

9th INTERNATIONAL CONFERENCE
on
ELECTRONICS, COMPUTERS
and ARTIFICIAL INTELLIGENCE
ECAI 2017, June 29– July 01, 2017



PROGRAM

hosted by

'Valahia' UNIVERSITY, TARGOVISTE, ROMANIA:

- Faculty of Electrical Engineering, Electronics and Information Technology

Organizers:

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PROGRAM

Thursday, June 29, 2017

June 29, 8:00-8:50, conference desk

Registration of the participants

June 29, 9:00-9:40, OFFICIAL OPENING

TG1, keynote room,

09:00-09:40 *Welcome and Opening Addresses,*

09:00-09:05 Welcome message of Henri George Coanda
Chair of ECAI 2017, “Valahia” University of Targoviste

09:05-09:10 Welcome message of Calin D. Oros
Rector of the “Valahia” University of Targoviste

09:10-09:15 Welcome message of Nicu Bizon
Chair of ECAI 2017, University of Pitești

09:15-09:20 Welcome message of Prof. Dumitru Chirleşan
Rector of the University of Pitești

09:20-09:25 Welcome message of Horia-Nicolai (L.) Teodorescu Corresponding
Member of Romanian Academy

09:25-09:30 Welcome message of Phatiphat Thounthong
Director of Science and Technology Research Institute, King Mongkut's University of
Technology North Bangkok

09:30-09:35 Welcome message of Mircea Eremia
Chair of the IEEE Romanian section

09:35-09:40 Welcome message of Takeshi Yamakawa
Honorary Chair of the ECAI 2017

09:40-09:45 Sponsors' message

**June 29, 09:40-13:30, ECAI KEYNOTE LECTURES – I
TG1 room**

Chairs: Nicu Bizon, Henri George Coanda

09:45-10:25, Phatiphat Thounthong, Fuel cell power source: System, Power Conditioning, and Control

10:25-11:05, Ion Lungu,
Electricity market design; vulnerabilities and priorities

11:05-11:35, Coffee break; Discussions and Brokerage events

Chairs: Nicu Bizon, Henri George Coanda

11:35-12:15, Horia N. Teodorescu

Dynamic Processes on Social Networks – A Review

12:15-14:00, Round Tables, Brokerage events

12:15-14:00, Round Tables 1, room-A102: *Data scientist as a National security Actor*

Organized by: Doina Banciu, Universitatea din Bucuresti, Mireille Radoi, Biblioteca Centrala Universitara

12:15-13:15, Round Table 2 room-A201: *SmartVibes & SENZOREX projects for security solutions*

Organized by: Silviu Ionita, Gabriel Iana, University of Pitesti & Miratelecom

12:15-13:15, Round Table 3 room-A202: *Issues and challenges in Smart Grid*

Organized by: Ersan Kabalci, Nevşehir Hacı Bektaş Veli University

12:15-13:15, Round Table 4 room-A301: *The importance of modelling and simulation in virtual prototyping*

Organized by: Stefan Castravete CAELynx Europe, Dumitru Cazacu

June 29, 15:30-17:00, ECAI Afternoon sessions

June 29, 17:00-17:30 Coffee break

June 29, 18:30-21:00, ECAI Welcome Dinner

June 29, 15:30-17:00, ECAI Afternoon sessions
June 29, 15:30-17:00 -- Software & Computer Applications – 1
June 29, 15:30-17:00 -- Electrical Engineering
June 29, 15:30-17:00 -- Control, robotics and mechatronics
June 29, 15:30-17:00 -- Workshop IWSSS 2017 – 1
June 29, 15:30-17:00 -- ECAI Poster session 1

June 29, 15:30-17.00, Software & Computer Applications - 1 session, room A102

Chairs: Petia Koprinkova, Ionut Iacob

15 :30-16:00 *Invited talk:* Marius Olteanu, Nicolae Paraschiv, Petia Koprinkova and Yancho Todorov

