</b>                     | <b>754</b> |
| <i>Ebru Yavuz ; Önder Aydemir</i>                                                                             |            |

|                                                                                                                                         |            |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>MULTIWORD EXPRESSION DETECTION IN TURKISH USING LINGUISTIC FEATURES .....</b>                                                        | <b>758</b> |
| <i>Senem Kumova Metin ; Mehmet Taze ; Hande Aka Uymaz ; Erdem Okur</i>                                                                  |            |
| <b>TERRAIN ELEVATION AIDED VISUAL SIMULTANEOUS LOCALIZATION AND MAPPING<br/>IN AERIAL PLATFORMS .....</b>                               | <b>762</b> |
| <i>Kerem Eyice ; Onur Çulha</i>                                                                                                         |            |
| <b>A MICROCONTROLLER IMPLEMENTATION OF HARMONIC CONTROL ARRAYS<br/>METHOD.....</b>                                                      | <b>766</b> |
| <i>Mehmet Fatih Çelebi ; Murat Dogruel</i>                                                                                              |            |
| <b>DEEP LEARNING BASED THREAT CLASSIFICATION IN DISTRIBUTED ACOUSTIC<br/>SENSING SYSTEMS.....</b>                                       | <b>770</b> |
| <i>Metin Aktas ; Toygar Akgun ; Mehmet Umut Demircin ; Duygu Buyukaydin</i>                                                             |            |
| <b>DISTANCE MEASUREMENT BY PHASE TRACKING.....</b>                                                                                      | <b>774</b> |
| <i>Ozan Dogan ; Ibrahim Demir ; Umut Aydin</i>                                                                                          |            |
| <b>FRACTAL DIMENSION ANALYSIS OF UROFLOWMETRY SIGNALS .....</b>                                                                         | <b>778</b> |
| <i>Sarper Kara ; Metin Ertas ; Cengiz Polat Uzunoglu ; Aydin Akan</i>                                                                   |            |
| <b>MOJETTE TRANSFORM BASED LDPC ERASURE CORRECTION CODES FOR DISTRIBUTED<br/>STORAGE SYSTEMS .....</b>                                  | <b>782</b> |
| <i>Suayb S. Arslan ; Benoît Parrein ; Nicolas Normand</i>                                                                               |            |
| <b>PORT-BASED DHCP SERVER DESIGN WITH AUTHENTICATION .....</b>                                                                          | <b>786</b> |
| <i>Mehmet Halis Korkmaz ; Cemal Köse</i>                                                                                                |            |
| <b>FACE RECOGNITION VIA LORENTZIAN METRIC .....</b>                                                                                     | <b>790</b> |
| <i>Yerzhan Kerimbekov ; Hasan Sakir Bilge</i>                                                                                           |            |
| <b>DC-INFORMATIVE SUBCARRIER INTENSITY MODULATION FOR VISIBLE LIGHT<br/>COMMUNICATION .....</b>                                         | <b>794</b> |
| <i>Yasin Celik ; Aydin Akan</i>                                                                                                         |            |
| <b>PERFORMANCE ANALYSIS OF FULL-DUPLEX SPATIAL-MODULATED COMMUNICATION<br/>SYSTEMS .....</b>                                            | <b>798</b> |
| <i>Asil Koç ; Ibrahim Altunbas ; Ertugrul Basar</i>                                                                                     |            |
| <b>AN EFFICIENT SPIHT ALGORITHM AND SYSTEM ARCHITECTURE FOR IMAGE<br/>COMPRESSION .....</b>                                             | <b>802</b> |
| <i>Serap Çekli ; Ali Akman</i>                                                                                                          |            |
| <b>HUBER FUNCTION BASED RECONSTRUCTION IN ACCELERATED PHASE-CYCLED BSSFP<br/>ACQUISITIONS FOR INCREASED DETECTION PERFORMANCE .....</b> | <b>806</b> |
| <i>Efe Ilıcak ; Tolga Çukur</i>                                                                                                         |            |
| <b>NFC TECHNOLOGY BASED SECURE VIRTUAL CASH SHOPPING ARCHITECTURE DESIGN.....</b>                                                       | <b>810</b> |
| <i>Mehmet Fatih Öztürk ; Muhammed Ali Aydin ; Ahmet Sertbas</i>                                                                         |            |
| <b>QUALITY MEASUREMENT OF FRUITS AND VEGETABLES WITH NEAR INFRARED<br/>CAMERA .....</b>                                                 | <b>814</b> |
| <i>Didem Türker ; Recep Sezer ; Sahin Isik ; Kemal Özkan</i>                                                                            |            |
| <b>THROUGH-THE-WALL TARGET DETECTION BY ENERGY FEATURES EXTRACTED FROM<br/>SIMULATED ULTRA WIDEBAND RADAR SIGNALS .....</b>             | <b>818</b> |
| <i>Mesut Dogan ; Gönül Turhan-Sayan</i>                                                                                                 |            |
| <b>IS BIG-5 PERSONALITY FEATURE SET CONVENIENT FOR MOVIE RECOMMENDER<br/>SYSTEMS .....</b>                                              | <b>822</b> |
| <i>Mustafa Çagatayli ; Erbug Çelebi</i>                                                                                                 |            |
| <b>DEVICE-TO-DEVICE CACHING FOR VIDEO STREAMING CONTENT.....</b>                                                                        | <b>826</b> |
| <i>Koray Necip Aytaç ; Tolga Girici ; Ayse Melda Yüksel ; Ali Telli ; Murat Ilter Köksal</i>                                            |            |
| <b>CLASSIFICATION WITH SVM IN LORENTZIAN SPACE .....</b>                                                                                | <b>830</b> |
| <i>Yerzhan Kerimbekov ; Hasan Sakir Bilge ; Hasan Hüseyin Ugurlu</i>                                                                    |            |
| <b>FAST IMAGE SEGMENTATION FOR LOCAL FEATURE DESCRIPTORS.....</b>                                                                       | <b>834</b> |
| <i>Ceyhan Çelik ; Hasan Sakir Bilge</i>                                                                                                 |            |
| <b>BIOMEDICAL DATA CLASSIFICATION USING SUPERVISED CLASSIFIERS AND<br/>ENSEMBLE BASED DICTIONARIES .....</b>                            | <b>838</b> |
| <i>Göksu Tüysüzoglu ; Yusuf Yaslan</i>                                                                                                  |            |
| <b>A WI-FI FINGERPRINTING-BASED INDOOR LOCALIZATION APPROACH: M-WEIGHTED<br/>POSITION ESTIMATION (M-WPE) .....</b>                      | <b>842</b> |
| <i>Ihsan Mert Özçelik ; Mehmet Yunus Dönmez</i>                                                                                         |            |
| <b>SCENE LABELING USING KERNEL CODEBOOK ENCODING.....</b>                                                                               | <b>846</b> |
| <i>Hasan F. Ates ; Sercan Süneci</i>                                                                                                    |            |
| <b>USING THE MINIMUM SAMPLING VARIANCE RESAMPLING ALGORITHM ON TARGET<br/>TRACKING .....</b>                                            | <b>850</b> |
| <i>Ahmet Bacak ; Ali Köksal Hocaoglu</i>                                                                                                |            |

|                                                                                                                     |            |
|---------------------------------------------------------------------------------------------------------------------|------------|
| <b>PRIVACY MANAGEMENT FOR SMART CITIES .....</b>                                                                    | <b>854</b> |
| <i>Nadin Kökciyan ; Pinar Yolum</i>                                                                                 |            |
| <b>CLASSIFICATION OF SHIPS WITH FUZZY LOGIC BY USING RADAR ECHO .....</b>                                           | <b>858</b> |
| <i>Burak Alptekin ; Bilal Kocakusaklar ; Nihan Kahraman</i>                                                         |            |
| <b>SECURITY OF MESSAGE QUEUE TELEMETRY TRANSPORT PROTOCOL.....</b>                                                  | <b>862</b> |
| <i>Özlem Yerlikaya ; Gökhan Dalkiliç</i>                                                                            |            |
| <b>PERFORMABILITY EVALUATION AND OPTIMIZATION ANALYSIS OF REPAIRMEN FOR<br/>LARGE-SCALE NETWORKS .....</b>          | <b>866</b> |
| <i>Yönel Kirsal</i>                                                                                                 |            |
| <b>A NOVEL CONCENTRATION-TYPE BASED MODULATION IN MOLECULAR<br/>COMMUNICATION .....</b>                             | <b>870</b> |
| <i>Bayram Cevdet Akdeniz ; Ali Emre Pusane ; Tuna Tugcu</i>                                                         |            |
| <b>NEW APPROACHES FOR ENHANCEMENTS ON TRANSMISSION OF ELECTROMAGNETIC<br/>SIGNALS .....</b>                         | <b>874</b> |
| <i>Musa Bute ; Ugur Cem Hasar ; Abdurrahim Muratoglu</i>                                                            |            |
| <b>INVESTIGATION OF TRANSFER LEARNING ON PULMONARY NODULE<br/>CHARACTERISTICS .....</b>                             | <b>877</b> |
| <i>Aydin Kaya ; Ali Seydi Keçeli ; Ahmet Burak Can</i>                                                              |            |
| <b>EFFECT OF LINEAR AND NON-LINEAR MEASUREMENTS OF HEART RATE VARIABILITY<br/>IN PREDICTION OF PAF ATTACK .....</b> | <b>881</b> |
| <i>Ali Narin ; Mahmut Özer ; Yalçın Isler</i>                                                                       |            |
| <b>RECOGNITION OF TENNIS ACTIONS USING A DEPTH CAMERA .....</b>                                                     | <b>885</b> |
| <i>Bilal Öztürk ; Pinar Duygulu Sahin</i>                                                                           |            |
| <b>DETECTION OF MITOTIC CELLS IN MULTISPECTRAL HISTOPATHOLOGICAL IMAGES.....</b>                                    | <b>889</b> |
| <i>Huseyin Cukur ; Gokhan Bilgin</i>                                                                                |            |
| <b>OPEN DISTRIBUTED SYSTEM TO PROVIDE REAL-TIME COMMUNICATION SERVICE<br/>OVER WEB .....</b>                        | <b>893</b> |
| <i>Özgür Armagğan ; Hüseyin Güner ; Selçuk Keskin ; Taskin Koçak</i>                                                |            |
| <b>NOISE REDUCTION ON HYPERSPECTRAL IMAGERY USING SPECTRAL UNMIXING AND<br/>CLASS-LABELS .....</b>                  | <b>897</b> |
| <i>Berk Kaya ; Savas Özkan ; Gözde Bozdagi Akar</i>                                                                 |            |
| <b>FINITE STATE MACHINE BASED BINARY CLASSIFIER .....</b>                                                           | <b>901</b> |
| <i>Yusuf Engin Tetik</i>                                                                                            |            |
| <b>PATTERN ANALYSIS FOR THE NEUROIMAGING BASED DIAGNOSIS OF SCHIZOPHRENIA .....</b>                                 | <b>905</b> |
| <i>Ayşe Demirhan</i>                                                                                                |            |
| <b>SEMANTIC SIMILARITY BETWEEN TURKISH AND EUROPEAN LANGUAGES USING<br/>WORD EMBEDDINGS .....</b>                   | <b>909</b> |
| <i>Lütfi Kerem Sjenel ; Veysel Yücesoy ; Aykut Koç ; Tolga Çukur</i>                                                |            |
| <b>RELAY SELECTION WITH AF BASED COOPERATIVE SYSTEMS FOR INTERFERENCE<br/>FORWARDING IN HCN .....</b>               | <b>913</b> |
| <i>Ethem Söylemez ; Sultan Aldirmaz Çolak</i>                                                                       |            |
| <b>DESIGN OF LOW-COST MODULAR RF FRONT END FOR RF FINGERPRINTING OF<br/>BLUETOOTH SIGNALS .....</b>                 | <b>917</b> |
| <i>Emre Uzundurukan ; Aysha M. Ali ; Ali Kara</i>                                                                   |            |
| <b>FACE RECOGNITION CLASSIFIER BASED ON DIMENSION REDUCTION IN DEEP<br/>LEARNING PROPERTIES .....</b>               | <b>921</b> |
| <i>Ahmet Bilgiç ; Onur Can Kurban ; Tülay Yildirim</i>                                                              |            |
| <b>TARGET MOTION ANALYSIS WITH FITNESS ADAPTIVE BIG BANG-BIG CRUNCH<br/>OPTIMIZATION ALGORITHM .....</b>            | <b>925</b> |
| <i>Aybars Tokta ; Ali Köksal Hocaoglu ; Hakki Murat Genç</i>                                                        |            |
| <b>DESIGN OF MINIATURIZED ON-BODY ANTENNAS FOR DUAL BAND IMPLANT ANTENNA<br/>COMMUNICATION .....</b>                | <b>929</b> |
| <i>Ademola O. Kaka ; Mehmet Toyçan</i>                                                                              |            |
| <b>AN EOG BASED COMMUNICATION CHANNEL FOR PARALYZED PATIENTS.....</b>                                               | <b>933</b> |
| <i>Yurdağül Karagöz ; Sevda Gül ; Gökçen Çetinel</i>                                                                |            |
| <b>USER PROVIDED NETWORK SYSTEM WITH INCENTIVE MECHANISM .....</b>                                                  | <b>937</b> |
| <i>Ahmet Özlü ; Kübra Uludağ ; Ömer Korçak</i>                                                                      |            |
| <b>LAND USE AND COVER CLASSIFICATION OF SENTINEL-1A SAR IMAGERY: A CASE<br/>STUDY OF ISTANBUL .....</b>             | <b>941</b> |
| <i>Mustafa Üstüner ; Füsün Balık Sanlı ; Gökhan Bilgin ; Saygin Abdikan</i>                                         |            |

