

# **2015 7th International Conference on Electronics, Computers and Artificial Intelligence (ECAI 2015)**

**Bucharest, Romania  
25-27 June 2015**



**IEEE Catalog Number: CFP1527U-POD  
ISBN: 978-1-4673-6648-9**

# TABLE OF CONTENTS

<b>BETWEEN TWO ENGINEERING AGES: OF INFORMATION AND COMPLEX SYSTEMS, PROFESSIONAL RESEARCH IS BASED ON A TEAM WORK!</b>	1
<i>Serbanescu, Alexandru ; Diaconu, Adrian-Viorel ; Ioana, Cornel ; Digulescu, Angela</i>	
<b>ADVANCES IN DIAGNOSIS OF ELECTRICAL MACHINES THROUGH EXTERNAL MAGNETIC FIELD</b>	5
<i>Pusca, Remus ; Romary, Raphael</i>	
<b>ON THE RESPONSES OF SOCIAL NETWORKS' TO EXTERNAL EVENTS</b>	13
<i>Teodorescu, Horia-Nicolai L.</i>	
<b>THE INFLUENCE OF SATELLITE TRANSPONDER BROADCASTING PLAN ON VIDEO QUALITY</b>	19
<i>Tache, Ioan</i>	
<b>PRIVACY PROFILING IMPACT OF ANDROID MOBILE APPLICATIONS</b>	23
<i>Barca, Cristian ; Barca, Dan Claudiu ; Mara, Constantin ; Raducu, Marian ; Gavriloaia, Bogdan ; Vizireanu, Radu ; Craciunescu, Razvan ; Halunga, Simona</i>	
<b>IMPROVING STORAGE CAPACITY BY DISTRIBUTED EXACT DEDUPLICATION SYSTEMS</b>	29
<i>Barca, Cristian ; Barca, Dan Claudiu ; Mara, Constantin ; Anghelescu, Petre ; Gavriloaia, Bogdan ; Vizireanu, Radu ; Craciunescu, Razvan ; Fratu, Octavian</i>	
<b>SMALL FARM COMPLEX IRRIGATION CONTROLLER BASED ON WIRELESS COMMUNICATION</b>	35
<i>Plotog, Ioan ; Varzaru, Gaudentiu ; Mihailescu, Bogdan ; Iacomi, Beatrice ; Madjar, Roxana ; Iacomi, Cristian ; Popescu, Viorel ; Sfetcu, Catalin</i>	
<b>DEVELOPMENT OF A PROTOTYPE ARCGIS- WEB-BASED DECISION APPLICATION WATERDSS: FOR WATER POLLUTION MANAGEMENT</b>	39
<i>Hussein Ali Salah ; Mocanu, Mariana ; Florea, Adina</i>	
<b>PLATFORM FOR BIO-MONITORING OF VITAL PARAMETERS IN CRITICAL INFRASTRUCTURES OPERATION</b>	45
<i>Cepisca, Costin ; Adochiei, Felix Constantin ; Potlog, Sabina ; Banica, Cosmin Karl ; Seritan, George Calin</i>	
<b>DOUBLE LOOP CONTROL OF BOOST CONVERTER BASED CURRENT SWITCHING CONTROLLER AND VOLTAGE COMPENSATOR</b>	49
<i>Hai-Peng Ren ; Xin Guo ; Ya-Chun Zi ; Jie Li</i>	
<b>ON THE GENERATION OF AIRBORNE MULTI-FREQUENCY ULTRASONIC IMAGES WITH BIOMIMETIC SONAR HEAD</b>	55
<i>Aiordachioaie, Dorel</i>	
<b>ADVANCED HPC METHODS FOR LARGE-SCALE SENSITIVITY ANALYSIS</b>	59
<i>Cioaca, Alexandru</i>	
<b>VOLTAGE-MODE CONTROL OF THE DC-DC POWER CONVERTER - A SHORT REVIEW</b>	65
<i>Andrei Ion Bogdan ; Bizon, Nicu</i>	
<b>ON THE SPATIAL AND MULTI-FREQUENCY AIRBORNE ULTRASONIC IMAGE FUSION</b>	71
<i>Aiordachioaie, Dorel</i>	