Genetic Algorithm for System Modelling

16:30-16:15 El Amrani Loubna, Mazri Tomader and Hmina Nabil

Specific Absorption Rate (SAR) in Human Body Exposed to Wireless Base Station Fields

16:15-16:30 Ionut Iacob, Hameed Jimoh and Abdullah Al Mamun

Detecting Possibly Incorrect Medication Using an Unlikely Co-occurrences Measure

16:30-16:45 Rahali Bilel and Alaa Abou Harb

Impact of the Information System on Decision-Making Within the Company

16:45-17:00 Mariana-Eugenia Ilas

HOG Algorithm Simplification and Its Impact on FPGA Implementation - With Applications in Car Detection

June 29, 15:30-17.00, Electrical Engineering, room A201

Chairs: Pavel Karlovsky, Nicolae Vasile

15 :30-16:00 *Invited talk:* Pavel Karlovsky and Jiri Lettl

Influence of Switching Frequency on Torque Ripples in Model Predictive Control of Induction Motor Drive

16 :00-16:15 Tiberiu Tudorache, Ion Trifu, Leonard Melcescu and Dan Floricau

Numerical Analysis of an Electro-Thermal Wind Generator

16:15-16:30 Eray Arik and Mehmet Tabakcioglu

Reducing EMI by Multiple Slit Shielding

16:30-16:45 Chaymae Fahassa, Mohamed Akherraz, Mustapha Jamma, Abderrahim Bennassar and Yassine Zahraoui

Intelligent Hybrid Controller and Artificial Neural Networks Selector Table Based Sensorless DTC Control of an Induction Motor

June 29, 15:30-17.00, Control, robotics and mechatronics, room A202

Chairs: Adrian Tulbure, Luminita Duță

15:30-16:00 *Invited talk:* Andrei George Florea and Cătălin Buiu

Modelling multi-robot interactions using a generic controller based on numerical P systems and ROS

16:00-16:15 Xinxin Yao and Hua-Liang Wei

Improving K-means Clustering Performance Using a New Global Time series Averaging Method

16:15-16:30 Yuanlin Gu, Hua-Liang Wei, Richard J. Boynton, Simon N. Walker and Michael A. Balikhin

Prediction of Kp Index Using NARMAX Models with A Robust Model Structure Selection Method

16:30-16:45 Adrian Tulbure, Emilian Ceuca, Adrian Ilea

Electronically Controlled Hexapod Prototype for emergency situations

June 29, 15:30-17:00, International Workshop on Systems Safety & Security- IWSSS – 2017 – 1, room A301
Chairs: Emil Pricop, Dan Popescu
15:30-15:45 Roxana Papadie and Ioana Apostol
Analyzing websites protection mechanisms against DDoS attacks
15:45-16:00 Carmina Georgescu, Alina Petrescu-Nita, Emil Simion and Antonela Toma
A View on Nist Randomness Tests (In)Dependence
16:00-16:15 Ana-Maria Ghimes and Victor-Valeriu Patriciu
Neural Network Models in Big Data Analytics and Cyber Security
16:15-16:30 Vishnu Manasa Devagiri and Abbas Cheddad
Splicing Forgery Detection and the Impact of Image Resolution
16:30-16:45 Balduino Estison Mugilila Camachi, Oana Chenaru, Loretta Ichim, Dan Popescu
A Practical Approach to IEC 61850 Standard for Automation, Protection and Control of Substations
16:45-17:00 Nicoleta Marilena Matei, Sorin-Lucian Dobrescu, Ichim Loretta, Dan Popescu, Emil Pricop.
A Multi-Agent System for Management of Control Functions as Services in Onshore Oilfield