|                                                                                                                              |             |
|------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>DEVELOPING AN AUTOMATIC TRANSCRIPTION AND RETRIEVAL SYSTEM FOR SPOKEN LECTURES IN TURKISH .....</b>                       | <b>945</b>  |
| <i>Ebru Arisoy</i>                                                                                                           |             |
| <b>DYNAMIC DECISION-BASED SPECTRUM SHARING FRAMEWORK FOR NEXT-GENERATION (5G) SYSTEMS.....</b>                               | <b>949</b>  |
| <i>Zhaleh Sadreddini ; Pavel Masek ; Tugrul Cavdar ; Jiri Hosek ; Erkan Guler</i>                                            |             |
| <b>REAL-TIME 5G TECHNOLOGY DEVELOPMENT PLATFORM.....</b>                                                                     | <b>953</b>  |
| <i>Ö. F. Gemici ; F. Kara ; I. Hökelek ; I. H. Salim ; H. Asmer ; M. I. Köksal ; A. Telli ; A. Yazar ; H. Arslan</i>         |             |
| <b>NODE PLACEMENT WITH EVOLUTIONARY ALGORITHMS FOR MAXIMUM COVERAGE OF HETEROGENEOUS WSNs.....</b>                           | <b>957</b>  |
| <i>Ozan Zorlu ; Özgür Koray Sahingöz</i>                                                                                     |             |
| <b>ENERGY-EFFICIENT ACCESS POINT DESIGN WITH ARDUINO YUN.....</b>                                                            | <b>961</b>  |
| <i>Mehmet Fatih Tuysuz ; Murat Ucan</i>                                                                                      |             |
| <b>COMBINING LANDSAT AND ALOS DATA FOR LAND COVER MAPPING.....</b>                                                           | <b>965</b>  |
| <i>Saygin Abdikan ; Mustafa Üstüner ; Füsün Balık Sanli ; Gökhan Bilgin</i>                                                  |             |
| <b>AN ADAPTIVE PATH PLANNING ALGORITHM FOR MOBILE-ANCHOR BASED WIRELESS SENSOR NETWORKS.....</b>                             | <b>969</b>  |
| <i>Ece Naz Erdemir ; T. Engin Tuncer</i>                                                                                     |             |
| <b>ERROR PERFORMANCE ANALYSIS OF MULTI-HOP SPACE SHIFT KEYING WITH TRANSMIT ANTENNA SELECTION.....</b>                       | <b>973</b>  |
| <i>Ferhat Yarkin ; Ibrahim Altunbas ; Ertugrul Basar</i>                                                                     |             |
| <b>PSEUDOCOLORING OF ULTRASOUND IMAGES.....</b>                                                                              | <b>977</b>  |
| <i>M. Zeki Konyar ; Sarp Ertürk</i>                                                                                          |             |
| <b>DEINTERLEAVING OF RADAR SIGNALS WITH STAGGER PRI AND DWELL-SWITCH PRI TYPES.....</b>                                      | <b>981</b>  |
| <i>Orhan Torun ; Mehmet Burak Kocamis ; Hakan Abaci ; Ssafak Bilgi Akdemir ; Alper Yildirim</i>                              |             |
| <b>GENETIC ALGORITHM BASED FEATURE SELECTION ON DIAGNOSIS OF PARKINSON DISEASE VIA VOCAL ANALYSIS.....</b>                   | <b>985</b>  |
| <i>Abdülkadir Gümüşçü ; Kerim Karadag ; Mehmet Emin Tenekeci ; Ibrahim Berkan Aydılek</i>                                    |             |
| <b>EFFECT OF COOCCURANCE WEIGHTING TO ENGLISH WORD EMBEDDINGS.....</b>                                                       | <b>989</b>  |
| <i>VeySEL Yücesoy ; Aykut Koç</i>                                                                                            |             |
| <b>STEM-BASED POS TAGGING FOR AGGLUTINATIVE LANGUAGES.....</b>                                                               | <b>993</b>  |
| <i>Necva Bölücü ; Burcu Can</i>                                                                                              |             |
| <b>A NEW DERIVATIVE-BASED APPROACH FOR HYPERSPECTRAL CLASSIFICATION.....</b>                                                 | <b>997</b>  |
| <i>Yücel Çintay ; Yunus Emre Esin ; Hakkı Gökhan İlk</i>                                                                     |             |
| <b>COMPARISON OF FEATURE SELECTION METHODS FOR SENTIMENT ANALYSIS ON TURKISH TWITTER DATA.....</b>                           | <b>1001</b> |
| <i>Tuba Parlar ; Esra Saraç ; Selma Ayşe Özel</i>                                                                            |             |
| <b>A SECURE WIRELESS HOME AUTOMATION SYSTEM.....</b>                                                                         | <b>1005</b> |
| <i>Muhammed Onur Güngör ; Yusuf Güngör ; Gökhan Ince</i>                                                                     |             |
| <b>EMOTION RECOGNITION FROM EEG SIGNALS THROUGH ONE ELECTRODE DEVICE.....</b>                                                | <b>1009</b> |
| <i>Mehmet Ali Sarıkaya ; Gökhan Ince</i>                                                                                     |             |
| <b>SLEEP STAGE DETECTION USING SENSOR INTEGRATION.....</b>                                                                   | <b>1013</b> |
| <i>Ipek Karakurt ; Mehmet Ali Sarıkaya ; Gökhan Ince</i>                                                                     |             |
| <b>AUDIO BASED COMMERCIAL MONITORING IN TV BROADCASTS.....</b>                                                               | <b>1017</b> |
| <i>Sinan Sarica ; Gökhan Ince</i>                                                                                            |             |
| <b>DISTRIBUTED FACE RECOGNITION SYSTEM FOR INDOOR ENVIRONMENTS.....</b>                                                      | <b>1021</b> |
| <i>Emre Sercan Aslan ; Baris Bayram ; Gökhan Ince</i>                                                                        |             |
| <b>RESONANCE BASED PRE-PROCESSING METHOD FOR ELIMINATING ARTIFACTS IN DOPPLER ULTRASOUND SIGNALS.....</b>                    | <b>1025</b> |
| <i>Görkem Serbes ; Nizamettin Aydın</i>                                                                                      |             |
| <b>INVESTIGATION OF THE EFFECT OF INTERPOLATION ON NOISY IMAGES WITH FILTERING METHODS.....</b>                              | <b>1029</b> |
| <i>Ufuk Tanyeri ; Mürsel Ozan Incetas ; Zübeyr Aydemir</i>                                                                   |             |
| <b>SPARSITY-DRIVEN MULTIPLICATIVE NOISE REDUCTION.....</b>                                                                   | <b>1033</b> |
| <i>Gülşay Aksoy ; Fatih Nar</i>                                                                                              |             |
| <b>CARDIOTOCOGRAPHY ANALYSIS BASED ON SEGMENTATION-BASED FRACTAL TEXTURE DECOMPOSITION AND EXTREME LEARNING MACHINE.....</b> | <b>1037</b> |
| <i>Zafer Cömert ; Adnan Fatih Kocamaz</i>                                                                                    |             |
| <b>A COMPARISON OF TWO APPEARANCE BASED METHODS FOR GENDER RECOGNITION.....</b>                                              | <b>1041</b> |
| <i>Bahar Hatipoğlu ; Çagatay Murat Yılmaz ; Cemal Köse</i>                                                                   |             |

|                                                                                                                                     |             |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>A NEW IMAGE SEGMENTATION METHOD FOR QUANTITATIVE ANALYSIS OF IN VITRO SCRATCH ASSAY.....</b>                                     | <b>1045</b> |
| <i>Aykut Erdamar ; Sila Yilmaz ; Tansel Uyar ; Özlem Darcansoy Iseri</i>                                                            |             |
| <b>MULTIPLE FREQUENCY ESTIMATION BY USING IMPROVED VARIATIONAL MODE DECOMPOSITION .....</b>                                         | <b>1049</b> |
| <i>Berrak Öztürk Simsek ; Aydın Akan</i>                                                                                            |             |
| <b>A NEW SOLUTION METHOD FOR THE PASSIVE TARGET MOTION ANALYSIS PROBLEM USING EVOLUTIONARY STRATEGIES .....</b>                     | <b>1053</b> |
| <i>Hasan Hüseyin Sönmez ; Ali Köksal Hocaoglu ; Hakkı Murat Genç</i>                                                                |             |
| <b>RANDOM FOREST CLASSIFICATION FOR BRAIN COMPUTER INTERFACE APPLICATIONS .....</b>                                                 | <b>1057</b> |
| <i>Hatice Okumus ; Önder Aydemir</i>                                                                                                |             |
| <b>ERROR PERFORMANCE OF LDPC CODED SPATIAL MODULATION TECHNIQUE.....</b>                                                            | <b>1061</b> |
| <i>Ferhat Bayar ; Hacı İlhan</i>                                                                                                    |             |
| <b>PROBABILITY MASS FUNCTION DISTANCE APPROACH FOR FAST SPEAKER DIARIZATION.....</b>                                                | <b>1065</b> |
| <i>Levent Arslan ; Gökçe Sarar ; Sedat Demirbag ; Mustafa Erden</i>                                                                 |             |
| <b>DYNAMIC TESTS OF MR (MAGNETORHEOLOGIC) DAMPER AND ANALYSIS OF RESPONSE CHARACTERISTICS IN SEMI-ACTIVE KNEE PROSTHESIS.....</b>   | <b>1069</b> |
| <i>Çagri Akalin ; Tuna Orhanli ; Atila Yilmaz ; Ismail Sahin</i>                                                                    |             |
| <b>BRAIN COMPUTER INTERFACE BASED VISUAL DETECTION SYSTEM .....</b>                                                                 | <b>1073</b> |
| <i>Apdullah Yayik ; Yakup Kutlu</i>                                                                                                 |             |
| <b>HYPERSPECTRAL IMAGE CLASSIFICATION USING FUZZY C-MEANS BASED COMPOSITE KERNEL APPROACH.....</b>                                  | <b>1077</b> |
| <i>Ibrahim Onur Sigirci ; Gokhan Bilgin</i>                                                                                         |             |
| <b>TIME-FREQUENCY ANALYSIS BASED DETECTION OF ECG ST SEGMENT CHANGE USING LARGE FEATURE SET .....</b>                               | <b>1081</b> |
| <i>Ilknur Kayikcioglu ; Güzin Ulutas ; Temel Kayikcioglu</i>                                                                        |             |
| <b>PREVENTING GOODPUT COLLAPSE FOR MULTI-HOP ROUTING IN IEEE 802.11 BASED AD-HOC NETWORKS BY ADJUSTING RESIDUAL HOP COUNT .....</b> | <b>1085</b> |
| <i>Hande Bayulu ; Merve Öncer ; Canan Aydogdu</i>                                                                                   |             |
| <b>A STOCHASTIC DATA DISCRIMINATION BASED AUTOENCODER APPROACH FOR NETWORK ANOMALY DETECTION .....</b>                              | <b>1089</b> |
| <i>R. Can Aygün ; A. Gökhan Yavuz</i>                                                                                               |             |
| <b>QOS-AWARE DOWNLINK SCHEDULING ALGORITHM FOR LTE NETWORKS: A CASE STUDY ON EDGE USERS.....</b>                                    | <b>1093</b> |
| <i>V. Cagri Gungor ; O. Gokhan Uyan</i>                                                                                             |             |
| <b>DEINTERLEAVING FOR RADARS WITH JITTER AND AGILE PULSE REPETITION INTERVAL.....</b>                                               | <b>1097</b> |
| <i>M. Burak Kocamis ; Orhan Torun ; Hakan Abaci ; Safak Bilgi Akdemir ; Alper Yildirim</i>                                          |             |
| <b>ROOF DETECTION ON SATELLITE IMAGES .....</b>                                                                                     | <b>1101</b> |
| <i>Ali Saglam ; Nurdan Akhan Baykan</i>                                                                                             |             |
| <b>OPTIMAL MIMO ARRAY CONFIGURATION FOR ULTRAWIDEBAND MICROWAVE IMAGING .....</b>                                                   | <b>1105</b> |
| <i>M. Burak Kocamis ; Figen S. Öktem</i>                                                                                            |             |
| <b>REDUCING FALSE ARRHYTHMIA ALARMS OF PATIENT MONITORING SYSTEMS IN INTENSIVE CARE UNITS.....</b>                                  | <b>1109</b> |
| <i>Erdem Yanar ; Yesim Serinagaoglu Dogrusöz</i>                                                                                    |             |
| <b>IMAGE ANALYSIS FOR SINGLE CELL GEL ELECTROPHORESIS.....</b>                                                                      | <b>1113</b> |
| <i>Alev Kakaç Mese ; Aykut Erdamar ; Özlem Darcansoy Iseri</i>                                                                      |             |
| <b>IMPROVEMENTS ON TRANSIENT SIGNAL DETECTION FOR RF FINGERPRINTING .....</b>                                                       | <b>1117</b> |
| <i>Aysha M. Ali ; Emre Uzundurukan ; Ali Kara</i>                                                                                   |             |
| <b>PROCEDURALIZATION OF URBAN MODELS .....</b>                                                                                      | <b>1121</b> |
| <i>Ilke Demir ; Daniel G. Aliaga ; Bedrich Benes</i>                                                                                |             |
| <b>LIFETIME ANALYSIS OF ENERGY HARVESTING UNDERWATER WIRELESS SENSOR NODES .....</b>                                                | <b>1125</b> |
| <i>H. Emre Erdem ; V. Cagri Gungor</i>                                                                                              |             |
| <b>DETECTION OF DIABETIC RETINOPATHY DISEASE FROM VIDEO-OCULOGRAPHY (VOG) SIGNALS BY ARTIFICIAL NEURAL NETWORKS .....</b>           | <b>1129</b> |
| <i>Ceren Kaya ; Okan Erkaymaz ; Orhan Ayar ; Mahmut Özer</i>                                                                        |             |