<b>FPGA AUTONOMOUS LOGIC ANALYZER USING INNOVATIVE BERC FILTER OPTIMIZATION</b>	77
<i>Ioan, Aleodor Daniel ; Ignat, Mihael Cristian</i>	
<b>CLOUD COMPUTING AND MANAGEMENT PROCESSES</b>	85
<i>Mucahit, Biner</i>	
<b>AN IMPROVED NEURAL APPROACH OF SAMMON PROJECTION ALGORITHM</b>	89
<i>Vizitiu, Iulian ; Enache, Florin ; Deparatanu, Daniel ; Oroian, Teofil ; Nicula, Aurelian</i>	
<b>AN INTELLIGENT REASONING MACHINE FOR THE HOME-BASED CARE</b>	93
<i>Dongxia Ge ; Wei Li ; Lei Wei</i>	
<b>OPTIMIZATION AND MONITORING ENERGY CONSUMPTION FROM SMALL INDUSTRIAL CONSUMERS</b>	99
<i>Cepisca, Costin ; Seritan, George Calin ; Ancuta, Florin ; Paraschiv, Ana Maria</i>	
<b>WEBLOG-TO-SPEECH APPLICATION FOR VISUALLY IMPAIRED PERSONS</b>	103
<i>Florin, Popescu</i>	
<b>IMPROVED AUTOMATIC SPEECH RECOGNITION SYSTEM BY USING COMPRESSED SENSING SIGNAL RECONSTRUCTION BASED ON L0 AND L1 ESTIMATION ALGORITHMS</b>	107
<i>Gavrilescu, Mihai</i>	

<b>NOISE ROBUST AUTOMATIC SPEECH RECOGNITION SYSTEM BY INTEGRATING ROBUST PRINCIPAL COMPONENT ANALYSIS (RPCA) AND EXEMPLAR-BASED SPARSE REPRESENTATION</b> .....	112
<i>Gavrilescu, Mihai</i>	
<b>PERFORMANCE COMPARISON OF THREE MPPT ALGORITHMS: AESC, MESC AND P&amp;O</b> .....	117
<i>Cristian, Hoarca Ioan ; Raducu, Marian</i>	
<b>BUILDINGS MODELING IN ORDER TO IMPLEMENT OPTIMAL TEMPERATURE CONTROL</b> .....	125
<i>Neculoiu, Giorgian ; Dache, Valentin ; Stamatescu, Grigore ; Sgarciu, Valentin</i>	
<b>THEORETICAL AND PRACTICAL IMPLEMENTATION OF SCRAMBLING ALGORITHMS FOR SPEECH SIGNALS</b> .....	131
<i>Enache, Florin ; Deperateanu, Daniel ; Oroian, Teofil ; Popescu, Florin ; Vizitiu, Iulian</i>	
<b>A JAVA SIMULATION SOFTWARE FOR THE STUDY OF THE EFFECTS OF THE SHORT-CIRCUIT FAULTS IN A FEED FORWARD NEURAL NETWORK</b> .....	135
<i>Ene, Alexandru ; Stirbu, Cosmin</i>	
<b>LOAD BALANCING TECHNIQUES USED IN CLOUD NETWORKING AND THEIR APPLICABILITY IN LOCAL NETWORKING</b> .....	139
<i>Ionescu, Valeriu Manuel</i>	
<b>ADAPTIVE MUTATION IN GENETIC ALGORITHMS FOR SHORTEST PATH ROUTING PROBLEM</b> .....	145
<i>Rares, Maniu</i>	
<b>A SELF-ORGANIZING MAP-BASED APPROACH TO AUTOMATIC METEOR DETECTION IN RADIO SPECTROGRAMS</b> .....	150
<i>Roman, Victor Stefan ; Buiu, Catalin</i>	
<b>A HIERARCHICAL DECISION SYSTEM FOR HUMAN BEHAVIORAL RECOGNITION</b> .....	154
<i>Soviany, Sorin ; Puscoci, Sorin</i>	
<b>AUTOMATIC LEXICO-SYNTACTIC CLASSIFICATION OF NOUN-ADJECTIVE RELATIONS FOR ROMANIAN LANGUAGE</b> .....	159
<i>Lazar, Marilena ; Militaru, Diana</i>	