June 29, 15:30-17.00, Poster session 1, room Poster Hall
Chairs: Ioan Liță, Catalin Drăgoi, Avireni Srinivasulu
Ziyad Hussien Saleh, Ghanim Theiab Hasan, Mostafa Abdulghafoor Mohammed
Investigate And Analyze The Levels of Electromagnetic Radiations emitted from Underground Power Cables Extended In Modern Cities
Luiza Grigorescu
Current Controlled Resistance
Büşra Ülker, Mehmet Tabakcioğlu, Hüseyin Çizmeci and Doruk Ayberkin
Relations of Attention and Meditation Level with Learning in Engineering Education
Bogdan-Mihai Gavrioloaia, Nicolae-Dragos Vizireanu, Marian Novac and Constantin Mara
Time Domain Analysis of Microstrip Line Network Simulating a Natural Neuron
Cristian Liviu Leca, Petrica Ciotirnae, Cristian Rincu and Ioan Nicolaescu
Characteristics of Crowdsourcing for Outdoor Radio Fingerprinting Positioning
Petr Pichlík and Jiří Zďenek
Comparison of a Locomotive Adhesion Force Estimation Methods for a Wheel Slip Control Purpose
Dan Puchianu, Ion Caciula, Horia Andrei, Emil Diaconu and Paul Cristian Andrei
New Approaches of Nonlinear Circuit Elements Analysis in Frequency Domain
Florina Scarlatache, Gheorghe Grigoras and Bogdan Constantin Neagu
Clustering Based Data Mining in Wind Power Production
Emilian Ceuca, Adrian Tulbure
Home Automations for Increasing the Quality of Life and Integration with the Smart

City
Alexandru Nitu, Cosmin Stirbu, Alexandru Ene and Florentina Magda Enescu
Traffic management system
Bogdan Constantin Neagu, Ovidiu Ivanov and Mihai Gavrilas
Voltage Profile Improvement in Distribution Networks Using the Whale Optimization Algorithm
Mihai Lica Pura, Iulian Aciobanitei, Stefan Adrian Toma and Didier Buchs
CTL Formula Evaluation by Term Rewriting Inversion
Tudor Catalin Apostolescu, Georgeta Ionascu, Despina Duminica, Laurentiu Adrian Cartal and Lucian Bogatu
Design and Programming of a New 4-DOF Parallel Robot

17:00-17:30 Coffee break, Discussions and Brokerage events

June 29, 18:30-21:00:, ECAI Welcome Dinner

Friday, June 30, 2017

June 30, 09:30-11:00, ECAI KEYNOTE LECTURES II, TG1 room

Chairs: Phatiphat Thounthong, Andrei Horia

09:30-10:10, **Filippo Spertino**

Equivalent Circuits for Simulating the Operation of Solar Cells in Photovoltaic Systems: An Overview

10:10-10:50, **Angela Russo**

Harmonics and Cable Sizing With an Energy Efficiency Approach

11:00-11:30 Coffee break, Discussions and Brokerage events

June 30, 11:30-14:00 ECAI morning sessions

June 30, 11:30-14:00 – Electronic Circuits & Equipment

June 30, 11:30-14:00 -- Young Researchers session

June 30, 11:30-14:00 -- Software & Computer Applications – 2

June 30, 11:30-14:00 -- Workshop IWTOTC 2017

June 30, 11:30-14:00 -- Workshop IWSSS 2017 session – 2

June 30, 11:30-14:00 -- ECAI Poster session 2

June 30, 11:30-14.00, Electronic Circuits & Equipment _B session, room A102

Chairs: Dorel Aiordăchioie, Florian Ion

11:30-11:45 Jitendra Kumar Saini, Avireni Srinivasulu and Brahmadeo Prasad Singh

A New Low-Power Full-Adder Cell For Low Voltage Using CNTFETs

11:45-12:00 Avireni Srinivasulu and Dipankar Pal

CCII+ Based Dual Square-Cum-Triangular Waveform Generator

12:00-12:15 Mihai Dima, Iulian Adrian Chihaiia and Maria Claudia Surugiu

Simulation of axle counting sistem using myRIO embedded devices

12:15-12:30 Ersan Kabalci, Aydin Boyar and Yasin Kabalci

Design and Analysis of a Micro Inverter for PV Plants

12:30-12:45 Dorel Aiordachioaie

An Analysis System of Sonar Signals Based on Time-Frequency Representation

12 :45-13:00 Adrian Moise, Gabriela Bucur and Cristina Popescu

Automatic System for Text to Braille Conversion

13 :00-13:15 Iuliana Albu, Cristian Anghel and Constantin Paleologu

Adaptive Filtering in Acoustic Echo Cancellation Systems - A Practical Overview

13 :15-13:30 Yasin Kabalci, Serdar Kockanat and Ersan Kabalci

A Differential Search Algorithm Application for Solving Harmonic Estimation Problems