|                                                                                                                                      |             |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>ENERGY AND SPECTRAL EFFICIENCY FOR HETEROGENEOUS CELLULAR NETWORKS WITH STOCHASTIC DEPLOYMENT .....</b>                           | <b>1133</b> |
| <i>Mahmut Demirtas ; Çağatay Sagginda ; Alkan Soysal</i>                                                                             |             |
| <b>PERFORMANCE COMPARISON OF TWO CHANNEL CMFB AND QMF BANK DESIGNED VIA ABC ALGORITHM.....</b>                                       | <b>1137</b> |
| <i>Gökçen Özdemir ; Nurhan Karaboga ; Türker Koza</i>                                                                                |             |
| <b>QUANTIFYING THE EFFECTS OF BLOOD PRESSURE CHANGES ON BALLISTOCARDIOGRAM SIGNALS .....</b>                                         | <b>1141</b> |
| <i>Abdul Q. Javaid ; Hakan Töreyn ; Omer T. Inan</i>                                                                                 |             |
| <b>SOFTWARE REQUIREMENT TRACEABILITY ANALYSIS USING TEXT MINING METHODS.....</b>                                                     | <b>1145</b> |
| <i>Poyraz Umut Hatipoglu ; Anil Atvar ; Yusuf Oguzhan Artan ; Oguzhan Sereflisan ; Ali Demir</i>                                     |             |
| <b>A DISCUSSION ON FUSION/CONFUSION AT SCORE LEVEL IN UNIMODAL BIOMETRIC SYSTEMS .....</b>                                           | <b>1149</b> |
| <i>Muhammed Maruf Kiliç ; Alper Kanak</i>                                                                                            |             |
| <b>ANALYZING DEEP FEATURES FOR TRADEMARK RETRIEVAL .....</b>                                                                         | <b>1153</b> |
| <i>Cemal Aker ; Osman Tursun ; Sinan Kalkan</i>                                                                                      |             |
| <b>PARCEL DELINEATION IN AGRICULTURAL LANDS .....</b>                                                                                | <b>1157</b> |
| <i>Hulya Yalcin</i>                                                                                                                  |             |
| <b>AUTOMATICALLY DIAGNOSING HER2 AMPLIFICATION STATUS FOR BREAST CANCER PATIENTS USING LARGE FISH IMAGES .....</b>                   | <b>1161</b> |
| <i>Salar Razavi ; Gökhan Hatipoglu ; Hülya Yalçın</i>                                                                                |             |
| <b>AUTOMATIC INSPECTION OF PHEROMONE TRAPS.....</b>                                                                                  | <b>1165</b> |
| <i>Hülya Yalçın</i>                                                                                                                  |             |
| <b>MEL-FREQUENCY CEPSTRAL BASED HEART SOUND SIGNAL SEGMENTATION FOR DECISION SUPPORT SYSTEM.....</b>                                 | <b>1169</b> |
| <i>Gülşen Çelebi ; Göksel Sözeri ; Atila Yılmaz ; Deniz Katircioglu ; Sercan Okutucu ; Begüm Yetis Sayin ; Hakan Aksoy ; Ali Oto</i> |             |
| <b>EXAMINATION OF THE AMBIGUITY FUNCTION OF MULTIPLE SUCCESSIVE OFDM TRANSMITTERS FOR PASSIVE DETECTION APPLICATIONS.....</b>        | <b>1173</b> |
| <i>Büsra Karanfil ; Burak Tüysüz ; Dogan Basaran</i>                                                                                 |             |
| <b>SPATIAL MODULATION FOR MULTI-USER MASSIVE MIMO SYSTEMS.....</b>                                                                   | <b>1177</b> |
| <i>Seyfettin Uluocak ; Ertugrul Basar</i>                                                                                            |             |
| <b>SPECIFIC EMITTER IDENTIFICATION OF MOBILE PHONES USING TRANSIENT FEATURES.....</b>                                                | <b>1181</b> |
| <i>Emrah Ener ; Tolga Çiloglu</i>                                                                                                    |             |
| <b>SIGN ALTERATIONS OF LLR VALUES BASED EARLY TERMINATION METHOD FOR LT BP DECODER .....</b>                                         | <b>1185</b> |
| <i>Cenk Albayrak ; Cemaleddin Simsek ; Kadir Türk</i>                                                                                |             |
| <b>USING CO-TRAINING TO EMPOWER ACTIVE LEARNING .....</b>                                                                            | <b>1189</b> |
| <i>Payam V. Azad ; Yusuf Yaslan</i>                                                                                                  |             |
| <b>FREQUENCY ANALYSIS OF EEG SIGNAL DURING WATCHING 2D &amp; 3D MOVIES BASED ON PLSR CLASSIFIER: A COMPARISON OF METHODS.....</b>    | <b>1193</b> |
| <i>Negin Manshouri ; Masoud Maleki ; Temel Kayıkcioglu</i>                                                                           |             |
| <b>TIME SERIES CLASSIFICATION USING POINT-WISE FEATURES.....</b>                                                                     | <b>1197</b> |
| <i>Hamza Ergezer ; Kemal Leblebicioglu</i>                                                                                           |             |
| <b>TAKING ADVANTAGE OF TURKISH CHARACTERISTIC FEATURES TO ACHIEVE AUTHORSHIP ATTRIBUTION PROBLEMS FOR TURKISH.....</b>               | <b>1201</b> |
| <i>Neslihan Sirin Saygili ; Tassadit Amghar ; Bernard Levrat ; Tankut Acarman</i>                                                    |             |
| <b>CHANGE-POINT DETECTION VIA SWITCHING KALMAN FILTERS .....</b>                                                                     | <b>1205</b> |
| <i>Çagri Sofuogglu ; Ali Taylan Cemgil</i>                                                                                           |             |
| <b>DETECTION AND SEGMENTATION OF MASSES IN MAMMOGRAMS BY THE RULE BASED ELIMINATION APPROACH.....</b>                                | <b>1209</b> |
| <i>Hayati Türe ; Temel Kayıkcioglu</i>                                                                                               |             |
| <b>LASER BARCODE-BASED SURGICAL INSTRUMENT TRACKING SYSTEM .....</b>                                                                 | <b>1213</b> |
| <i>Ali Findik ; Ozgun Pinarer ; Sultan Turhan</i>                                                                                    |             |
| <b>ENERJİ HASATÇI VE BATARYA KISITLI BİR SENSÖR İLE EN TAZE VERİ GÜNCELLEMELERİNİN GÖNDERİLMESİ.....</b>                             | <b>1217</b> |
| <i>Baran Tan Baçınöglü ; Elif Uysal-Biyiköglü</i>                                                                                    |             |
| <b>LOCAL BINARY PATTERN METHOD AND ITS HARDWARE ARCHITECTURE FOR LOW-COMPLEXITY MOTION ESTIMATION .....</b>                          | <b>1221</b> |
| <i>Seda Yavuz ; Aysun Tasyapi Çelebi ; Anil Çelebi ; Oguzhan Urhan</i>                                                               |             |

|                                                                                                                                                                    |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>ROBOTIC ARM CONTROL BY FINE-TUNED CONVOLUTIONAL NEURAL NETWORK MODEL .....</b>                                                                                  | <b>1225</b> |
| <i>Ertugrul Bayraktar ; Cihat Bora Yigit ; Pinar Boyraz</i>                                                                                                        |             |
| <b>MOTION DEBLURRING UTILIZING THE VARIABLE SPEED EGOMOTION OF CAMERA AND COMPARISON BASED ON CORNER FEATURE POINTS .....</b>                                      | <b>1229</b> |
| <i>Gökhan Koray Gültekin ; Afsar Saranlı</i>                                                                                                                       |             |
| <b>VIDEO ACTION CLASSIFICATION BY DEEP LEARNING.....</b>                                                                                                           | <b>1233</b> |
| <i>Esra Ergün ; Filiz Gürkan ; Onur Kaplan ; Bilge Günsel</i>                                                                                                      |             |
| <b>LEARNING TRAFFIC CONGESTION BY CONTEXTUAL BANDIT PROBLEMS FOR OPTIMUM LOCALIZATION.....</b>                                                                     | <b>1237</b> |
| <i>Ümitcan Sahin ; Veysel Yücesoy ; Aykut Koç ; Cem Tekin</i>                                                                                                      |             |
| <b>REGISTRATION AND OPTIMIZATION IN ENTROPIC GRAPHS USING BRANCH SKELETON FEATURES.....</b>                                                                        | <b>1241</b> |
| <i>Asli Ergün ; Serkan Ergun ; Mehmet Zübeyir Ünlü ; Cengiz Güngör</i>                                                                                             |             |
| <b>EXPERT ADVICE ENSEMBLE FOR THYROID DISEASE DIAGNOSIS .....</b>                                                                                                  | <b>1245</b> |
| <i>Muhammad Anjum Qureshi ; Kubilay Eksioğlu</i>                                                                                                                   |             |
| <b>CLASSIFICATION OF EFFECTS OF DRUG COMBINATIONS WITH SUPPORT VECTOR MACHINES .....</b>                                                                           | <b>1249</b> |
| <i>Ali Cüvitoglu ; Zerrin Isik</i>                                                                                                                                 |             |
| <b>THE USE OF LOW-BIT DEPTH APPROACHES FOR BAND ORDERING IN HYPERSPECTRAL IMAGE COMPRESSION.....</b>                                                               | <b>1253</b> |
| <i>Ali Can Karaca ; Mehmet Kemal Güllü</i>                                                                                                                         |             |
| <b>DEEP LEARNING BASED SKIN CANCER DIAGNOSIS .....</b>                                                                                                             | <b>1257</b> |
| <i>Alper Arık ; Mesut Gölcük ; Elif Mine Karsligil</i>                                                                                                             |             |
| <b>A FAST APPROACH FOR ADAPTIVE CONVENTIONAL RECURSIVE LEAST-SQUARES PREDICTOR IN LOSSLESS COMPRESSION OF HYPERSPECTRAL IMAGES .....</b>                           | <b>1261</b> |
| <i>Ali Can Karaca ; Mehmet Kemal Güllü</i>                                                                                                                         |             |
| <b>SIGNATURE RECOGNITION APPLICATION BASED ON DEEP LEARNING.....</b>                                                                                               | <b>1265</b> |
| <i>Nurullah Çalik ; Onur Can Kurban ; Ali Riza Yılmaz ; Lütfiye Durak Ata ; Tülay Yıldırım</i>                                                                     |             |
| <b>PARALLELIZATION OF SPARSITY-DRIVEN CHANGE DETECTION METHOD .....</b>                                                                                            | <b>1269</b> |
| <i>Atilla Özgür ; Ayse Nurdan Saran ; Fatih Nar</i>                                                                                                                |             |
| <b>A FAST AND ROBUST AUTOMATIC OBJECT DETECTION ALGORITHM TO DETECT SMALL OBJECTS IN INFRARED IMAGES.....</b>                                                      | <b>1273</b> |
| <i>Muhammet Özbay ; Mehmet Cihan Sahingil</i>                                                                                                                      |             |
| <b>DEEP LEARNING BASED ESTIMATION OF THE EYE PUPIL CENTER BY USING IMAGE PATCH CLASSIFICATION .....</b>                                                            | <b>1277</b> |
| <i>Necmeddin Said Karakoç ; Samil Karahan ; Yusuf Sinan Akgül</i>                                                                                                  |             |
| <b>UNATTENDED OBJECT DETECTION BASED ON BLOB TRACKING .....</b>                                                                                                    | <b>1281</b> |
| <i>Murat Peker</i>                                                                                                                                                 |             |
| <b>SEGMENTATION OF PRECURSOR LESIONS IN CERVICAL CANCER USING CONVOLUTIONAL NEURAL NETWORKS .....</b>                                                              | <b>1285</b> |
| <i>Abdülkadir Albayrak ; Asli Ünlü ; Nurullah Çalik ; Gökhan Bilgin ; Ilknur Türkmen ; Asli Çakir ; Abdulkерim Çapar ; Behçet Uğur Töreşin ; Lütfiye Durak Ata</i> |             |
| <b>DERIVATION OF OUTAGE PROBABILITY FOR DF IDMA SYSTEMS WITH BEST RELAY SELECTION OVER RAYLEIGH/WEIBULL CHANNELS .....</b>                                         | <b>1289</b> |
| <i>Mehmet Bilim ; Nuri Kapucu ; Ibrahim Develi</i>                                                                                                                 |             |
| <b>OUTAGE PROBABILITY OF AF DS-CDMA SYSTEMS USING FULL SELECTION DIVERSITY OVER <math>\alpha</math>-<math>\eta</math>-<math>\mu</math> FADING CHANNELS.....</b>    | <b>1293</b> |
| <i>Nuri Kapucu ; Mehmet Bilim ; Ibrahim Develi</i>                                                                                                                 |             |
| <b>SELECTIVE SAMPLING AND OTSU ALGORITHM BASED SPECTRUM SENSING IN COGNITIVE RADIO NETWORKS .....</b>                                                              | <b>1297</b> |
| <i>Mustafa Namdar ; Fatih Kocak ; Arif Basgumus</i>                                                                                                                |             |
| <b>PREDICTING FLIGHT DELAYS WITH ARTIFICIAL NEURAL NETWORKS: CASE STUDY OF AN AIRPORT .....</b>                                                                    | <b>1301</b> |
| <i>Engin Demir ; Vahap Burhan Demir</i>                                                                                                                            |             |
| <b>GENERATING WORD IMAGES USING DEEP GENERATIVE ADVERSARIAL NETWORKS .....</b>                                                                                     | <b>1305</b> |
| <i>Ceren Güzel Turhan ; Hasan Sakir Bilge</i>                                                                                                                      |             |
| <b>REALIZATION OF FIELD ESTIMATION WITH SENSORS DESIGNED USING LOW POWER AND LOW COST COMPONENTS.....</b>                                                          | <b>1309</b> |
| <i>Veysel Yaman Akgün ; Engin Masazade</i>                                                                                                                         |             |

|                                                                                                                               |             |
|-------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>WAVEFORM DESIGN PRIORITIES IN DIFFERENT WIRELESS COMMUNICATIONS SYSTEMS FOR 5G BEYOND .....</b>                            | <b>1313</b> |
| <i>Ahmet Yazar ; Hüseyin Arslan</i>                                                                                           |             |
| <b>IMPROVING TRACK INITIATION PERFORMANCE BY TRACK VALIDATION ALGORITHMS FOR MULTI-TARGET TRACKING IN HEAVY CLUTTER .....</b> | <b>1317</b> |
| <i>Hasan Hüseyin Sönmez ; Kübra Turgut ; Ali Köksal Hocaoglu</i>                                                              |             |
| <b>POINT BASED MOTION DETECTION ON UAV CAMERAS .....</b>                                                                      | <b>1321</b> |
| <i>Murat Bal ; Ismail Karakaya ; Emre Baseski</i>                                                                             |             |
| <b>COMPARISON OF FACE RECOGNITION ALGORITHMS.....</b>                                                                         | <b>1325</b> |
| <i>Tolga Ensari ; Melike Günay</i>                                                                                            |             |
| <b>PERFORMANCE OF MULTIPATH EXPLOITATION FOR ADAPTIVE TARGET DETECTION.....</b>                                               | <b>1329</b> |
| <i>Utku Kumbul ; Harun Taha Hayvaci</i>                                                                                       |             |
| <b>VESSEL SEGMENTATION IN ANGIOGRAPHY IMAGES WITH MULTI-SCALE FILTERS .....</b>                                               | <b>1333</b> |
| <i>Mehmet Emin Tenekeci ; Hüseyin Pehlivan ; Abdülkadir Gümüşçü ; Kerim Karadag</i>                                           |             |
| <b>GRAPH-BASED SEMI-SUPERVISED LEARNING WITH GPU ON SMALL SAMPLE SIZED HYPERSPECTRAL IMAGES .....</b>                         | <b>1337</b> |
| <i>M. Said Aydemir ; Gokhan Bilgin</i>                                                                                        |             |
| <b>A FAST AND OPTIMAL STATIC SEGMENT SCHEDULING METHOD FOR FLEXRAY V3.0 .....</b>                                             | <b>1341</b> |
| <i>Cumhur Çakmak ; Ece Güran Schmidt ; Klaus Werner Schmidt</i>                                                               |             |
| <b>SAR IMAGING OF MOVING TARGETS BY SUBAPERTURE BASED LOW-RANK AND SPARSE DECOMPOSITION .....</b>                             | <b>1345</b> |
| <i>Mubashar Yasin ; Müjdat Çetin ; Ahmed Shaharyar Khwaja</i>                                                                 |             |
| <b>IMPROVED LOAD DISTRIBUTION FOR CONTROLLER AREA NETWORK.....</b>                                                            | <b>1349</b> |
| <i>Ahmet Batur ; Klaus Werner Schmidt ; Ece Güran Schmidt</i>                                                                 |             |
| <b>A CONFIGURABLE CAN FD CONTROLLER: ARCHITECTURE AND IMPLEMENTATION .....</b>                                                | <b>1353</b> |
| <i>Mehmet Ertug Afsin ; Klaus Werner Schmidt ; Ece Güran Schmidt</i>                                                          |             |
| <b>AIR FLOW ESTIMATION VIA A WIENER FILTER APPROACH .....</b>                                                                 | <b>1357</b> |
| <i>Ilhan Yildirim ; Yasemin P. Kahya ; Ipek Sen</i>                                                                           |             |
| <b>AN ANALYSIS FOR THE USE OF COMPRESSED SENSING METHOD IN MICROWAVE IMAGING .....</b>                                        | <b>1361</b> |
| <i>Enes Yigit ; Mustafa Tekbas ; İlhami Ünal ; Sercan Erdogan ; Cafer Çalışkan</i>                                            |             |
| <b>SOBEL FILTER OPERATION IN IMAGE PROCESSING VIA STOCHASTIC ARITHMETIC-LOGIC UNIT DESIGN.....</b>                            | <b>1365</b> |
| <i>Sercan Aygün ; Mustafa Altun ; Ece Olcay Günes</i>                                                                         |             |
| <b>A COMMUNICATION ARCHITECTURE FOR INTELLIGENT TRANSPORTATION APPLICATIONS .....</b>                                         | <b>1369</b> |
| <i>Çagğatay Bağcı ; Ece Güran Schmidt</i>                                                                                     |             |
| <b>TAMPER LOCALIZATION OF THE MEDICAL IMAGES BASED ON FRAGILE WATERMARKING .....</b>                                          | <b>1373</b> |
| <i>Arda Üstübioglu ; Güzin Ulutas ; Beste Üstübioglu</i>                                                                      |             |
| <b>3B DENDRITIC SPINE SEGMENTATION USING NONPARAMETRIC SHAPE PRIORS.....</b>                                                  | <b>1377</b> |
| <i>Erdem Böcügöz ; Ertuğ Erdil ; A. Özgür Argunsah ; Devrim Ünay ; Müjdat Çetin</i>                                           |             |
| <b>REDUCED CORDIC BASED LOGARITHMIC CONVERTOR.....</b>                                                                        | <b>1381</b> |
| <i>Gülfem Helvacioğlu ; Ali Bugra Korucu Yasar Kemal Alp ; Cosku Kasnakoglu</i>                                               |             |
| <b>SLEEP APNEA DETECTION VIA SMART PHONES .....</b>                                                                           | <b>1385</b> |
| <i>Burçin Camci ; Ali Yavuz Kahveci ; Bert Arnrich ; Cem Ersoy</i>                                                            |             |
| <b>GRAFIK PROCESSOR ACCELERATED REAL TIME SOFTWARE DEFINED RADIO APPLICATIONS .....</b>                                       | <b>1389</b> |
| <i>Alparslan Fisne ; Adnan Özsoy</i>                                                                                          |             |
| <b>A SVM BASED SPEECH TO TEXT CONVERTER FOR TURKISH LANGUAGE .....</b>                                                        | <b>1393</b> |
| <i>Burak Tombaloglu ; Hamit Erdem</i>                                                                                         |             |
| <b>PROSTATE LOCALIZATION FROM ABDOMINAL ULTRASOUND IMAGES BY USING A TWO-LEVEL APPROACH .....</b>                             | <b>1397</b> |
| <i>Nur Banu Albayrak ; Ayşe Betül Oktay ; Yusuf Sinan Akgül</i>                                                               |             |
| <b>A SCALE-SPACE THEORY AND BAG-OF-FEATURES BASED TIME SERIES CLASSIFICATION METHOD.....</b>                                  | <b>1401</b> |
| <i>Tayip Altay ; Mustafa Gökçe Baydoğan</i>                                                                                   |             |
| <b>SEED TEXTURE CLASSIFICATION BY RANDOM FOREST AND NEURAL NETWORKS.....</b>                                                  | <b>1405</b> |
| <i>Sercan Aygün ; Hülya Yalçın ; Ece Olcay Günes</i>                                                                          |             |
| <b>DIAMOND-SHAPED MICROSTRIP PATCH ANTENNA WITH DEFECTED GROUND STRUCTURE .....</b>                                           | <b>1409</b> |
| <i>Ahmed Dherar Saleh Saif Shaif ; Sevdé Selçuk ; Gül Kabadayi ; Ömer Toraman ; S. Taha Imeci</i>                             |             |