<b>MOBILE APPLICATION FOR TRACKING DATA FROM HUMIDITY AND TEMPERATURE WEARABLE SENSORS</b> .....	163
<i>Maria, Aileni Raluca</i>	
<b>ELECTROCONDUCTIVE MATERIALS WITH HIGH POTENTIAL FOR WEARABLE ELECTRONIC DEVICES INTEGRATION</b> .....	167
<i>Maria, Aileni Raluca ; Laurentiu, Dinca</i>	
<b>A COMPARISON BETWEEN EXTREME LEARNING MACHINE AND FAST SUPPORT VECTOR CLASSIFIER</b> .....	171
<i>Bucurica, Mihai ; Dogaru, Radu</i>	
<b>SHAPE OBJECT CLASSIFICATION USING ECHOES INSIDE A VIRTUAL ENVIRONMENT APPLICATION</b> .....	175
<i>Bucurica, Mihai ; Dogaru, Radu</i>	
<b>CONSIDERATIONS ON THE FUNCTIONS AND IMPORTANCE OF A WEB CRAWLER</b> .....	179
<i>Pirna, Mironela</i>	
<b>MONITORING A CLOUD-BASED SPEECH PROCESSING SYSTEM</b> .....	185
<i>Suciu, George ; Vulpe, Alexandru ; Arseni, Stefan Ciprian ; Stancu, Alexandru ; Butca, Cristina ; Suciu, Victor</i>	
<b>SOME ASPECTS ON MODELING OF THE SIGNAL AND POWER INTEGRITY IN A PCB BASED ON WAVEFORM ANALYSIS</b> .....	190
<i>Catalin, Arva Mihai ; Bizon, Nicu</i>	
<b>TRENDS IN COMPUTATIONAL INTELLIGENCE APPLIED IN NUCLEAR ENGINEERING AND NON-DESTRUCTIVE EXAMINATION TECHNIQUES OF NUCLEAR UNITS</b> .....	196
<i>Dorin - Mirel, Stanica ; Robert, Sisman George</i>	
<b>ASSESSMENT, PROBABILITY AND ENTROPY; A STOCHASTIC ANALYSIS OF THE FUNCTIONALITY OF A TECHNICAL SYSTEM</b> .....	200
<i>Carlan, Miltiade ; Costea, Marius-Aurel ; Iosif, Florin-Doru</i>	
<b>A QUANTITATIVE RISK ANALYSIS FRAMEWORK FOR BOW-TIE MODELS</b> .....	206
<i>Iacob, Ionut Emil ; Apostolou, Alex</i>	
<b>FINGERPRINTS USED FOR SECURITY ENHANCEMENT OF ONLINE BANKING AUTHENTICATION PROCESS</b> .....	210
<i>Lupu, Catalin ; Gaitan, Vasile-Gheorghita ; Lupu, Valeriu</i>	
<b>EXTENDING THE BATTERY MODEL FROM A SINGLE CELL TO A BATTERY PACK WITH BMS</b> .....	214
<i>Enache, Bogdan-Adrian ; Alexandru, Magdalena Emilia ; Constantinescu, Luminita-Mirela</i>	

<b>HUMAN FOOTSTEP DETECTION USING SEISMIC SENSORS</b> .....	224
<i>Anghelescu, Petre ; Iana, Gabriel Vasile ; Tramandan, Ionut</i>	
<b>A NEW APPROACH FOR AERODYNAMIC LEVITATION BASED POSITION CONTROL USING DIGITAL IMAGE PROCESSING AND DATA ACQUISITION</b> .....	229
<i>Visan, Daniel Alexandru ; Lita, Ioan ; Cioc, Ion Bogdan ; Teodorescu, Rodica Mihaela</i>	
<b>A METHOD FOR INCREASING SECURITY IN ELECTRONIC COMMUNICATION SERVICES BASED ON TEXT MESSAGES COMMUNICATION</b> .....	233
<i>Cioc, I.B. ; Jurian, M. ; Lita, I. ; Teodorescu, R.M.</i>	
<b>THE CYBER SECURITY IN SMES IN POLAND AND TANZANIA</b> .....	237