13 :30-13:45 Zoltán A. Godó, Anikó Apró, József Madar, Balázs Szabó and Norbert Németh

Microcontroller-based vein testing system

13 :45-14:00 Ioan Tache

Video Quality Monitoring Platform for Digital Terrestrial Television

June 30, 11:30-14.00, Young Researchers session - with technical support of IEEE-IAS-RO Chapter, room A201
Chairs: Andrei Horia, Nicu Bizon
11:30-11:45 Alexandru Mihai Antonescu and Lidia Dobrescu
A Low Cost High Frequency Charge/Discharge CMOS Oscillator
11:45-12:00 Bogdan Anton and Adriana Florescu
Simple power management control for a plug-in mild-hybrid Diesel powertrain
12:00-12:15 Diana Popa and Emil Simion
Enhancing Security by Combining Biometrics and Cryptography
12:15-12:30 Viorel Miron Alexe, Iulian Bancuta and Nicolae Vasile
Hydroelectric Backup System for Off-Grid Households
12:30-12:45 Georgiana Subașu, Livia Roșu and Ion Bădoi
Modeling And Simulation Architecture For Training In Cyber Defence Education
12 :45-13:00 Ionuț Firiceanu, Irinel-Florin Țone, Petrica Ciofîrnae and Nicolae Lucaci
Application for Library with Online Database Access, Architecture and Performance Analysis
13 :00-13:15 Ovidiu Plugariu, Lucian Petrica and Alexandru Dumitru Gegiu
FPGA systolic array GZIP compressor
13 :15-13:30 Raluca Maria Aileni, Sever Pasca and Rodica Strungaru
Wearable platform for cardiac rhythm monitoring and signal processing
13 :30-13:45 Valentin-Alexandru Vlăduță and Victor-Valeriu Patriciu
Authentication mechanism for data gathering protocol in Wireless Sensor Networks
13 :45-14:00 A. Topor, F. Babarada, C. Ravariu, A. Salageanu and I. Caras
Applications of Images Processing Algorithms for Bacterial Meningitis Diagnosis

June 30, 11:30-14.00, Software & Computer Applications - 2, room A202
Chairs: Zdzisław Pólkowski, Felix Albu
11:30-12:00 <i>Invited talk:</i> Felix Albu, Linh T.T. Tran and Sven Nordholm
Two-Microphone Acoustic Feedback Cancellation using NLMS based Algorithms
12:00-12:15 George Suciu, Alexandru Ganaside and Muneeb Anwar
IoT Time Critical Applications for Environmental Early Warning
12:15-12:30 Valeriu Manuel Ionescu, Dumitru Cazacu, Florentina Magda Enescu and Jose Manuel Lopez-Guede
System using a hybrid application for virtual reality 3D drawing
12:30-12:45 Eva Tuba and Zorica Stanimirovic
Elephant Herding Optimization Algorithm for Support Vector Machine Parameters Tuning
12 :45-13:00 Valeriu Manuel Ionescu
CPU and GPU gray scale image conversion on mobile platforms
13 :00-13:15 Lihong Luo, Xiamei Tan
Research of Model Scheduling Strategy in Large Web3D Scene Based on XML
13 :15-13:30 Łukasz Krawiec, Małgorzata Nycz, Zdzisław Pólkowski
Validation of website accessibility, a case study of DIMBI project