|                                                                                                                                |             |
|--------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>A NEW MULTI-AGENT DECISION MAKING STRUCTURE AND APPLICATION TO MODEL-BASED FAULT DIAGNOSIS PROBLEM .....</b>                | <b>1413</b> |
| <i>M. Kemal Leblebicioglu ; Yasin Zengin ; Klaus Werner Schmidt</i>                                                            |             |
| <b>FUSION BASED RESOLUTION ENHANCEMENT IN HYPERSPECTRAL IMAGES.....</b>                                                        | <b>1417</b> |
| <i>Hasan Irmak ; Gözde Bozdagi Akar ; Seniha Esen Yüksel</i>                                                                   |             |
| <b>DETECTING ROOFTOPS IN 3D POINT CLOUDS FOR SOLAR MAPPING.....</b>                                                            | <b>1421</b> |
| <i>Hülya Yalçın ; M. Furkan Çelik ; Esra Erten</i>                                                                             |             |
| <b>TURKISH CUISINE: A BENCHMARK DATASET WITH TURKISH MEALS FOR FOOD RECOGNITION .....</b>                                      | <b>1425</b> |
| <i>Cem Güngör ; Fatih Baltacı ; Aykut Erdem ; Erkut Erdem</i>                                                                  |             |
| <b>BLOCK SIZE EFFECT ON IMAGE COMPRESSION USING SYMPES METHOD.....</b>                                                         | <b>1429</b> |
| <i>Behnoosh Meskoob ; Lida Kouhalvandi ; Binboga Siddik Yarman</i>                                                             |             |
| <b>DETECTION AND ESTIMATION OF DOWN SYNDROME GENES BY MACHINE LEARNING TECHNIQUES.....</b>                                     | <b>1433</b> |
| <i>Enes Çelik ; Hamza Osman Ilhan ; Ahmet Elbir</i>                                                                            |             |
| <b>OPTIMAL POWER ALLOCATION FOR DL NOMA SYSTEMS .....</b>                                                                      | <b>1437</b> |
| <i>Fatih Kara ; Ömer Faruk Gemici ; Ibrahim Hökelek ; Hakan Ali Çirpan</i>                                                     |             |
| <b>EFFECT OF NEARBY OBSTACLE REFLECTIONS ON TDOA BASED LOCALIZATION RESULTS FOR NARROWBAND SIGNALS.....</b>                    | <b>1441</b> |
| <i>Ali Osman Kalayci ; Eren Akdemir</i>                                                                                        |             |
| <b>A REVIEW ON REAL-TIME BIG DATA ANALYSIS IN REMOTE SENSING APPLICATIONS .....</b>                                            | <b>1445</b> |
| <i>Mustafa Kemal Pektürk ; Muhammet Ünal</i>                                                                                   |             |
| <b>FAULT TOLERANT DATA PLANE USING SDN .....</b>                                                                               | <b>1449</b> |
| <i>Baris Yamansavaşçılar ; Ahmet Cihat Baktir ; Atay Özgövde ; Cem Ersoy</i>                                                   |             |
| <b>VARIABLE PI CONTROLLED DC-DC CONVERTER ADAPTIVE TO VOLTAGE INPUT WITH FLICKER.....</b>                                      | <b>1453</b> |
| <i>Çağrı Altıntasi ; Özgül Salor</i>                                                                                           |             |
| <b>OBJECT DETECTION WITH CONVOLUTIONAL CONTEXT FEATURES.....</b>                                                               | <b>1457</b> |
| <i>Emre Can Kaya ; A. Aydın Alatan</i>                                                                                         |             |
| <b>BRAIN ACTIVITY CHARACTERIZATION BY ENTROPIC CLUSTERING OF EEG SIGNALS .....</b>                                             | <b>1461</b> |
| <i>Bilal Orkan Olcay ; Bilge Karaçalı ; Murat Özgören ; Çağdas Güdücü</i>                                                      |             |
| <b>A GRAPH FORM DATA STREAM CLUSTERING APPROACH BASED ON DIMENSION REDUCTION.....</b>                                          | <b>1465</b> |
| <i>Özge Makul ; Murat Ekinci</i>                                                                                               |             |
| <b>CLASSIFICATION OF INGESTION SOUNDS USING HILBERT-HUANG TRANSFORM .....</b>                                                  | <b>1469</b> |
| <i>M. A. Tugttekin Turan ; Engin Erzin</i>                                                                                     |             |
| <b>SECURITY ANALYSIS ON THE ADS-B TECHNOLOGY.....</b>                                                                          | <b>1473</b> |
| <i>Eren Kocaaga ; M. Oguzhan Külekci</i>                                                                                       |             |
| <b>PREDICTION OF WIND SPEED WITH NON-LINEAR AUTOREGRESSIVE (NAR) NEURAL NETWORKS.....</b>                                      | <b>1477</b> |
| <i>Seçkin Karasu ; Aytaç Altan ; Zehra Saraç ; Rifat Hacıoglu</i>                                                              |             |
| <b>SPATIAL-SPECTRAL ANALYSIS OF IONOSPHERIC TEC MAPS.....</b>                                                                  | <b>1481</b> |
| <i>Büsra Yılmaz ; Cenk Toker</i>                                                                                               |             |
| <b>BER ANALYSIS OF SM-MIMO SYSTEMS WITH MRC DETECTORS OVER WEIBULL FADING CHANNELS .....</b>                                   | <b>1485</b> |
| <i>Ayşe Elif Canbilen ; Seyfettin Sinan Gültekin ; Ibrahim Develi</i>                                                          |             |
| <b>A NEW SAMPLING METHOD FOR MASSIVE MIMO SYSTEMS.....</b>                                                                     | <b>1489</b> |
| <i>Ali Bulut Üçüncü ; Ali Özgür Yılmaz</i>                                                                                     |             |
| <b>CELL COUNTING AND RECOGNITION OF IMMUNOHISTOCHEMICALLY DYED SEMINIFEROUS TUBULES WITH FEED-FORWARD NEURAL NETWORK .....</b> | <b>1493</b> |
| <i>Zübeyr Aydemir ; Okan Erkıymaz ; Meryem Akpolat Ferah</i>                                                                   |             |
| <b>STOCK MARKET DIRECTION PREDICTION USING DEEP NEURAL NETWORKS .....</b>                                                      | <b>1497</b> |
| <i>Hakan Gunduz ; Zehra Cataltepe ; Yusuf Yaslan</i>                                                                           |             |
| <b>EMOTION RECOGNITION VIA AGENT-BASED MODELLING.....</b>                                                                      | <b>1501</b> |
| <i>Semiye Demircan ; Hımar Kahramanli</i>                                                                                      |             |
| <b>MULTI BAND PASS FILTER BASED ONE-BIT TRANSFORMS IN MOTION ESTIMATION.....</b>                                               | <b>1505</b> |
| <i>Orhan Akbulut ; Ramazan Duvar ; Ayhan Küçükmanisa ; Oguzhan Urhan</i>                                                       |             |
| <b>VIDEO CLASSIFICATION BASED ON CONVNET COLLABORATION AND FEATURE SELECTION .....</b>                                         | <b>1509</b> |
| <i>Emel Boyacı ; Mustafa Sert</i>                                                                                              |             |
| <b>A NEW OUTLIER DETECTION METHOD BASED ON ANTI-SPARSE REPRESENTATIONS.....</b>                                                | <b>1513</b> |
| <i>Metin Vural ; Peter Jung ; Slawomir Stanczak</i>                                                                            |             |

|                                                                                                                                  |             |
|----------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>EFFECT OF ANTI-SPARSE PRIOR ON PAPR PERFORMANCE ANALYSIS .....</b>                                                            | <b>1517</b> |
| <i>Metin Vural ; Peter Jung ; Slawomir Stanczak</i>                                                                              |             |
| <b>PASSIVE EDGE FILTER DESIGN USING ERBIUM-DOPED FIBER .....</b>                                                                 | <b>1521</b> |
| <i>Murat Yücel ; Onur Koyuncu</i>                                                                                                |             |
| <b>SENTIMENT ANALYSIS ON MICROBLOG DATA BASED ON WORD EMBEDDING AND FUSION TECHNIQUES.....</b>                                   | <b>1525</b> |
| <i>Ahmet Hayran ; Mustafa Sert</i>                                                                                               |             |
| <b>A MARKOV CHAIN MONTE CARLO BASED RIGID IMAGE REGISTRATION METHOD .....</b>                                                    | <b>1529</b> |
| <i>Navdar Karabulut ; Ertuğ Erdil ; Müjdat Çetin</i>                                                                             |             |
| <b>PERFORMING VIDEO ALIGNMENT BY USING DIFFERENT METHODS IN HUMAN COMPUTER INTERACTION EXPERIMENTS.....</b>                      | <b>1533</b> |
| <i>Leyla Garayli ; Mahiye Uluyagmur Öztürk ; Zehra Çataltepe</i>                                                                 |             |
| <b>REAL-TIME INSTANTANEOUS RADAR FREQUENCY MEASUREMENT FOR PULSE ON PULSE CONDITION.....</b>                                     | <b>1537</b> |
| <i>Ismail Emre Ortatli ; Adnan Orduyilmaz ; Ömer Özdi ; Mahmut Serin ; Abdullah Emin Gürel ; Alper Yıldırım ; Hamza Kurt</i>     |             |
| <b>APPLICATION OF STANDARD CMOS PHOTODIODES IN OPTICAL COMMUNICATION SYSTEMS .....</b>                                           | <b>1541</b> |
| <i>Berk Çamlı ; Arda Deniz Yalçinkaya ; Ali Emre Pusane ; Rifat Kisacik ; Muhittin Maç ; Murat Uysal ; Tunçer Baykas</i>         |             |
| <b>CLASSIFICATION OF BRAIN TISSUES AS LESION OR HEALTHY BY 3D CONVOLUTIONAL NEURAL NETWORKS.....</b>                             | <b>1545</b> |
| <i>Cem Yusuf Aydogdu ; Enes Albay ; Gözde Ünal</i>                                                                               |             |
| <b>DESIGN AND ANALYSIS OF A NOVEL FIBER OPTIC SENSING SYSTEM FOR PROCESS MONITORING OF COMPOSITE MATERIALS .....</b>             | <b>1549</b> |
| <i>Anil Yilmaz ; Osman Kartav ; Kivilcim Yüksel</i>                                                                              |             |
| <b>GENETIC ALGORITHM BASED RESOURCE ALLOCATION TECHNIQUE FOR VLC NETWORKS.....</b>                                               | <b>1553</b> |
| <i>Muhammet Selim Demir ; Ömer Faruk Gemici ; Murat Uysal</i>                                                                    |             |
| <b>HANDWRITTEN CHARACTER RECOGNITION USING EMPIRICAL MODE DECOMPOSITION APPLIED WRITING MOVEMENTS .....</b>                      | <b>1557</b> |
| <i>Esra Tunçer ; Bilal Orkan Olcay ; Mehmet Zübeyir Ünlü</i>                                                                     |             |
| <b>ROBUST FACE RECOGNITION UNDER ILLUMINATION VARIATION AND OCCLUSION (IN ENGLISH).....</b>                                      | <b>1561</b> |
| <i>Huda M. S. Algharib ; O. Serdar Gedik</i>                                                                                     |             |
| <b>DATA MONITORING SYSTEM FOR SOLAR PANELS WITH BLUETOOTH .....</b>                                                              | <b>1565</b> |
| <i>Burak Inner</i>                                                                                                               |             |
| <b>A FAST DETECTION METHOD FOR FRAME DUPLICATION FORGERY BASED ON CORRELATION .....</b>                                          | <b>1569</b> |
| <i>Beste Üstübioglu ; Güzin Ulutas ; V. Vasif Nabiyeve ; Mustafa Ulutas ; Arda Üstübioglu</i>                                    |             |
| <b>RADAR FINGERPRINT EXTRACTION VIA VARIATIONAL MODE DECOMPOSITION .....</b>                                                     | <b>1573</b> |
| <i>Gökhan Gok ; Yasar Kemal Alp ; Fatih Altıparmak</i>                                                                           |             |
| <b>IMAGE RECONSTRUCTION IN PHOTOACOUSTIC MICROSCOPY AND NOISE ANALYSIS.....</b>                                                  | <b>1577</b> |
| <i>Gökhan Güney ; Özlem Birgül ; Esra Aytaç-Kipergil ; Aytaç Demirkiran ; Nasire Uluç ; M. Burçin Ünlü</i>                       |             |
| <b>RADYOTERAPI UYGULAMALARI İÇİN OTOMATİK İRİS LOKALİZASYONU AUTOMATED İRİS LOCALIZATION FOR RADIOTHERAPY APPLICATIONS .....</b> | <b>1581</b> |
| <i>Melih Çavusculu ; Imam Samil Yetik ; Mete Yeginer</i>                                                                         |             |
| <b>APPLICATION OF PLSR WITH A COMPARISON OF MATLAB CLASSIFICATION LEARNER APP IN USING BCI .....</b>                             | <b>1585</b> |
| <i>Masoud Maleki ; Negin Manshouri ; Temel Kayıkcioglu</i>                                                                       |             |
| <b>HARVESTING SOLAR ENERGY FOR LIMITED-ENERGY PROBLEM IN WIRELESS SENSOR NETWORKS.....</b>                                       | <b>1589</b> |
| <i>Selahattin Kosunalp ; Ahmet Cihan</i>                                                                                         |             |
| <b>SMOKEWATCH: A SMARTWATCH SMOKING CESSATION ASSISTANT .....</b>                                                                | <b>1593</b> |
| <i>Ozgur Akyazi ; Sahin Batmaz ; Bilgin Kosucu ; Bert Arnrich</i>                                                                |             |
| <b>DETECTION OF SMOKING, GENDER AND STARVATION - SATIETY USING PHOTOPLETHYSMOGRAM SIGNALS.....</b>                               | <b>1597</b> |
| <i>Onur Erdem Korkmaz ; Önder Aydemir ; Mehmet Öztürk</i>                                                                        |             |
| <b>SUB-BAND EQUALIZATION OF MODULATED WIDEBAND CONVERTER FOR IMPROVED DYNAMIC RANGE PERFORMANCE .....</b>                        | <b>1601</b> |
| <i>Ali Bugra Korucu ; Yasar Kemal Alp ; Gökhan Gok ; Orhan Arikan</i>                                                            |             |