<i>Nycz, Malgorzata ; Martin, Mkisi Jovita ; Polkowski, Zdzislaw</i>	
<b>MULTIFUNCTIONAL INTEGRATED PHOTOVOLTAIC WINDOW WITH ADVANCED FEATURES OF ENERGY HARVESTING AND INDOOR SHADING CONTROL: HARDWARE IMPLEMENTATION</b> .....	244
<i>Radut, Marin ; Mihai, Oproescu</i>	
<b>VIBRATION MONITORING SYSTEM FOR HUMAN ACTIVITY DETECTION</b> .....	250
<i>Gabriel, Iana Vasile ; Anghelescu, Petre</i>	
<b>EVOLUTION OF FIBER OPTIC CABLES &amp; NETWORKS IN ROMANIA</b> .....	254
<i>Barbut, Cornel</i>	
<b>THE BENEFITS OF OPTICAL FIBRES STANDARDIZATION ONE FTTH APPROACH</b> .....	258
<i>Chivu, Catalin ; Barbut, Cornel</i>	
<b>OMNIDIRECTIONAL ILLUMINATOR FOR PANORAMIC VIEWING SYSTEMS</b> .....	262
<i>Vladescu, Marian</i>	
<b>MULTIFUNCTIONAL AUTOMATED PLATFORM FOR DETERMINING SPATIAL CHARACTERISTICS OF OPTOELECTRONIC DEVICES</b> .....	266
<i>Vuza, Dan Tudor ; Vladescu, Marian</i>	
<b>GAPPING SINGLE LAMBDA GAUSSIAN SPLIT-BEAMS FOR INTERFERENCE-FREE SPATIAL MULTIPLEXED FSO</b> .....	270
<i>Manea, Viorel ; Dragomir, Radu ; Stoichescu, Dan Alexandru</i>	
<b>LEAST SQUARES MULTI-LEVEL APPROACH FOR CENTROID DETECTION IN ACTIVE TRIANGULATION</b> .....	274
<i>Ashir, Abubakar Muhammad ; Abo-serie, Essam</i>	
<b>A COMPARATIVE SPEED/POSITION CONTROL TECHNIQUE BASED FUZZY LOGIC CONTROL FOR TRAVELLING WAVE ULTRASONIC MOTOR</b> .....	279
<i>Gencer, Altan</i>	
<b>ADAPTIVE CLUSTERING ALGORITHM FOR OPTICAL CHARACTER RECOGNITION</b> .....	284
<i>Ashir, Abubakar Muhammad ; Shehu, Gaddafi Sani</i>	
<b>A SINGLE-AXIS SOLAR TRACKING SYSTEM AND MONITORING SOFTWARE</b> .....	288
<i>Kabalci, Ersan ; Calpbimici, Ayberk ; Kabalci, Yasin</i>	
<b>DESIGN AND IMPLEMENTATION OF A PI-MPPT BASED BUCK-BOOST CONVERTER</b> .....	293
<i>Kabalci, Ersan ; Gokkus, Goksel ; Gorgun, Alper</i>	
<b>A MODELLING CASE STUDY OF AN ISLAND MODE SOLAR POWER PLANT</b> .....	299
<i>Kabalci, Ersan ; Gorgun, Alper ; Kabalci, Yasin ; Gokkus, Goksel</i>	
<b>HAZOP-BASED SECURITY ANALYSIS FOR EMBEDDED SYSTEMS: CASE STUDY OF OPEN</b> .....	305
<i>Jingxuan Wei ; Matsubara, Yutaka ; Takada, Hiroaki</i>	
<b>REDUCED TIME MICROWAVE FILTER TUNING</b> .....	313
<i>Rosca, Cosmina - Mihaela ; Radulescu, Gabriel</i>	
<b>SAFETY MEASURES IN TESTING AIRCRAFT WHEELED PARTS</b> .....	317
<i>Padure, Paul ; Vintea, Adela ; Ghita, Octavian Mihai</i>	
<b>SMART HOME SECURITY BASED ON OPTIMAL WIRELESS SENSOR NETWORK ROUTING PROTOCOLS</b> .....	321
<i>Mohamad, Omar Abdulwahabe ; Hameed, Rasha Talal ; Tapus, Nicolae</i>	
<b>FUZZY APPROACH ON MODELLING CYBER ATTACKS PATTERNS ON DATA TRANSFER IN INDUSTRIAL CONTROL SYSTEMS</b> .....	327