June 30, 11:30-14.00, International Workshop on Trends and Opportunities in Teaching Career - 2017, room A301
Chairs: Ana Oproescu, Elena-Otilia Virjoghe, Pescaru Maria
11:30-12:00 Invited talk: Ana Oproescu
The constructivist design of the assessment - an integrated teaching and learning process
12:00-12:15 Pescaru Maria, Esther Nieto Moreno de Diezmas
Romanian Educational Policies for the Implementation of the Community in School Activity
12:15-12:30 Pescaru Maria, Pescaru Cristina-Maria
The Role of the School Manager in Developing the Culture of Educational Organization in Romania
12:30-12:45 Liliana Ezechil
Teacher's personality and style
12:45-13:00 Lazăr Adriana
Developing Teacher Trainees' Autonomy through Self-Reflection
13 :00-13:15 Crina Dumitrița Popa
Moral education - a MUST of the postmodern society
13:15-13:30 Georgiana Dumitru
The Psycho-Pedagogical Counselling of the Future Teachers Students during Pedagogical Training Stages
13:30-13:45 Păiși Lăzărescu Mihaela, Stan Maria Magdalena
Student Centered Learning Using ICT
13:45-14:00 Sofia Loredana Tudor
Teachers' Formation from the Perspective of Labour Market Demands

June 30, 11:30-14.00, International Workshop on Systems Safety & Security- IWSSS – 2017 - 2, room TG6
Chairs: Emil Pricop, Grigore Stamatescu
11:30-11:45 Cristian Dragana, Viorel Mihai, Grigore Stamatescu, Dan Popescu
In-network Stochastic Consensus for WSN Surveillance Applications
11:45-12:00 Ionut - Daniel Barbu, Sabina-Daniela Axinte, Cristian Pascariu, Ioan Bacivarov and Marian Firoiu
Intruder Monitoring System for Local Networks Using Python
12:00-12:15 Cristian Pascariu, Ionut-Daniel Barbu and Ioan Bacivarov
Dynamic analysis of malware using artificial neural networks
12:15-12:30 Bogdan-Cosmin Chifor, Ion Bica and Victor-Valeriu Patriciu
Mitigating DoS attacks in publish-subscribe IoT networks
12:30-12:45 Mihai Togan, Alin Feraru and Adrian Popescu
Virtual Machine for Encrypted Code Execution
12 :45-13:00 Nicolae Lucaci, Petrică Ciofîrnae, Irinel Florin Tone and Ionut Firiceanu
Specific Acces Architecture for Computer Networks with AAA Server Solution
13 :00-13:15 Mihail-Iulian Plesa
Hybrid Scheme for Secure Communications Using Quantum and Classical Mechanisms

13:15-13:30 Mihai Togan, Bogdan-Cosmin Chifor, Ionut Florea, George Gugulea
A Smart-phone Based Privacy-Preserving Security Framework for IoT Devices
13:30-13:45 Cristina Cica, Lucian Filipoaia
Sustainability enabling research methods for development of integrated border security systems
13:45-14:00 Paul Şchiopu, Aurelian Costea
Independent thermal protection for electrical circuit breaker panels, electrical power cables and lines. A practical solution proposal