|                                                                                                                                       |      |
|---------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>ON COMPARISON OF DIFFERENT CLASSIFICATION TECHNIQUES FOR THE FINE-<br/>GRAINED RETAIL PRODUCT RECOGNITION PROBLEM.....</b>         | 1605 |
| <i>Osman Berk Satir ; Ipek Baz ; Ertunç Erdil ; Müjdat Çetin</i>                                                                      |      |
| <b>A SPECTRAL GRAPH BASED IMAGE CODING METHOD.....</b>                                                                                | 1609 |
| <i>Alt Can Yagan ; Mehmet Tankut Özgen</i>                                                                                            |      |
| <b>DESIGN OF FREQUENCY UPCONVERSION AND DOWNCONVERSION BLOCKS FOR 240<br/>GHZ COMMUNICATION SYSTEMS .....</b>                         | 1613 |
| <i>Özgün Ersoy ; A. Behzat Gahin ; Adem Çiçek ; M. Can Karakoç ; Enver Çavus ; Serdar Özyurt</i>                                      |      |
| <b>SEYIRCILER NEREYE BAKIYOR? WHERE ARE THE SPECTATORS GAZING AT? .....</b>                                                           | 1617 |
| <i>M. Elif Karşılıgil ; Furkan Kaynar</i>                                                                                             |      |
| <b>OPTIMAL FOCUSING WITH EXTENDED DEPTH OF FOCUS IN MICROSCOPIC SYSTEMS.....</b>                                                      | 1621 |
| <i>Hülya Dogan ; Elif Saykal ; Murat Ekinci ; Mustafa Emre Ercin ; Safak Ersöz</i>                                                    |      |
| <b>CONJUNCTION OF HEURISTIC ALGORITHMS WITH MULTIDIMENSIONAL SCALING FOR<br/>LOCALIZATION AT WIRELESS AD-HOC NETWORKS .....</b>       | 1625 |
| <i>O. Tolga Altinoz ; Ahmet Akbulut ; Tolga Numanoglu ; Güven Yenihayat ; Cagri Goken ; A. Egemen Yilmaz</i>                          |      |
| <b>A PHOTONIC-BASED SENSOR DATA DISTRIBUTION APPROACH FOR A REAL-TIME<br/>MULTI-PROCESSOR SYSTEM.....</b>                             | 1629 |
| <i>Hüseyin Temuçin ; Kayhan M. Imre</i>                                                                                               |      |
| <b>RETAIL PRODUCT RECOGNITION WITH A GRAPHICAL SHELF MODEL .....</b>                                                                  | 1633 |
| <i>Ipek Baz ; Erdem Yoruk ; Müjdat Çetin</i>                                                                                          |      |
| <b>LEVERAGING MULTIMODAL AND FEATURE SELECTION APPROACHES TO IMPROVE<br/>SLEEP APNEA CLASSIFICATION PERFORMANCE.....</b>              | 1637 |
| <i>Gökhan Memiş ; Mustafa Sert ; Adnan Yazici</i>                                                                                     |      |
| <b>REAL TIME MEASUREMENT OF MICRO CHANGES IN DINAMIC IMAGES .....</b>                                                                 | 1641 |
| <i>Orhan Kesemen ; Özge Tezel ; Eda Özkul ; Merve Kesim</i>                                                                           |      |
| <b>CONVERSION OF NUMBER EXPRESSIONS WITHIN NOISY TEXT INTO NUMERICAL<br/>REPRESENTATION .....</b>                                     | 1645 |
| <i>Gözde Gül Ssahin ; Erdem Emekligil ; Seçil Arslan ; Onur Aggin ; Gülsen Eryiggit</i>                                               |      |
| <b>A SPEAKER IDENTIFICATION PERFORMANCE COMPARISON BASED ON THE<br/>CLASSIFIER, THE COMPUTATION TIME AND THE NUMBER OF MFCC .....</b> | 1649 |
| <i>Zübeyir Özcan ; Temel Kayıkçıoğlu</i>                                                                                              |      |
| <b>USING DEEP MULTIPLE INSTANCE LEARNING FOR ACTION RECOGNITION IN STILL<br/>IMAGES.....</b>                                          | 1653 |
| <i>Çağdas Bas ; Cemil Zalluhoglu ; Nazlı İkizler-Cinbis</i>                                                                           |      |
| <b>TURKISH DOCUMENT CLASSIFICATION BASED ON WORD2VEC AND SVM CLASSIFIER .....</b>                                                     | 1657 |
| <i>Gürkan Sahin</i>                                                                                                                   |      |
| <b>THE EFFECT OF BANT SELECTION TO SUCCESS OF ARTIFICIAL NEURAL NETWORK IN<br/>HYPERSPECTRAL CLASSIFICATION .....</b>                 | 1661 |
| <i>Ismail Karakaya ; Yücel Çimtay</i>                                                                                                 |      |
| <b>REMOTE LEAK DETECTION FOR UNDERWATER NATURAL GAS PIPELINES.....</b>                                                                | 1665 |
| <i>Yigit Mahmutoglu ; Kadir Türk</i>                                                                                                  |      |
| <b>BIG DATA AND SMART CITY PLATFORMS .....</b>                                                                                        | 1669 |
| <i>Sema F. Oktug ; Yusuf Yaslan</i>                                                                                                   |      |
| <b>PERFORMANCE EVALUATION OF NETWORK STARTUP IN TSCH PROTOCOL .....</b>                                                               | 1673 |
| <i>Berk Ünlü ; Baver Özceylan ; Buyurman Baykal</i>                                                                                   |      |
| <b>A COMPARISON OF VALIDITY INDICES ON FUZZY C-MEANS CLUSTERING ALGORITHM<br/>FOR DIRECTIONAL DATA .....</b>                          | 1677 |
| <i>Orhan Kesemen ; Özge Tezel ; Eda Özkul ; Bugra Kaan Tiryaki ; Elçin Agayev</i>                                                     |      |
| <b>THE EFFECT OF CONTRAST ENHANCEMENT TECHNIQUES ON MUTUAL INFORMATION<br/>BASED IMAGE REGISTRATION .....</b>                         | 1681 |
| <i>Ibrahim Atli ; Ahmet Saraçoğlu ; O. Serdar Gedik</i>                                                                               |      |
| <b>HUMAN ACTIVITY RECOGNITION WITH DIFFERENT ARTIFICIAL NEURAL NETWORK<br/>BASED CLASSIFIERS.....</b>                                 | 1685 |
| <i>Burak Çatalbas ; Bahadır Çatalbas ; Ömer Morgül</i>                                                                                |      |
| <b>BAG OF FEATURE BASED CLASSIFICATION OF BONE FROM MR IMAGES.....</b>                                                                | 1689 |
| <i>Aysun Sezer ; Hasan Basri Sezer</i>                                                                                                |      |
| <b>GAIT ANALYSIS USING KINECT: TOWARDS IN-HOME GAIT ANALYSIS .....</b>                                                                | 1693 |
| <i>Nezihe Pehlivan ; Can Tunca ; Gülistü Salur ; Cem Ersoy</i>                                                                        |      |
| <b>COMPARISON OF CONVOLUTIONAL NEURAL NETWORK MODELS FOR DOCUMENT<br/>IMAGE CLASSIFICATION .....</b>                                  | 1697 |
| <i>Doggucan Yaman ; Fevziye Irem Eyiokur ; Hazim Kemal Ekenel</i>                                                                     |      |

|                                                                                                                          |             |
|--------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>DEEP NEURAL NETWORK BASED DIAGNOSIS SYSTEM FOR MELANOMA SKIN CANCER .....</b>                                         | <b>1701</b> |
| <i>Alper Bastürk ; Mehmet Emin Yüksel ; Hasan Badem ; Abdullah Çaliskan</i>                                              |             |
| <b>HUE-BASED SEGMENTATION OF COLOR IMAGES USING WEIGHTED DIRECTIONAL CLUSTERING ALGORITHMS .....</b>                     | <b>1705</b> |
| <i>Orhan Kesemen ; Eda Özkul ; Özge Tezel ; Bugra Kaan Tiryaki ; Soheila Vefaeinahr</i>                                  |             |
| <b>DESIGN AND PERFORMANCE ANALYSIS OF INFORMATION CENTRIC NETWORK FOR INTERNET OF THINGS .....</b>                       | <b>1709</b> |
| <i>Yeliz Yengi ; Sajjad A. Khan ; Kerem Küçük</i>                                                                        |             |
| <b>DEEP NEURAL NETWORK CLASSIFIER FOR HAND MOVEMENT PREDICTION .....</b>                                                 | <b>1713</b> |
| <i>Alper Bastürk ; Mehmet Emin Yüksel ; Abdullah Çaliskan ; Hasan Badem</i>                                              |             |
| <b>ULTRASONIC SIGNAL DELAY DETERMINATION FOR DISTANCE ESTIMATION IN UNDERWATER SPACE .....</b>                           | <b>1717</b> |
| <i>Tugba Özge Onur ; Rifat Hacıoglu</i>                                                                                  |             |
| <b>MOBILE MALWARE DETECTION USING DEEP NEURAL NETWORK .....</b>                                                          | <b>1721</b> |
| <i>İrfan Bulut ; A. Gökhan Yavuz</i>                                                                                     |             |
| <b>SUPERPIXEL APPROACH IN HIGH RESOLUTION HISTOPATHOLOGICAL IMAGE SEGMENTATION .....</b>                                 | <b>1725</b> |
| <i>Abdülkadir Albayrak ; Gökhan Bilgin</i>                                                                               |             |
| <b>A NEW IMAGE DENOISING METHOD BASED ON REGION GROWING SEGMENTATION .....</b>                                           | <b>1729</b> |
| <i>Elvan Duman ; O. Ayhan Erdem</i>                                                                                      |             |
| <b>REAL TIME SENDING AND MONITORING ELECTRONIC HEALTH RECORDS .....</b>                                                  | <b>1733</b> |
| <i>Ramazan Özgür Doğan ; Temel Kayıkçıoğlu ; Yavuz Yagci</i>                                                             |             |
| <b>TWO-WAY SPECTRUM SHARING PROTOCOL IN OVERLAY COGNITIVE RADIO NETWORK .....</b>                                        | <b>1737</b> |
| <i>Said Emam ; M. E. Çelebi</i>                                                                                          |             |
| <b>DIMENSION REDUCTION SELECTION FOR INCREASING NATURALNESS IN SPEECH SYNTHESIS .....</b>                                | <b>1741</b> |
| <i>Mehmet Ali Kutlugün ; Yahya Sirin</i>                                                                                 |             |
| <b>REAL-TIME DETECTION OF STUDENTS' EMOTIONAL STATES IN THE CLASSROOM .....</b>                                          | <b>1745</b> |
| <i>Uğur Ayvaz ; Hüseyin Gürüler</i>                                                                                      |             |
| <b>OBSERVING THE ENTROPY OF CROWD MOVEMENTS .....</b>                                                                    | <b>1749</b> |
| <i>Murat Akpulat ; Murat Ekinci</i>                                                                                      |             |
| <b>RULE BASED AUTOMATIC NEWS TAGGING .....</b>                                                                           | <b>1753</b> |
| <i>Berke Özenç ; Ercan Solak</i>                                                                                         |             |
| <b>ADJUSTING TRANSIENT ATTRIBUTES OF OUTDOOR IMAGES USING GENERATIVE ADVERSARIAL NETWORKS .....</b>                      | <b>1757</b> |
| <i>Levent Karacan ; Aykut Erdem ; Erkut Erdem</i>                                                                        |             |
| <b>ONLINE CLASSIFICATION WITH CONTEXTUAL EXPONENTIAL WEIGHTS FOR DISEASE DIAGNOSTICS .....</b>                           | <b>1761</b> |
| <i>Kubilay Eksioğlu ; Muhammad Anjum Qureshi ; Cem Tekin</i>                                                             |             |
| <b>INVESTIGATION OF AN APPROPRIATE FEATURE EXTRACTION METHODS BASED ON SINGLE CHANNEL LUNG SOUNDS .....</b>              | <b>1765</b> |
| <i>Selim Aras ; Mehmet Cinel ; Ali Gangal</i>                                                                            |             |
| <b>CMOS OPTICAL RECEIVER FOR LOW POWER BIOMEDICAL MICROSYSTEMS .....</b>                                                 | <b>1769</b> |
| <i>Asli Yelkenci ; Baykal Sarioglu</i>                                                                                   |             |
| <b>A COMPARISON OF LP-WAN TECHNOLOGIES: AN OVERVIEW FROM A MOBILE OPERATORS' PERSPECTIVE .....</b>                       | <b>1773</b> |
| <i>Gültekin Berahan Mermer ; Engin Zeydan</i>                                                                            |             |
| <b>ERROR BUDGETING FOR INERTIAL MEASUREMENT UNITS BASED ON SYSTEM SCENARIO AND NAVIGATION SPECIFICATIONS .....</b>       | <b>1777</b> |
| <i>Halil Ozan Ünsal ; Mehmet Erçin Özgeneci</i>                                                                          |             |
| <b>DETERMINATION AND SUMMARIZATION OF IMPORTANT TWEETS AFTER NATURAL DISASTERS .....</b>                                 | <b>1781</b> |
| <i>İlkin Hüseyinli ; M. Elif Karsligil</i>                                                                               |             |
| <b>PROBABILITY DISTRIBUTION OF REFRACTIVE INDEX STRUCTURE PARAMETER .....</b>                                            | <b>1785</b> |
| <i>İbrahim Yazar ; Yusuf E. Yenice ; Filiz Sari</i>                                                                      |             |
| <b>FASTER OMP COMPUTATIONS BY SENSING MATRIX COLUMN REDUCTION .....</b>                                                  | <b>1789</b> |
| <i>Fatih Çagatay Akyön ; Gökhan Gök ; Yasar Kemal Iip</i>                                                                |             |
| <b>FPGA IMPLEMENTATION OF REAL TIME VIDEO SIGNAL PROCESSING USING SOBEL, ROBERT, PREWITT AND LAPLACIAN FILTERS .....</b> | <b>1793</b> |
| <i>Emrah Onat</i>                                                                                                        |             |