<i>Pricop, Emil ; Mihalache, Sanda Florentina</i>	
<b>ENABLING SECURITY ON 6LOWPAN / IPV6 WIRELESS SENSOR NETWORKS</b> .....	333
<i>Halcu, Ionela ; Stamatescu, Grigore ; Sgarciu, Valentin</i>	
<b>A SLOW READ ATTACK USING CLOUD</b> .....	337
<i>Ameyed, Darine ; Jaafar, Fehmi ; Fattahi, Jaouhar</i>	
<b>SENSOR FUSION METHOD FOR ALTITUDE ESTIMATION IN MINI-UAV APPLICATIONS</b> .....	343
<i>Stamatescu, Grigore ; Stamatescu, Iulia ; Popescu, Dan ; Mateescu, Cristian</i>	

<b>AN INFORMATION THEORETIC MEASURE FOR SECRECY LOSS IN STOCHASTIC DISCRETE EVENT SYSTEMS.....</b>	<b>347</b>
<i>Ibrahim, Mariam ; Chen, Jun ; Kumar, Ratnesh</i>	
<b>SECRECY BY WITNESS-FUNCTIONS UNDER EQUATIONAL THEORIES .....</b>	<b>353</b>
<i>Fattahi, Jaouhar ; Mejri, Mohamed</i>	
<b>COMPARATIVE STUDY REGARDING CHARACTERISTIC FEATURES OF THE HUMAN VOICE.....</b>	<b>361</b>
<i>Lexutan, Roxana Madalina</i>	
<b>IMPROVING LTE EPS-AKA USING THE SECURITY REQUEST VECTOR.....</b>	<b>365</b>
<i>Apostol, Cristian-Gabriel ; Racuciu, Ciprian</i>	
<b>STUDIES OF RECTANGULAR DIELECTRIC RESONATOR ANTENNAS WITH A SLOT FEED FOR ISM BAND APPLICATIONS .....</b>	<b>369</b>
<i>Surcan, Marius Gabriel</i>	
<b>TOUCH BASED BIOMETRIC AUTHENTICATION FOR ANDROID DEVICES .....</b>	<b>375</b>
<i>Grivei, Alexandru-Cosmin</i>	
<b>A COMPARATIVE PERFORMANCE ANALYSIS OF MIMO-OFDM SYSTEM OVER DIFFERENT FADING CHANNELS.....</b>	<b>379</b>
<i>Casu, George ; Georgescu, Florin ; Nicolaescu, Mircea ; Mocanu, Alexandra</i>	
<b>TIME-FREQUENCY DOMAIN RADAR CROSS SECTION EVALUATION OF AN IAR 99 SCALED MODEL AIRCRAFT .....</b>	<b>383</b>
<i>Tusa, Leontin ; Nicolaescu, Ioan ; Moni, Madalina ; Banciu, Marian Gabriel</i>	
<b>ON THE PERFORMANCE OF AN OPTIMIZED NLMS ALGORITHM .....</b>	<b>387</b>
<i>Paleologu, Constantin ; Ciochina, Silviu ; Caramalau, Razvan ; Benesty, Jacob</i>	
<b>FAST RECURSIVE AMPAP ALGORITHM .....</b>	<b>393</b>
<i>Albu, Felix</i>	
<b>COMPUTERIZED VISUAL INSPECTION APPLIED TO IDENTIFICATION AND CLASSIFICATION OF LABELED CHEMICALS .....</b>	<b>397</b>
<i>Rusu, Mariana</i>	
<b>AN ADAPTIVE MULTICHANNEL IDENTIFICATION SYSTEM FOR ROOM RESPONSE EQUALIZATION.....</b>	<b>403</b>
<i>Cecchi, Stefania ; Romoli, Laura ; Gasparini, Michele ; Carini, Alberto ; Bettarelli, Ferruccio</i>	
<b>AN OPTIMIZATION PROCEDURE FOR A NONLINEAR SYSTEM IDENTIFICATION APPROACH BASED ON CUBIC SPLINES .....</b>	<b>409</b>
<i>Romoli, Laura ; Cecchi, Stefania ; Gasparini, Michele ; Piazza, Francesco</i>	