June 30, 11:30-14.00, Poster session 2, room Poster Hall
Chairs: Emil Pricop, Emil Diaconu, Mihai Oproescu
Laurentiu-Mihai Ionescu, Alin Mazare, Mihai Oproescu, Ioan Lita, Gheorghe Serban, Nadia Belu and Toni Goeller
Electricity consumption measurement system for detecting losses occurring in power transmission networks
Nicoleta Angelescu, Dan Constantin Puchianu, Gabriel Predusca, Liana Denisa Circiumarescu and George Movila
DMVPN simulation in GNS3 network simulation software
Alexandru Ene and Andrei Ene
An application of Levenshtein algorithm in vocabulary learning
Cristian Andrei Badea and Horia Andrei
Case Studies of Energy Efficiency in Wastewater Treatment Plants
Sisman George, Nicu Bizon and Mihai Oproescu
Predictive maintenance of electronics systems based on analysis with thermographic camera and fuzzy graphs
Florentina Magda Enescu, Cicerone Marinescu, Valeriu Manuel Ionescu and Cosmin Ştirbu
System for monitoring and controlling renewable energy sources
Mihai C. Arva and Eugen Diaconescu
Experimental study on nonlinear behavior of Buck converter as noise generator and its influence on vibroacoustic systems
Gaudentiu Varzaru, Adrian Zarnescu, Razvan Ungurelu and Andra Gabriela Iordache
A cost-effective solution for remote Carbon Dioxide indoor monitoring
Hayder Al-Amily and Marius Vochin
Practical Design of High Frequency Low Noise Amplifier Design
Razvan Andrei Gheorghiu, Angel Ciprian Cormos, Valentin Alexandru Stan, Valentin Iordache
Overview of network topologies for V2X communications
Razvan Andrei Gheorghiu, Valentin Alexandru Stan, Valentin Iordache and Diana Irina Zamfir
Use of V2I Communications to Enhance Accuracy of the Estimated Time of Arrival in Crowded Transport Environments
Diana Irina Zamfir, Andrei Gabriel Sanmarghitan, Razvan Andrei Gheorghiu
Fail-Safe Aircraft Onboard Communication Network Solution

June 30, 15:30-17:00 ECAI ECAI Afternoon sessions
June 30, 15:30-17:00 – Bio-medical applications
June 30, 15:30-17:00 -- Microwaves & EMC
June 30, 15:30-17:00 -- Workshop OCSC-2017
June 30, 15:30-17:00 -- 5th Workshop WAITS 2017
June 30, 15:30-17:00 -- E – SESSION
June 30, 15:30-17:00 – Workshop IWAE-2017
June 30, 15:30-17:00 -- ECAI Poster session 3

June 30, 15:30-17.00, Bio-medical applications, room A102
Chairs: Gabriela Anghelescu, Nicoleta Angelescu
15:30-16:00 <i>Invited talk:</i> Gabriela Anghelescu, Nicolae Mirescu, Andreea Tănăsescu, Florin Grama, Ruxandra Populeanu and Mihai Ionică
Quantitative determination of ethyl alcohol in blood, by gas chromatography
16:00-16:15 Ruxandra Populeanu, Andrea Raluca Băjănaru, Gabriela Anghelescu, Mihai Ionică, Genica Caragea, Radu Alexandru Macovei, Florin Grama, Daniel Cristian
Methods for increasing the sensitivity and signal-to-noise ratio in mass spectrometry for the determination of cocaine end ethylbenzoylcegonine in urine
16:15-16:30 Mihail Tudosie, Elena Truță, Ana Maria Davițoiu. Ana Mihaela Mitu and Alexandra Andrada Bojescu
Optoelectronics method for determining the cobalt involved in symptoms of attention deficit hyperactivity disorder children
16 :30-16:45 Sorin Soviany, Virginia Sandulescu, Sorin Puscoci, Cristina Soviany and Mariana Jurian
An Optimized Biometric System with Intra- nd Inter-Modal Feature-level Fusion

June 30, 15:30-17.00, Microwaves & EMC, room A201
Chairs: Stefan Simion, Florian Ion
15:30-16:00 <i>Invited talk:</i> Stefan Simion
Analysis of single-fed and dual-fed distributed amplifiers based on analytical approach
16:00-16:15 Florin Enache, Daniel Depărățeanu and Florin Popescu
Optimal Design of Circular Antenna Array Using Genetic Algorithms
16:15-16:30 Maria Brojboiu, Virginia Ivanov, Florin Ocoleanu
Experimental Setup for Measuring the Weight of Materials During Drying Process in the Microwave Oven
16:30-16:45 Ciprian Curteanu, Maria-Lavinia Iordache Bobaru, Răzvan Asanache and Mihai Iordache
S-Parameters utilization in electrical quadrupoles analysis
16 :45-17:00 Marius Voinea and Mihai Iordache
Transmission lines and square wave signal integrity analysis