|                                                                                                                                                 |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>A DEEP LEARNING BASED APPROACH FOR CLASSIFICATION OF CERBB2 TUMOR CELLS<br/>IN BREAST CANCER.....</b>                                        | 1797 |
| <i>Gözde A. Tataroglu ; Anil Genç ; Kaan A. Kabakçı ; Abdulkirim Çapar ; B. Ugur Töreyn ; Hazim K. Ekenel ;<br/>Ilknur Türkmen ; Asli Çakir</i> |      |
| <b>ESTIMATING DISTRIBUTIONS VARYING IN TIME IN A UNIVERSAL MANNER.....</b>                                                                      | 1801 |
| <i>Kaan Gökçesu ; Eren Manis ; Ali Emirhan Kurt ; Ersin Yar</i>                                                                                 |      |
| <b>EXPERIMENTAL STUDIES BASED ON CLASSIFICATION OF EXPLOSIVE AND NON-<br/>EXPLOSIVE LIQUIDS .....</b>                                           | 1805 |
| <i>Turgut Öztürk ; Aysun Sayinti ; İlhami Ünal</i>                                                                                              |      |
| <b>IDENTIFICATION OF BAD SOLAR POWER GENERATION DATA.....</b>                                                                                   | 1809 |
| <i>Deniz Sengül ; Erencan Duymaz ; Murat Göl</i>                                                                                                |      |
| <b>T-TEST FEATURE RANKING BASED 3D MR CLASSIFICATION WITH VBM MASK .....</b>                                                                    | 1813 |
| <i>Muhammet Üsame Özic ; Seral Özsen</i>                                                                                                        |      |
| <b>ANOMALY DETECTION USING IMPROVED BACKGROUND SUBTRACTION .....</b>                                                                            | 1817 |
| <i>Yunus Can Bilge ; Fikret Kaya ; Nazli İkizler Cinbis ; Ufuk Çelikcan ; Hayri Sever</i>                                                       |      |
| <b>REAL TIME PASSIVE DIRECTION FINDING IN FPGA ENVIRONMENT .....</b>                                                                            | 1821 |
| <i>Abdullah Emin Gürel ; Adnan Orduyilmaz ; Seçkin Anil Yildirim ; Gökhan Kara ; Mahmut Serin ; Ismail Emre<br/>Ortatatli ; Alper Yildirim</i>  |      |
| <b>EPILEPTIC SEIZURE PREDICTION WITH RECURRENT CONVOLUTIONAL NEURAL<br/>NETWORKS.....</b>                                                       | 1825 |
| <i>Ahmet Remzi Özcan ; Sarp Ertürk</i>                                                                                                          |      |
| <b>ONLINE ANOMALY DETECTION IN CASE OF LIMITED FEEDBACK WITH ACCURATE<br/>DISTRIBUTION LEARNING .....</b>                                       | 1829 |
| <i>Iman Marivani ; Dariush Kari ; Ali Emirhan Kurt ; Eren Manis</i>                                                                             |      |
| <b>CALCULATION OF VEGETATION INDEX FOR SHORT WAVE INFRARED<br/>HYPERSPETRAL IMAGES .....</b>                                                    | 1833 |
| <i>Büsra Özbay ; Yücel Çimtay ; Fatih Kandaz</i>                                                                                                |      |
| <b>A 3D FACIAL EXPRESSION RECOGNITION SYSTEM BASED ON SVM CLASSIFIER USING<br/>DISTANCE BASED FEATURES .....</b>                                | 1836 |
| <i>Ömer Faruk Söylemez ; Burhan Ergen ; Nesrin Hark Söylemez</i>                                                                                |      |
| <b>REAL-TIME AUDIOVISUAL LAUGHTER DETECTION.....</b>                                                                                            | 1839 |
| <i>B. Berker Türker ; Zana Buçinca ; M. Tevfik Sezgin ; Yücel Yemez ; Engin Erzin</i>                                                           |      |
| <b>COUPLED SHAPE PRIORS FOR DYNAMIC SEGMENTATION OF DENDRITIC SPINES .....</b>                                                                  | 1843 |
| <i>Naimeh Atabakilachini ; Ertunc Erdil ; A. Ozgur Argunsah ; Lavdie Rada ; Devrim Unay ; Mujdat Cetin</i>                                      |      |
| <b>HARDWARE FRIENDLY EARLY STOPPING STRUCTURE FOR POLAR CODE.....</b>                                                                           | 1847 |
| <i>Cemaleddin Simsek ; Cenk Albayrak ; Kadir Türk</i>                                                                                           |      |
| <b>SYNTHESIS OF FORMAL CONTROL STRATEGIES FOR TRAFFIC NETWORKS VIA<br/>PARTITIONING .....</b>                                                   | 1851 |
| <i>Kemal Cagri Bardakci ; Ebru Aydin Gol</i>                                                                                                    |      |
| <b>MULTITAB DIGITAL INSTANTANEOUS FREQUENCY MEASUREMENT RECEIVER.....</b>                                                                       | 1855 |
| <i>Seçkin Ami Yildinm ; Adnan Orduyilmaz ; Mahmut Serin ; Alper Yildmm</i>                                                                      |      |
| <b>AN ENERGY-EFFICIENT CAPACITATED MINIMUM SPANNING TREE ALGORITHM FOR<br/>TOPOLOGY CONTROL IN WIRELESS SENSOR NETWORKS .....</b>               | 1859 |
| <i>Mustafa Asçi ; Can Umut Ileri ; Orhan Dagdeviren</i>                                                                                         |      |
| <b>MOVIE RATING PREDICTION USING ENSEMBLE LEARNING AND MIXED TYPE<br/>ATTRIBUTES .....</b>                                                      | 1863 |
| <i>Aysegül Özkaya Eren ; Mustafa Sert</i>                                                                                                       |      |
| <b>CLASSIFICATION OF ADRENAL LESIONS BY BOUNDED PSO-NN .....</b>                                                                                | 1867 |
| <i>Hasan Koyuncu ; Rahime Ceylan</i>                                                                                                            |      |
| <b>A PROTOCOL FOR INTERNET OF THINGS : IETF 6TISCH.....</b>                                                                                     | 1871 |
| <i>Sedat Görmüs ; Ahmet Faruk Yavuz</i>                                                                                                         |      |
| <b>IMPLEMENTATION OF 1 -BIT TRANSFORM BASED MOTION ESTIMATION TO HEVC<br/>ENCODER .....</b>                                                     | 1875 |
| <i>Ramazan Duvar ; Ayhan Küçükmanisa ; Orhan Akbulut ; Aysun Tasyapi Çelebi ; Oguzhan Urhan</i>                                                 |      |
| <b>CLASSIFICATION OF MENTAL TASK EEG RECORDS USING HJORTH PARAMETERS .....</b>                                                                  | 1879 |
| <i>Ömer Türk ; Mesut Seker ; Veysi Akpolat ; Mehmet Siraç Özerdem</i>                                                                           |      |
| <b>THREE DIMENSIONAL SCENES AND OBJECT RECOGNITION.....</b>                                                                                     | 1883 |
| <i>Ali Köksal ; Furkan Eren Uzyildirim ; Mustafa Özuysal</i>                                                                                    |      |
| <b>A NOVEL APPROACH FOR IMPROVING PERFORMANCE OF TIME DOMAIN CHANNEL<br/>EQUALIZER EMPLOYED IN MULTI CARRIER COMMUNICATION SYSTEMS .....</b>    | 1887 |
| <i>Emre Ayduşlu ; Onur Dursun Tören ; Yücel Aydın ; Ali Özen</i>                                                                                |      |

|                                                                                                                                           |             |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>YAPAY YASAM SİMÜLASYONUNDA HAYATTA KALMAK SURVIVING IN ARTIFICIAL LIFE SIMULATION .....</b>                                            | <b>1891</b> |
| <i>Onur Baris Dev ; Reyhan Aydogan ; Erhan Öztop</i>                                                                                      |             |
| <b>A NOVEL SINGLE CARRIER FREQUENCY DOMAIN EQUALIZER BASED ON DISCRETE WAVELET TRANSFORM .....</b>                                        | <b>1895</b> |
| <i>Yücel Aydın ; Emre Ayduşlu ; Onur Dursun Tören ; Ali Özen</i>                                                                          |             |
| <b>GRAPH BASED AUTOMATIC DOCUMENT SUMMARIZATION WITH DIFFERENT SIMILARITY METHODS .....</b>                                               | <b>1899</b> |
| <i>Oğuz Kaynar ; Yunus Emre Isik ; Yasin Görmez</i>                                                                                       |             |
| <b>DC SHIFT BASED IMAGE RECONSTRUCTION FOR MAGNETIC PARTICLE IMAGING .....</b>                                                            | <b>1903</b> |
| <i>Damla Sarica ; Ömer Burak Demirel ; Emine Ülkü Saritas</i>                                                                             |             |
| <b>FACE FRONTALIZATION ENHANCED BY DEEP LEARNING .....</b>                                                                                | <b>1907</b> |
| <i>Anil Çelik ; Nafiz Arica</i>                                                                                                           |             |
| <b>NETWORK INTRUSION DETECTION USING MACHINE LEARNING ANOMALY DETECTION ALGORITHMS.....</b>                                               | <b>1911</b> |
| <i>M. Elif Karşilgil ; A. Gökhan Yavuz ; M. Amaç Güvensan ; Khadija Hanifi ; Hasan Bank</i>                                               |             |
| <b>UNDERWATER POSITION ESTIMATION FOR AN UNDERWATER VEHICLE USING UNSCENTED KALMAN FILTER.....</b>                                        | <b>1915</b> |
| <i>David Scaradozzi ; Luca Panebianco ; Nicolo Ciuccoli ; Silvia Zingaretti ; S. Murat Egi ; Corentin Altepe</i>                          |             |
| <b>SEMI-AUTOMATIC SEGMENTATION OF APICAL LESIONS IN CONE BEAM COMPUTED TOMOGRAPHY IMAGES .....</b>                                        | <b>1919</b> |
| <i>Ercüment Yılmaz ; Temel Kayıkçıoğlu ; Saadettin Kayıpmaz</i>                                                                           |             |
| <b>SPECTRUM SENSING PERFORMANCE WITH ADAPTIVE THRESHOLD IN MIMO COGNITIVE RADIO.....</b>                                                  | <b>1923</b> |
| <i>Abdülkadir Can Çakır ; Halil Yigit</i>                                                                                                 |             |
| <b>ON EXPLOITING SPATIAL CORRELATION FOR ENERGY HARVESTING WIRELESS SENSOR NETWORKS.....</b>                                              | <b>1927</b> |
| <i>Ali Al-Qamaji ; Baris Atakan</i>                                                                                                       |             |
| <b>GRAPH MINING APPROACH FOR MODELING ACADEMIC SUCCESS .....</b>                                                                          | <b>1931</b> |
| <i>Basak Buluz ; Burcu Yılmaz</i>                                                                                                         |             |
| <b>CLASSIFICATION OF EEG SIGNALS CAUSED BY IMAGINING HAND MOVEMENTS .....</b>                                                             | <b>1935</b> |
| <i>Yavuz Kablan ; Ümit Özsandıkçıoğlu ; Ayten Atasoy</i>                                                                                  |             |
| <b>A NEW WEIGHTING ALGORITHM FOR COLLABORATIVE FILTERING .....</b>                                                                        | <b>1939</b> |
| <i>Tasnim Zayet ; M. Elif Karşilgil</i>                                                                                                   |             |
| <b>MODELING CONGESTION OF VESSEL ON RECTANGULAR MICROSTRIP ANTENNA AND EVALUATING ELECTROMAGNETIC SIGNALS .....</b>                       | <b>1943</b> |
| <i>Rabia Top ; S. Sinan Gültekin ; Dilek Uzer</i>                                                                                         |             |
| <b>A NOVEL COMBINATION METHODOLOGY FOR DEMPSTER-SHAFER THEORY .....</b>                                                                   | <b>1947</b> |
| <i>Hasan İhsan Turhan ; Mübeccel Demirekler</i>                                                                                           |             |
| <b>COMPARISON OF QMF BANK DESIGNS IN FREQUENCY AND TIME DOMAIN USING ABC ALGORITHM .....</b>                                              | <b>1951</b> |
| <i>Türker Koza ; Nurhan Karaboga</i>                                                                                                      |             |
| <b>A NOVEL WALSH HADAMARD BASED APPROACH FOR IMPROVING PERFORMANCE OF ZERO TAIL OFDM SYSTEMS.....</b>                                     | <b>1955</b> |
| <i>Onur Dursun Tören ; Emre Ayduşlu ; Yücel Aydın ; Ali Özen</i>                                                                          |             |
| <b>STATISTICAL ANALYSIS OF RESIDUE SIGNAL FOR BACKWARD COMPATIBLE HDR IMAGE CODING.....</b>                                               | <b>1959</b> |
| <i>Kutan Feyiz ; Fatih Kamisli ; Emin Zerman ; Giuseppe Valenzise ; Alper Koz ; Frederic Dufaux</i>                                       |             |
| <b>MULTI CHANNEL BRAIN EEG SIGNALS BASED EMOTIONAL AROUSAL CLASSIFICATION WITH UNSUPERVISED FEATURE LEARNING USING AUTOENCODERS .....</b> | <b>1963</b> |
| <i>Deger Ayata ; Yusuf Yaslan ; Mustafa Kamasak</i>                                                                                       |             |
| <b>FOREIGN OBJECT DETECTION ON AIRPORT RUNWAYS BY MM-WAVE FMCW RADAR.....</b>                                                             | <b>1967</b> |
| <i>Bahar Özlen ; Süleyman Baykut ; Okyanus Tulgar ; Ahmet U. Belgül ; İlhan K. Yalçın ; Demet S. Armagan Sahinkaya</i>                    |             |
| <b>VISUAL BASED PATH PLANNING WITH ADAPTIVE ARTIFICIAL POTENTIAL FIELD .....</b>                                                          | <b>1971</b> |
| <i>Emrah Dönmez ; Adnan Fatih Kocamaz ; Mahmut Dirik</i>                                                                                  |             |
| <b>ODAKLANAN NÖRON FOCUSING NEURON .....</b>                                                                                              | <b>1975</b> |
| <i>İlker Çam ; F. Boray Tek</i>                                                                                                           |             |
| <b>REAL TIME KALMAN FILTER IMPLEMENTATION ON FPGA ENVIRONMENT .....</b>                                                                   | <b>1979</b> |
| <i>Gökhan Kara ; Adnan Orduyılmaz ; Mahmut Serin ; Alper Yıldırım</i>                                                                     |             |
| <b>PERFORMANCE ANALYSIS OF PANSHARPENING ALGORITHMS FOR RASAT IMAGES.....</b>                                                             | <b>1983</b> |
| <i>Sevcan Kahraman ; Alp Ertürk</i>                                                                                                       |             |