<b>STUDY ON THE IMPLEMENTATION OF PROTOCOLS FOR PROVIDING SECURITY IN AVERAGE VANET INTERVEHICULARY NETWORK COMMUNICATION SYSTEMS .....</b>	<b>415</b>
<i>Alexandrescu, R.V. ; Surugiu, Maria Claudia ; Petrescu, I.</i>	
<b>INTELLIGENT SELF-CONFIGURABLE RADIO NETWORKS .....</b>	<b>421</b>
<i>Alexandru, Stan Valentin ; Serban, Timnea Radu</i>	
<b>ON THE COMMUNICATION NETWORK INSIDE VEHICLES .....</b>	<b>427</b>
<i>Andrei, Gheorghiu Razvan ; Alexandru, Stan Valentin</i>	
<b>ANALYSIS OF HIGHWAY ENTRANCE MANAGEMENT SYSTEMS USING LABORATORY MODELS.....</b>	<b>433</b>
<i>Serban, Timnea Radu ; Laurentiu, Buretea Dorin ; Andrei, Gheorghiu Razvan</i>	
<b>ELECTRICAL POWER ANALYSIS LEARNING AND IMPLEMENTATION IN ONE2ONE PROJECT .....</b>	<b>439</b>
<i>Constantinescu, Luminita Mirela ; Villeneuve, Yannick</i>	
<b>FPGA IMPLEMENTATION OF FREQUENCY DIVIDERS IN VOCATIONAL EDUCATION .....</b>	<b>445</b>
<i>Bostan, Ionel ; Ferrando, Guillermo ; Hoyos, Carlos</i>	
<b>TEACHING ELECTRIC MOTORS' STARTING METHODS IN LIFELONS LEARNING PROGRAMS.....</b>	<b>449</b>
<i>Beloiu, Robert</i>	
<b>SENTIMENT ANALYSIS FROM PRODUCT REVIEWS USING SENTIWORDNET AS LEXICAL RESOURCE.....</b>	<b>453</b>
<i>Cernian, Alexandra ; Sgarciu, Valentin ; Martin, Bogdan</i>	
<b>SECURITY IN E-LEARNING SYSTEMS .....</b>	<b>457</b>
<i>Savulescu, Corina ; Polkowski, Zdzislaw ; Cosmin, Deaconescu Ionus ; Elena, Blidaru Catalina</i>	
<b>THE ONLINE AND COMPUTER AIDED ASSESSMENT.....</b>	<b>463</b>
<i>Savulescu, Corina ; Polkowski, Zdzislaw ; Alexandru, Albu Iulian</i>	
<b>ELECTRICAL MACHINES LEARNING AND TRAINING IN ONE2ONE PROJECT .....</b>	<b>469</b>
<i>Iorgulescu, Mariana</i>	

<b>ASPECTS OF KINEMATICS AND DYNAMICS FOR PAYLOAD UAVS</b> .....	473
<i>Stefan, Anton ; Stefan, Amado ; Constantin, Daniel ; Mateescu, Cristian ; Cartal, Laurensiu Adrian</i>	
<b>ADAPTIVE NUMERICAL CONTROL FOR DYNAMIC DATA-DRIVEN APPLICATIONS</b> .....	477
<i>Cioaca, Alexandru</i>	
<b>DEVELOPMENT OF A MULTIFUNCTIONAL ROBOTIC ARM FOR IN-PIPE ROBOTS</b> .....	483
<i>Lapusan, Ciprian ; Rusu, Calin ; Brai, Leon ; Mandru, Dan</i>	
<b>DESIGN OF A HUMANOID ROBOT HEAD FOR STUDYING HUMAN-ROBOT INTERACTION</b> .....	487
<i>Lapusan, Ciprian ; Rad, Ciprian-Radu ; Besoiu, Sorin ; Plesa, Alin</i>	
<b>ASPECTS OF KINEMATICS AND DYNAMICS OF A GRIPPING MECHANISM</b> .....	491
<i>Stefan, Amado ; Constantin, Daniel ; Grigore, Lucian Stefanisa</i>	
<b>FINITE ELEMENT METHOD DESIGN AND ANALYSIS OF A MEMS COMB DRIVE</b> .....	495
<i>Ionescu, Viorel</i>	