June 30, 15:30-17.00, Workshop on Optical Communication Systems Connectivity, OCSC-2017, room A202
Chairs: Sorin Puscoci, Cornel Bărbuț
15:30-16:00 Invited talk: Viorel Manea, Sorin Pușcoci, Dan Alexandru Stoichescu
Multi-head wavelength division multiplexing free space optical system
16:00-16:15 Niculina Badalan, Paul Svasta and Cristina Marghescu
Fan vs. Passive Heat Sinks for Cooling High Power COB-type LEDs
16:15-16:30 Adrian Sima, Paul Schiopu and Petre Catalin Logofatu
Real - time digital holographic interferometric measurement of diffusive objects displacements using spatial light modulator
16 :30-16:45 Marian Vladescu, Valentin Feies, Paul Schiopu, Alexandru Craciun, Neculai Grosu, Mihaela Savin, Carmen-Marinela Mihailescu and Dana Stan
Method for the Quantitative Determination through Fluorescence of Biosurfaces
16 :45-17:00 Cornel Bărbuț
Fiber Optic Networks in Romania - ready for Next Generation Network or Future Networks?

June 30, 15:30-17.00, Workshop on Automotive and Intelligent Transport Systems – WAITS 2017, room A301
Chairs: Marius Minea, Valentin Alexandru Stan
15:30-15:45 Marius Minea
On the design of V2I communications infrastructure with reduced infrastructural set
15:45-16:00 Marius Minea
Cellular / Sensorless V2I - Based Traffic Information and Communications Infrastructure. Case study for high class motorways
16:00-16:15 Cristian Hoarca, Nicu Bizon and Alexandru Badita
Design of hybrid power systems using HOMER simulator for different renewable energy sources
16:15-16:30 Valentin Alexandru STAN, Radu Serban TIMNEA
Power analysis over digital pulse fail-safe railway track circuit
16 :30-16:45 Nicu Bizon, Mihai Culcer, Mariana Ilescu, Alin Mazare, Ionescu Laurentiu, Robert Beloiu
Real-time strategy to optimize the Fuel Flow rate of Fuel Cell Hybrid Power Source under variable load cycle
16 :45-17:00 Nicu Bizon, Mihai Culcer, Mariana Ilescu, Marian Raducu, Luminita-Mirela Constantinescu
Real-time strategy to optimize the operation of Fuel Cell Hybrid Power Source under variable load cycle

June 30, 15:30-17.00, International Workshop on Applied Electronics – 2017 , room TG6
Chairs: Gabriel Iana, Petre Anghelescu
15:30-16:00 Invited talk: Petre Anghelescu, Ioan Adrian Stefan
Parking Management And Control System
16:00-16:15 Mustapha Jamma, Abderrahim Bennassar, Mohammed Akherraz, Chaymae Fahassa, Mohamed Barara and Mihai Oproescu
Self-tuning fuzzy PI dc-bus voltage controller and fuzzy switching sequences selection for direct power control of PWM AC/DC converter
16:15-16:30 Corina Savulescu and Zdzislaw Polkowski
An Approach for Systems Identification Using Artificial Inteligence
16:30-16:45 Silviu Ionita and Gabriel Iana
NQR Detector: HW Solutions And Constructive Issues
16:45-17:00 Florin-Marian Birleanu, Vasile-Gabriel Iana, Mihai Oproescu, Silviu Ionita, Gheorghe Serban
Feature Extraction for Distance-Based Classification of Signal Sources