|                                                                                                                                     |             |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>DEVELOPMENT OF AUTOMATED LASER SCANNING SYSTEM FOR STRUCTURAL HEALTH MONITORING OF WIND TURBINES .....</b>                       | <b>1987</b> |
| <i>A. Ugur Dilek ; Ali D. Oguz ; Y. Daghan Gokdel ; Muammer Ozbek</i>                                                               |             |
| <b>ENSEMBLE CLUSTERING SELECTION BY OPTIMIZATION OF ACCURACY-DIVERSITY TRADE OFF .....</b>                                          | <b>1991</b> |
| <i>Buse Çisil Otar ; Süreyya Akyüz</i>                                                                                              |             |
| <b>DISTANCE INDEPENDENT WEIGHT ESTIMATION OF EGGS FROM IMAGES USING ARTIFICIAL NEURAL NETWORKS .....</b>                            | <b>1995</b> |
| <i>Ünsal Burak Salvarci ; Umut Engin Ayten</i>                                                                                      |             |
| <b>COULD WE CREATE A TRAINING SET FOR IMAGE CAPTIONING USING AUTOMATIC TRANSLATION? .....</b>                                       | <b>1999</b> |
| <i>Nermin Samet ; Samet Hiçsönmez ; Pinar Duygulu ; Emre Akbas</i>                                                                  |             |
| <b>A SCORE FOR DIRECTIONAL DOMINANCE IN IMAGES .....</b>                                                                            | <b>2003</b> |
| <i>Bilge S. Akkoca Gazioglu ; Mustafa Kamasak</i>                                                                                   |             |
| <b>CLASSIFICATION OF MODERN ART MOVEMENTS WITH COMPUTATIONAL METHODS: INITIAL RESULTS .....</b>                                     | <b>2007</b> |
| <i>O. Tolga Altinöz ; Meltem Özkan Altinöz</i>                                                                                      |             |
| <b>NOTE RECOGNITION-BASED MOBILE APPLICATION FOR GUITAR TRAINING .....</b>                                                          | <b>2011</b> |
| <i>Meriç Turan ; Çagğatay Demirel ; Gökhan Ince</i>                                                                                 |             |
| <b>AUTOMATED REMOVAL OF GAUSSIAN NOISE IN COLOR IMAGES .....</b>                                                                    | <b>2015</b> |
| <i>Ahmet Ulu ; Bekir Dizdaroglu</i>                                                                                                 |             |
| <b>FACIAL EMOTION CLASSIFICATION USING DEEP EMBEDDING WITH TRIPLET LOSS FUNCTION.....</b>                                           | <b>2019</b> |
| <i>Cenk Bircanoglu ; Nafiz Arica</i>                                                                                                |             |
| <b>STATIC PATH PLANNING BASED ON VISUAL SERVOING VIA FUZZY LOGIC .....</b>                                                          | <b>2023</b> |
| <i>Mahmut Dirik ; Adnan Fatih Kocamaz ; Emrah Dönmez</i>                                                                            |             |
| <b>A HORN ANTENNA ARRAY DESIGN TO DESTROY CANCEROUS TISSUES BY NON-DESTRUCTIVE HYPERTHERMIA .....</b>                               | <b>2027</b> |
| <i>Mehmet Ünal ; Ahmet Serdar Türk ; Ahmet Kizilay</i>                                                                              |             |
| <b>FACIAL EXPRESSION PAIR MATCHING .....</b>                                                                                        | <b>2031</b> |
| <i>Deniz Engin ; Hazim Kemal Ekenel ; Bilgisayar Mühendisligi Bölümü</i>                                                            |             |
| <b>CELLS CLASSIFICATION WITH DEEP LEARNING .....</b>                                                                                | <b>2035</b> |
| <i>Aysun Sezer ; Ugur Çekmez</i>                                                                                                    |             |
| <b>EXPLOITING TEXTURE INFORMATION IN DIAGNOSING GLAUCOMA .....</b>                                                                  | <b>2039</b> |
| <i>E. T. Gormus ; N. Anantrasirichai ; M. Bundy ; I. Erchova ; N. White ; J. Fergusson ; J. Morgan ; L. B. Nicholson ; A. Achim</i> |             |
| <b>OBSERVATION OF THE EFFECT OF THE INCREASE IN LUMINANCE LEVEL ON EMOTIONAL ASSESSMENT IN EEG RECORDS USING WELCH METHOD .....</b> | <b>2043</b> |
| <i>Kübra Eroglu ; Pinar Kurt ; Onur Osman ; Temel Kayikçioglu</i>                                                                   |             |
| <b>A NEW FREQUENCY BASED DATA ASSOCIATION METHOD.....</b>                                                                           | <b>2047</b> |
| <i>Yilmaz Kalkan</i>                                                                                                                |             |
| <b>HYBRID-SENSOR HIGH-RESOLUTION LIGHT FIELD IMAGING .....</b>                                                                      | <b>2051</b> |
| <i>M. Umair Mukati ; Bahadır K. Gunturk</i>                                                                                         |             |
| <b>PERFORMANCE ANALYSIS OF SIGNAL SPACE DIVERSITY WITH TRANSMIT ANTENNA SELECTION AND MAXIMAL RATIO COMBINING .....</b>             | <b>2055</b> |
| <i>Serdar Özyurt ; Oguz Kucur</i>                                                                                                   |             |
| <b>MODELING OF AN ACTIVE SUSPENSION SYSTEM OF A QUARTER CAR MODEL VIA PARAMETRIC SYSTEM IDENTIFICATION METHODS .....</b>            | <b>2059</b> |
| <i>Bans Bidikli</i>                                                                                                                 |             |
| <b>USING CONVOLUTIONAL NEURAL NETWORKS FOR PLANT CLASSIFICATION .....</b>                                                           | <b>2063</b> |
| <i>Salar Razavi ; Hulya Yalcin</i>                                                                                                  |             |
| <b>ONLINE GENERATION OF TANGO CHOREOGRAPHY USING TEMPO ESTIMATION .....</b>                                                         | <b>2067</b> |
| <i>Anil Özen ; Umut Yazgan ; Sanem Sariel ; Gökhan Ince</i>                                                                         |             |
| <b>A TANGIBLE USER INTERFACE FOR AIR DRUM GAME .....</b>                                                                            | <b>2071</b> |
| <i>Fahrettin Ay ; Ilkan Engin ; Gökhan Ince</i>                                                                                     |             |
| <b>HAPTIC SEAT INTERFACE DESIGN FOR IMPROVED USER EXPERIENCE .....</b>                                                              | <b>2075</b> |
| <i>Ege Çağlar ; Selman Orhan ; Anil Özen ; Gökhan Ince</i>                                                                          |             |
| <b>SHOULDER LESION CLASSIFICATION USING SHAPE AND TEXTURE FEATURES VIA COMPOSITE KERNEL .....</b>                                   | <b>2079</b> |
| <i>Aysun Sezer ; Ibrahim Onur Sigirci ; Hasan Basri Sezer</i>                                                                       |             |

|                                                                                                                                                |             |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>SEQUENTIAL CHURN PREDICTION AND ANALYSIS OF CELLULAR NETWORK USERS —<br/>A MULTI-CLASS, MULTI-LABEL PERSPECTIVE .....</b>                   | <b>2083</b> |
| <i>Farhan Khan ; Suleyman S. Kozat</i>                                                                                                         |             |
| <b>HIGH DYNAMIC RANGE IMAGING USING A PLENOPTIC CAMERA.....</b>                                                                                | <b>2087</b> |
| <i>Abdul Wahab ; Muhammad Zeshan Alam ; Bahadır K. Gunturk</i>                                                                                 |             |
| <b>A NEW MODELING APPROACH FOR RELIEF AND EMBOSS .....</b>                                                                                     | <b>2091</b> |
| <i>Yusuf Buyruk ; Gülen Çağdas</i>                                                                                                             |             |
| <b>PAN-SHARPENING BASED ON SPARSE REPRESENTATION .....</b>                                                                                     | <b>2095</b> |
| <i>Selen Ayas ; Esra Tunç Görmüş ; Murat Ekinci</i>                                                                                            |             |
| <b>SCENE TEXT DATASET IN TURKISH.....</b>                                                                                                      | <b>2099</b> |
| <i>Nesli Erdogmus</i>                                                                                                                          |             |
| <b>IOT BASED SMART OFFICE APPLICATION FOR ADVANCED INDOOR WORKING<br/>ENVIRONMENT AND ENERGY EFFICIENCY .....</b>                              | <b>2103</b> |
| <i>Arda Cankat Bati ; Ercan Coskun ; Ömer Gözüaçık ; Giray Ilhan ; Fatih Alperen Sahin ; Uygur Uncuoglu ; Murat<br/>Alp Güngen ; Ali Telli</i> |             |
| <b>ENERGY HARVESTING COOPERATIVE MULTIPLE ACCESS UNDER ENERGY STORAGE<br/>LOSSES .....</b>                                                     | <b>2107</b> |
| <i>Nugman Su ; Onur Kaya ; Mutlu Koca</i>                                                                                                      |             |
| <b>DWT BASED OFDM WITH DAPSK MODULATION FOR POWER LINE COMMUNICATION<br/>SYSTEMS .....</b>                                                     | <b>2111</b> |
| <i>Yesim Hekim Tanç ; Aydin Akan</i>                                                                                                           |             |
| <b>A NEW APPROACH IN BORDER SECURITY APPLICATIONS WITH EEG BIOMETRICS.....</b>                                                                 | <b>2115</b> |
| <i>Furkan Tektas ; Seyma Yücer ; Alper Kanak</i>                                                                                               |             |
| <b>MACHINE LEARNING BASED INTERACTIVE DRAWING PLATFORM.....</b>                                                                                | <b>2119</b> |
| <i>Oguz Emre Kural ; Erdal Kiliç</i>                                                                                                           |             |
| <b>BUSY TONE BASED POWER CONTROL FOR COORDINATION OF IEEE 802.11AF AND 802.22<br/>SYSTEM.....</b>                                              | <b>2123</b> |
| <i>Oguz Ülgen ; Serhat Erküçük ; Onur Karatalay ; Tunçer Baykas</i>                                                                            |             |
| <b>INVESTIGATION OF ASSOCIATION ESTIMATORS IN NETWORK INFERENCE<br/>ALGORITHMS ON BREAST CANCER PROTEOMIC DATA.....</b>                        | <b>2127</b> |
| <i>Cihat Erdogan ; Zeyneb Kurt ; Banu Diri</i>                                                                                                 |             |
| <b>ON THE EFFECTS OF MOBILE TRANSMITTER AND RECEIVER ON THE PERFORMANCE<br/>OF MOLECULAR COMMUNICATIONS SYSTEM .....</b>                       | <b>2131</b> |
| <i>Mustafa Can Gürsoy ; Bayram Cevdet Akdeniz ; Ali Emre Pusane ; Tuna Tugcu</i>                                                               |             |
| <b>COMPARING RESOURCE SHARING METHODS FOR DEVICE-TO-DEVICE<br/>COMMUNICATION IN CELLULAR NETWORKS.....</b>                                     | <b>2135</b> |
| <i>Yasemin Mingan ; Bilge Kartal Çetin</i>                                                                                                     |             |
| <b>AUTOMATIC IMAGE SELECTION FROM IMAGES WITH SIMILAR CONTENTS.....</b>                                                                        | <b>2139</b> |
| <i>Batuhan Bardak ; M. Fatih Demirci</i>                                                                                                       |             |
| <b>USAGE OF MINIMUM NORM AND WIENER FILTER METHODS IN THE REDUCTION OF IN-<br/>BAND INTERFERENCE .....</b>                                     | <b>2143</b> |
| <i>Seda Üstün Ercan ; Hülya Gökalt</i>                                                                                                         |             |
| <b>REMOVAL OF OCULAR ARTIFACTS IN EEG SIGNALS MEASURED IN A<br/>NEUROECONOMICS EXPERIMENT .....</b>                                            | <b>2146</b> |
| <i>Mehmet Emin Kazanç ; Yasemin Kahya ; Seda Ertaç ; Burak Güçlü</i>                                                                           |             |
| <b>FLARE SIGNATURE ANALYSIS IN INFRARED BAND.....</b>                                                                                          | <b>2150</b> |
| <i>Umut Kayikci ; Emrah Oduncu ; Mustafa Sivasligil ; Berat Aytaç</i>                                                                          |             |
| <b>REHABILITATION APPLICATIONS USING BRAIN INSPIRED COGNITIVE ARCHITECTURE<br/>FOR HUMANOID ROBOTS .....</b>                                   | <b>2154</b> |
| <i>Evren Daglarli ; Hatice Köse ; Gülay Öke Günel</i>                                                                                          |             |
| <b>PERSONALITY IDENTIFICATION BY DEEP LEARNING .....</b>                                                                                       | <b>2158</b> |
| <i>Evren Daglarli ; Erke Aribas</i>                                                                                                            |             |
| <b>EFFECT OF NOISE AND NUMBER OF SENSORS ON EEG SOURCE LOCALIZATION IN<br/>DIPOLE FITTING METHOD .....</b>                                     | <b>2162</b> |
| <i>Mustafa Yazici ; Mustafa Ulutas</i>                                                                                                         |             |
| <b>NOISE ELIMINATION AND FINDING R PEAKS OF ECG SIGNAL BY USING DISCRETE<br/>STATIONARY WAVELET TRANSFORM.....</b>                             | <b>2166</b> |
| <i>Nuray Küçükğöz ; Nurhan Karaboga</i>                                                                                                        |             |
| <b>SUCCESSIVE INTERFERENCE CANCELLATION IN DEVICE-TO-DEVICE<br/>COMMUNICATIONS .....</b>                                                       | <b>2170</b> |
| <i>Gökhan Kiliç ; Tolga Girici</i>                                                                                                             |             |