<b>A VARIANT OF A SYNCHRONOUS MOTOR WITH TWO STATORS AND HIGH-ENERGY PERMANENT MAGNETS DISPOSED ON THE BOTH ROTOR PERIPHERIES</b> .....	499
<i>Mihail-Florin, Stan ; Cosmin, Cobianu ; Nicolae, Fidel ; Adela-Gabriela, Husu</i>	
<b>THE ELECTROMAGNETIC COMPATIBILITY PRINCIPLES FOR THE ASSESSMENT OF THE SOLUTIONS FOR EQUIPMENT PROTECTION</b> .....	505
<i>Iosif, Florin-Doru ; Costea, Marius</i>	
<b>PARTICULAR ASPECTS OF THE COGGING TORQUE REDUCTION FOR PERMANENT MAGNET SYNCHRONOUS MOTORS USING SPECIALIZED SOFTWARE</b> .....	511
<i>Diga, Nicolae ; Ghita, Constantin ; Stoica, Constantin ; Diga, Silvia-Maria</i>	
<b>BIOMETRIC DATA SOFTWARE REPRESENTATION IN DISTRIBUTED COMPUTING ARCHITECTURES</b> .....	515
<i>Liviu, Serbanescu ; Doru, Iosif</i>	
<b>A SOFTWARE ARCHITECTURE FOR THE CONTROL OF BIOMATERIALS MAINTENANCE</b> .....	519
<i>Liviu, Serbanescu ; Ion, Sima</i>	
<b>CRYPTOGRAPHIC CHEMISTRY</b> .....	523
<i>Beteringhe, Adrian ; Sima, Ion</i>	
<b>MOLECULAR DOCKING TECHNIQUE FOR SELECTION OF SOME NAPROXEN DERIVATIVES AS INHIBITORS OF CYCLOOXYGENASE 2 (COX-2)</b> .....	527
<i>Beteringhe, Adrian ; Symeonidis, Flavia Corina Mitroi</i>	
<b>METHODS FOR DENOISING THE ECG SIGNAL IN WEARABLE SYSTEMS</b> .....	531
<i>Rosu, Marius-Corneliu ; Hamed, Yassin</i>	
<b>PERFORMANCE EVALUATION OF WSN TOPOLOGY CONTROL ALGORITHMS THAT CAN BE USED IN THE SMART CITY CONCEPT</b> .....	537
<i>Lavric, Alexandru ; Popa, Valentin</i>	
<b>GATHER DYNAMIC POLLUTION DATA USING MOBILE SENSORS</b> .....	541
<i>Claudia, Surugiu Maria ; Vasilica, Barna Oana</i>	
<b>FIRST RESULTS WITH A C-BAND GROUND BASED SYNTHETIC APERTURE RADAR</b> .....	547
<i>Toma, Stefan-Adrian ; Moldovan, Adrian-Septimiu ; Poncos, Valentin Ioan ; Anghel, Andrei ; Teleaga, Delia Cosmina ; Serban, Florin</i>	
<b>VIRTUAL INSTRUMENTATION APPLICATION FOR SYMMETRICAL AND ASYMMETRICAL TEXT ENCRYPTION/DECRYPTION STUDYING</b> .....	551
<i>Teodorescu, R.M. ; Lita, I. ; Cioc, I.B. ; Visan, D.A</i>	
<b>MULTIPOINT CONVERTERS - A BRIEF REVIEW</b> .....	555
<i>Mihai, Mihaescu</i>	
<b>RUBIK'S CUBE PRINCIPLE BASED IMAGE ENCRYPTION ALGORITHM IMPLEMENTATION ON MOBILE DEVICES</b> .....	559
<i>Ionescu, Valeriu Manuel ; Diaconu, Adrian-Viorel</i>	
<b>IMAGE SEARCH ALGORITHMS</b> .....	563
<i>Magda, Enescu Florentina ; Cosmin, Stirbu ; Ioan, Lita Adrian</i>	
<b>SYSTEM FOR POWER SUPPLY, MONITORING, CONTROL AND COMMUNICATION FOR ISOLATED TEMPORARY HABITATS - SIGHAB</b> .....	569
<i>Banica, Cosmin Karl ; Ghita, Ileana ; Gandescu, Costin Hedwig ; Grigorescu, Sorin Dan ; Paturca, Sanda Victorinne</i>	