|                                                                                                                                                     |             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>TRAFFIC DENSITY ANALYSIS USING TRAFFIC CAMERA IMAGES .....</b>                                                                                   | <b>2174</b> |
| <i>Anil Atvar ; Yusuf Oguzhan Artan ; Safak Öztürk</i>                                                                                              |             |
| <b>RESOURCE-EFFICIENT PERCEPTRON HAS SPARSE SYNAPTIC WEIGHT DISTRIBUTION .....</b>                                                                  | <b>2178</b> |
| <i>Cengiz Pehlevan ; Anirvan Sengupta</i>                                                                                                           |             |
| <b>THE INFERENCE OF GENE CO-EXPRESSION NETWORKS OF BREAST AND COLON<br/>CANCER USING MIRNA-TARGET GENE INTERACTIONS DATA .....</b>                  | <b>2182</b> |
| <i>Mustafa Özgür Cingiz ; Banu Diri</i>                                                                                                             |             |
| <b>VOICE CLOUD PLATFORM FOR MEDICAL APPLICATIONS .....</b>                                                                                          | <b>2186</b> |
| <i>Hasan Can Aydan ; Meral Korkmaz ; Beyza Çizmeçi ; İsmail Koçak ; Nilüfer Egrican ; Gökhan İnce</i>                                               |             |
| <b>A METHOD FOR REGION SELECTION IN SPECTRAL SIGNATURES FOR GAS DETECTION .....</b>                                                                 | <b>2190</b> |
| <i>Safak Öztürk ; Yunus Emre Esin ; Yusuf Oguzhan Artan ; Anil Atvar</i>                                                                            |             |
| <b>FUSION OF HYPERSPECTRAL AND MULTISPECTRAL IMAGES USING GENERAL AND<br/>LOCAL SPECTRAL FEATURES.....</b>                                          | <b>2194</b> |
| <i>Davut Çesmeçi ; M. Kemal Güllü</i>                                                                                                               |             |
| <b>FPGA BASED MOVING OBJECTS CONTROLLER USING REMOTE DISTANCE SENSORS .....</b>                                                                     | <b>2198</b> |
| <i>Oguzhan Kemal Gültekin ; Hakan Erdöl ; Mehmet Ali Çavuşlu</i>                                                                                    |             |
| <b>EFFECTS OF SYNAPTIC TIME DELAY ON VIBRATIONAL RESONANCE IN NEURONAL<br/>NETWORKS.....</b>                                                        | <b>2201</b> |
| <i>Sükrüye Nihal Agaoglu ; Mahmut Özer ; Ali Çalim ; Muhammet Uzuntarla</i>                                                                         |             |
| <b>REALTIME OBJECT DETECTION IN IOT (INTERNET OF THINGS) DEVICES.....</b>                                                                           | <b>2205</b> |
| <i>Erke Aribas ; Evren Daglarlı</i>                                                                                                                 |             |
| <b>EFFECTS OF SUBTHRESHOLD EXCITATION CHARACTERISTICS ON VIBRATIONAL<br/>RESONANCE IN WEIGHTED SCALE-FREE NETWORK .....</b>                         | <b>2209</b> |
| <i>Sükrüye Nihal Agaoglu ; Mahmut Özer ; Ali Çalim ; Muhammet Uzuntarla</i>                                                                         |             |
| <b>AN ONTOLOGY-BASED INTEGRATION APPROACH FOR MEDICAL INFORMATION<br/>STANDARDS.....</b>                                                            | <b>2213</b> |
| <i>Emine Sezer ; Özgü Can ; Murat Osman Ünalir ; Okan Bursa</i>                                                                                     |             |
| <b>STANDALONE AND COMPACT HYPERSPECTRAL CAMERA DESIGN.....</b>                                                                                      | <b>2217</b> |
| <i>Onur Haliloglu ; Mustafa Sancay Kirik</i>                                                                                                        |             |
| <b>MUSIC GENRE CLASSIFICATION WITH MACHINE LEARNING TECHNIQUES .....</b>                                                                            | <b>2221</b> |
| <i>Ali Karatana ; Oktay Yıldız</i>                                                                                                                  |             |
| <b>COMPARISON OF COLLABORATIVE DEEP LEARNING AND NONNEGATIVE MATRIX<br/>FACTORIZATION FOR RECOMMENDER SYSTEMS.....</b>                              | <b>2225</b> |
| <i>Mine Öggretir ; Ali Taylan Cemgil</i>                                                                                                            |             |
| <b>UNDERSTANDING A CITY FROM ITS VISUALS: AN INTERDISCIPLINARY PROGRAM<br/>PROPOSAL .....</b>                                                       | <b>2229</b> |
| <i>Ceyhan Burak Akgül ; Onur Nizam Sönmez ; Sema Alaçam</i>                                                                                         |             |
| <b>CEREBRAL VESSEL CLASSIFICATION WITH CONVOLUTIONAL NEURAL NETWORKS .....</b>                                                                      | <b>2233</b> |
| <i>Yusuf Hüseyin Sahin ; Gözde Ünal</i>                                                                                                             |             |
| <b>A SUB-PIXEL RESOLUTION METHOD FOR CHROMOSOME BAND PROFILE EXTRACTION.....</b>                                                                    | <b>2237</b> |
| <i>Yaser Moazzen ; Abdülkerim Çapar ; Behçet Ugur Töreğin</i>                                                                                       |             |
| <b>ERROR PROBABILITY PERFORMANCE OF CHANNEL ESTIMATION ERROR ON<br/>COGNITIVE MULTI RELAY NETWORKS .....</b>                                        | <b>2241</b> |
| <i>Eylem Erdogan ; Asli Birol ; Tansal Gucluoglu</i>                                                                                                |             |
| <b>THE USE OF OBJECT BASED CLASSIFICATION WITH NDSM TO INCREASE THE<br/>ACCURACY OF BUILDING DETECTION .....</b>                                    | <b>2245</b> |
| <i>Bans Besol ; Ugur Alganci ; Elif Sertel</i>                                                                                                      |             |
| <b>IMPROVING SENSITIVITY OF TASK-IMRI BY USE OF RECIPROCAL INFORMATION<br/>FROM PERIPHERAL NEAR INFRARED SPECTROSCOPY (NIRS) MEASUREMENTS .....</b> | <b>2249</b> |
| <i>Sinem Burcu Erdogan ; Yunjie Tong ; Lia Maria Hocke ; Kimberly P. Lindsey ; Blaise De B. Frederick</i>                                           |             |
| <b>AUTOMATIC COMMENT GENERATION USING ONLY SOURCE CODE.....</b>                                                                                     | <b>2254</b> |
| <i>Eren Yıldız ; Emine Ekin</i>                                                                                                                     |             |
| <b>A NOVEL SYSTEM FOR CONTENT BASED RETRIEVAL OF REMOTE SENSING IMAGES<br/>BASED ON BAG OF SPECTRAL VALUES.....</b>                                 | <b>2258</b> |
| <i>Osman Emre Dai ; Begüm Demir ; Bülent Sankur ; Lorenzo Bruzzone</i>                                                                              |             |
| <b>MACHINE-BASED LEARNING SYSTEM: CLASSIFICATION OF ADHD AND NON-ADHD<br/>PARTICIPANTS .....</b>                                                    | <b>2262</b> |
| <i>Hüseyin Öztoprak ; Mehmet Toycan ; Yasar Kemal Alp ; Orhan Arikan ; Elvin Dogutepe ; Sirel Karakas</i>                                           |             |
| <b>JOINT MULTI-EMITTER SIGNAL SEPERATION AND ANGLE OF ARRIVAL ESTIMATION<br/>VIA VARIATIONAL MODE DECOMPOSITION .....</b>                           | <b>2266</b> |
| <i>Abdurrahim Soganlı ; Orhan Arikan</i>                                                                                                            |             |

|                                                                                                                                               |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>THE DETECTION OF FLUCTUATING TARGETS IN CASE OF RANGE MIGRATION.....</b>                                                                   | 2270 |
| <i>Onur Çulha ; Yalçın Tanik</i>                                                                                                              |      |
| <b>A STUDY ON THE MODIFICATION OF COSH-HAMMING WINDOW FOR NONRECURSIVE<br/>FILTER DESIGN .....</b>                                            | 2274 |
| <i>Kemal Avcı</i>                                                                                                                             |      |
| <b>EFFECT OF THE HILBERT-HUANG TRANSFORM METHOD ON SLEEP STAGING .....</b>                                                                    | 2278 |
| <i>Cüneyt Yücelbas ; Sule Yücelbas ; Seral Özsen ; Gülay Tezel ; Sebnem Yosunkaya</i>                                                         |      |
| <b>EFFICIENT INCREMENTAL CHECKPOINT ALGORITHM FOR PRIMARY-BACKUP<br/>REPLICATION .....</b>                                                    | 2282 |
| <i>Berkin Güler ; Öznur Özkasap</i>                                                                                                           |      |
| <b>OPTIMAL QUANTIZATION FOR DISTRIBUTED COMPRESSIVE SENSING.....</b>                                                                          | 2286 |
| <i>Mehmet Yamaç ; Can Altay ; Bülent Sankur</i>                                                                                               |      |
| <b>AUTOMATIC BUILDING DETECTION BASED ON CIE LUV COLOR SPACE USING VERY<br/>HIGH RESOLUTION PLEIADES IMAGES.....</b>                          | 2290 |
| <i>Alireza Rahimzadeganasl ; Elif Sertel</i>                                                                                                  |      |
| <b>HYPERNYM EXTRACTION FROM WIKIPEDIA AND WIKTIONARY .....</b>                                                                                | 2294 |
| <i>Emre Sasmaz ; Razieh Ehsani ; Olcay Taner Yıldız</i>                                                                                       |      |
| <b>REAL-TIME LANE MARKING DETECTION USING MODIFIED 1-BIT TRANSFORM BASED<br/>PRE-PROCESSING .....</b>                                         | 2298 |
| <i>Ayhan Küçükmanisa ; Ramazan Duvar ; Oguzhan Urhan</i>                                                                                      |      |
| <b>DISTRIBUTED SENSOR CALIBRATION WITH MINIMUM CONNECTIONS IN WIRELESS<br/>SENSOR NETWORKS.....</b>                                           | 2302 |
| <i>Onur Cihan ; Ö. Feyza Erkan ; Mehmet Akar</i>                                                                                              |      |
| <b>SLEEP STAGE CLASSIFICATION BASED ON FILTER BANK OPTIMIZATION .....</b>                                                                     | 2306 |
| <i>E. Argun Oral ; M. Mustafa Çodur ; I. Yucel Ozbek</i>                                                                                      |      |
| <b>ASSOCIATION COST ENFORCING SPATIAL CONSISTENCY FOR TRACKLET MERGING.....</b>                                                               | 2310 |
| <i>Yeti Ziya Gürbüz ; Ogul Can ; A. Aydın Alatan</i>                                                                                          |      |
| <b>COMPARATIVE ANALYSIS OF HYPERSPECTRAL FEATURE EXTRACTION METHODS IN<br/>VEGETATION CLASSIFICATION .....</b>                                | 2314 |
| <i>Mertalp Öcal ; Kazim Ergün ; Gözde Bozdagi Akar</i>                                                                                        |      |
| <b>SPATIAL DOMAIN MULTI-FOCUS IMAGE FUSION .....</b>                                                                                          | 2318 |
| <i>Ahmet Nusret Toprak ; Veysel Aslantas</i>                                                                                                  |      |
| <b>FPGA IMPLEMENTATION OF LAYERED LOW DENSITY PARITY CHECK ERROR<br/>CORRECTION CODES.....</b>                                                | 2322 |
| <i>Abdulsamet Çağlan ; Ersen Balcisoy ; Emre Kirkaya ; Gurbannazar Charyyev ; Adem Çiçek ; Enver Çavus</i>                                    |      |
| <b>SIMULATION OF PARKINSONIAN BASAL NUCLEI WITH NETWORK MOTIFS .....</b>                                                                      | 2326 |
| <i>Ali Çalim ; Mahmut Özer ; Muhammet Uzuntarla</i>                                                                                           |      |
| <b>FAST TEXT CLASSIFICATION WITH NAIVE BAYES METHOD ON APACHE SPARK .....</b>                                                                 | 2330 |
| <i>Iskender Ülgen Ogul ; Caner Özcan ; Özlem Hakdagli</i>                                                                                     |      |
| <b>AN ABSTRACTION AND STRUCTURAL INFORMATION BASED DEPTH PERCEPTION<br/>EVALUATION METRIC.....</b>                                            | 2334 |
| <i>Gökçe Nur Yilmaz ; Hüseyin Bayrak</i>                                                                                                      |      |
| <b>MULTIMODAL VIDEO CONCEPT CLASSIFICATION BASED ON CONVOLUTIONAL<br/>NEURAL NETWORK AND AUDIO FEATURE COMBINATION.....</b>                   | 2338 |
| <i>Berkay Selbes ; Mustafa Sert</i>                                                                                                           |      |
| <b>SYNCHRONIZATION INDUCED TERMINATION IN NEURONAL NETWORKS .....</b>                                                                         | 2342 |
| <i>Ali Çalim ; Sükrüye Nihal Agaoglu ; Muhammet Uzuntarla</i>                                                                                 |      |
| <b>METRIC AND TRANSFORM PERFORMANCE ANALYSIS FOR HYPERSPECTRAL<br/>SUPERPIXEL SEGMENTATION .....</b>                                          | 2346 |
| <i>Gözde Nur Yesilyurt ; Alp Ertürk ; Sarp Ertürk</i>                                                                                         |      |
| <b>FAST PAINTING ANIMATION .....</b>                                                                                                          | 2350 |
| <i>Ece Selin Böncü ; Gözde Bozdagi Akar</i>                                                                                                   |      |
| <b>UNSUPERVISED CHANGE DETECTION IN SATELLITE IMAGES USING<br/>OVERSEGMENTATION AND MUTUAL INFORMATION .....</b>                              | 2354 |
| <i>Bahar Taskesen ; Beril Besbinar ; Alper Koz ; A. Aydın Alatan</i>                                                                          |      |
| <b>DEVELOPMENT OF THERMOACOUSTIC IMAGING SYSTEM: PRELIMINARY<br/>EXPERIMENTAL RESULTS.....</b>                                                | 2358 |
| <i>M. Sait Kiling ; Betül Samanci ; Ali T. Hacıhamzaoglu ; Metin Yazgi ; Selçuk Parker ; Aydın Dogan ; Fatih Ahiska<br/>; Mustafa Karaman</i> |      |
| <b>AUTOMATIC TRANSCRIPTION OF OPEN STRING NOTES FROM VIOLIN RECORDINGS.....</b>                                                               | 2362 |
| <i>Kemal Avcı ; Tamer Sevki Acuner</i>                                                                                                        |      |

|                                                                                                                                        |             |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>INVERSE SOLUTION OF THERMOACOUSTIC WAVE EQUATION FOR MULTI-LAYER PLANAR MEDIUM .....</b>                                            | <b>2366</b> |
| <i>Hazel Bayintir ; Banu Uzun ; Mithat Idemen ; Mustafa Karaman</i>                                                                    |             |
| <b>ACTION RECOGNITION WITH DEEP NEURAL NETWORKS.....</b>                                                                               | <b>2370</b> |
| <i>Metehan Doyran ; Yiggit Yildirim ; Albert Ali Salah</i>                                                                             |             |
| <b>NEIGHBOURHOOD CHARACTERIZATION USING VISUAL ARCHITECTURAL FEATURES .....</b>                                                        | <b>2374</b> |
| <i>Hülya Yalçın ; M. Furkan Çelik</i>                                                                                                  |             |
| <b>POLITICAL OPINION/SENTIMENT PREDICTION VIA LONG SHORT TERM MEMORY RECURRENT NEURAL NETWORKS ON TWITTER .....</b>                    | <b>2378</b> |
| <i>Deger Ayata ; Murat Saraçlar ; Arzucan Özgür</i>                                                                                    |             |
| <b>INVERSE SOLUTION OF THERMOACOUSTIC WAVE EQUATION FOR CYLINDRICAL MULTI-LAYER MEDIUMS.....</b>                                       | <b>2382</b> |
| <i>Demet Elmas ; Banu Uzun ; Mithat Idemen ; Mustafa Karaman</i>                                                                       |             |
| <b>BANDPASS SAMPLING OF MULTIBAND SIGNALS BY USING GEOMETRIC APPROACH .....</b>                                                        | <b>2386</b> |
| <i>Esra Saatçi ; Ertugrul Saatçi ; Aydın Akan</i>                                                                                      |             |
| <b>REAL-TIME LOCALIZATION METHODOLOGY WITH RFID TECHNOLOGY IN CLOSED AREA.....</b>                                                     | <b>2390</b> |
| <i>Mahmut Çavur ; Ebubekir Demir</i>                                                                                                   |             |
| <b>DETERMINATION OF DRUG ACTIVITY ON PULMONARY ARTERIAL HYPERTENSION USING FREQUENCY-DOMAIN ANALYSIS OF MEASURED ECG SIGNALS .....</b> | <b>2394</b> |
| <i>Hüseyin Yanık ; Evren Degirmenci ; Belgin Büyükakilli ; Derya Çitirik ; Olgu Hallioglu ; Serkan Gürgül</i>                          |             |
| <b>Author Index</b>                                                                                                                    |             |