<b>MOBILE SYSTEM WITH REAL TIME ROUTE LEARNING USING HARDWARE ARTIFICIAL NEURAL NETWORK</b> .....	573
<i>Mazare, Alin ; Ionescu, Laurentiu-Mihai ; Lita, Adrian-Ioan ; Serban, Gheorghe ; Ionut, Marin</i>	
<b>EXPERIMENTAL DETERMINING IDEALITY COEFFICIENT FOR DIFFERENT KIND OF SEMICONDUCTOR DIODES USING NI ELVIS II+</b> .....	577
<i>Andrei, Gheorghe ; Sima, Ion ; Andrei, Cristian</i>	

<b>AN ENCRYPTION ALGORITHM .....</b>	<b>581</b>
<i>Soloi, Anton</i>	
<b>ASSESSMENT OF SLOW VOLTAGE VARIATIONS FROM THE ELECTRIC DISTRIBUTION SYSTEMS WITH FUZZY TECHNIQUES.....</b>	<b>588</b>
<i>Neagu, Bogdan-Constantin ; Grigoras, Gheorghe</i>	
<b>AN EXPERT SYSTEM ARCHITECTURE FOR MANAGING THE BIOMATERIALS USED IN MEDICAL DEVICES .....</b>	<b>594</b>
<i>Mihaela-Adina, Mateescu ; Gheorghisa, Pescaru</i>	
<b>DATA ACQUISITION SYSTEM AND BIOSIGNAL ANALYSIS OF CARDIO PARAMETERS BY USING PHOTOPLETHYSMOGRAPHY METHOD.....</b>	<b>598</b>
<i>Vasile, Ion ; Andrei, Horia ; Ardeleanu, Mihaita ; Vasile, Vicentiu</i>	
<b>3D NUMERICAL MODELING WITH FEM OPERATION UNDER LOAD ON THE ALTERNATOR CLAW POLES.....</b>	<b>602</b>
<i>Constantin, Stoica ; Dumitru, Cazacu ; Leonard, Melcescu</i>	
<b>ON THE COMPUTATION OF THE SAR FOR A 3D HUMAN HEAD MODEL USING ANSYS HFSS .....</b>	<b>608</b>
<i>Cazacu, Dumitru ; Constantin, Stoica ; Constantin, Dorinel</i>	
<b>DESIGN AND TESTING OF AN AUTOMATIC DOSING SYSTEM FOR OPHTHALMIC LIQUIDS .....</b>	<b>612</b>
<i>Apostolescu, Tudor Catalin ; Udrea, Constantin ; Ionascu, Georgeta ; Duminica, Despina-Paula</i>	
<b>MEASUREMENT METHODS FOR THE PATH DEVIATION OF MOBILE ROBOTS.....</b>	<b>618</b>
<i>Tarulescu, Radu ; Tarulescu, Stelian</i>	
<b>ADVANCED CONTROL PROCEDURE FOR AUTONOMOUS UNDERWATER ROBOTS .....</b>	<b>622</b>
<i>Farkas, Ioana I. ; Tulbure, Adrian ; Farcas, Cristian</i>	
<b>ASPECTS ON THE MOBILITY AND PROTECTION FOR FIREFIGHTING ROBOTS.....</b>	<b>628</b>
<i>Isuwl, Ionel Nusa ; Orban, Octavian ; Gokcel, Salih</i>	
<b>ASPECTS REGARDING THE DESIGN AND REALISATION OF A HUMANOID ROBOT.....</b>	<b>632</b>
<i>Constantin, Daniel ; Voiniciuc, Constantin ; Marcoianu, Ingrid ; Vinturis, Valentin</i>	
<b>HARD/SOFT SIMULATOR FOR ELECTRIC ENGINES CONTROLLED WITH SIEMENS AUTOMATES .....</b>	<b>636</b>
<i>Greco, Dan-Laurensiu ; Popescu, Stefan-Liviu</i>	
<b>CONTAINERIZED MODULAR DATA CENTERS POWERED BY WIND FARMS .....</b>	<b>644</b>
<i>Potlog, Sabina ; Gherghina, Catalina ; Vintea, Adela</i>	
<b>Author Index</b>	