June 30, 15:30-17.00, E – SESSION ECAI-2017, Library room
Chairs: Mihai Oproescu, Ion Caciula
Alexandru Lavric and Valentin Popa
LoRa Wide-Area Networks from an Internet of Things Perspective
Alexandru Lavric and Valentin Popa
Internet of Things and LoRa Low-Power Wide-Area Networks Challenges
Yi-Qing Liu, Zhi-Kai Gao , Zhang-Jian Shao and Gu-Yang Liu
Intelligent ultrasonic detection of walking sticks for the blind
Goncharov Dmitry Evgenievich, Zareshin Sergey Vladimirovich, Bulychev Roman Valerievich and Silnov Dmitry Sergeevich
Increasing efficiency of the Vistumbler Wi-Fi scanner
Salheddine Ayad, Abdelkader Megueni, Mohammed Ayad, Henrik Schiøler, Mark De Zee and Lotte Andreasen Struijk
A control Approach for a Robotic Ground Walking Platform
Gürkan Alpaslan and Oya Kalpsız
Integration Issues on User Interface based Web Development
Evgenii Suharev, Dmitry Silnov and Vladimir Ivanov
Research of Public Wi-Fi Networks Vulnerabilities by Performing Evil Twin and Man-in-the-middle Attacks
Viorel Ionescu and Anisoara-Arleziana Neagu
Thermal - Hydraulic Performance Modelling of a Sine - Shaped Wavy Channel for Electronics Cooling Applications
Afsaneh Tadoui Zanganeh and Gholamreza Akbarizadeh
Unsupervised Classification of PolSAR Images using NMF-FLD Features
Radu Rădescu and Sever Pașca
Procedures of Extending the Alphabet in Combined Coding for Prediction by Partial String Matching in Text Compression

Wisit Wisetsurasit, Krerk Piromsopa and Chris Charoenlap
Applying Digital Image Processing for Knee Joint Angle Bending Analysis using Smartphone Devices
Paravee Pattarakavin and Krerk Piromsopa
Development of Epidemiology Data Map Visualization System
Ali Yamuç, M.Özgür Cingiz, Göksel Biricik, Oya Kalpsız
Solving Test Suite Reduction Problem Using Greedy and Genetic Algorithms
Allan Rivalles Souza Feitosa, Henrique Lacerda, Abel Silva-Filho, Wellington Pinheiro Dos Santos and Filipe Rolim Cordeiro
Using Binary Multi Objective Particle Swarm Optimization for energy-saving in Smart Home environments
Muhammad Waleed, Aftab Khan and Ashfaq Khan
On the Quick Convergence of PSF Estimation for Single Image Blind Deblurring
Fahad Ali Khan and Aftab Khan
Avoiding Fake Facial Biometrics Through Liveness Estimation for Facial Recognition
Asif Iqbal and Muhammad Bilal
Demonstrating the Mobility feature in the Next Generation of the Internet Protocol (IPng / IPv6)

June 30, 15:30-17.00, Poster session 3, room Poster Hall
Chairs: Marian Popescu, Gabriela Bucur
Murat Unlu and Sabri Çamur
Solar irradiance emulator based on DC power supply for photovoltaic panels
Radut Marin
Performance of advanced Extremum Seeking Control algorithm to accurately locate the extremes on multimodal benchmark patterns
Rodica Mihaela Teodorescu and Ion Bogdan Cioc
5th order Chebyshev LC-Band Pass Filter Designing and Testing Using Virtual Methods
Viorel Popescu, Constantin Vasilescu, Gaudentiu Varzaru, Bogdan Mihailescu, Ioan Plotog
Remote Control of Sensorless Permanent Magnet Synchronous Motor
Daniel Alexandru VISAN, Mariana JURIAN, Adrian Ioan LITA
Virtual Instrumentation Based Acquisition and Synthesis Module for Communication Signals
Daniel Alexandru VISAN, Adrian Ioan LITA
Conditioning and Transmission Module for Resistive Bridge Sensors
Mohamed Adel Al-Shaher and Nassir Jabir Al-Khafaji
E-Healthcare System to Monitor Vital Signs
Cristian Liviu Leca
Overview of Romania 802.11 Wireless Networks Security
Sabina-Daniela Axinte, Gabriel Petrica and Ionut-Daniel Barbu
Managing a Software Development Project Complying with PRINCE2 Standard
Gabriel Petrica, Sabina-Daniela Axinte, Ioan C. Bacivarov, Ioan-Cosmin Mihai and Marian Firoiu

Studying Cyber Security Threats to Web Platforms Using Attack Tree Diagrams

Ion Valentin Gurgu, Marius Giorgian Ionita, Vasile Ion, Dinu Coltuc, Ioan Alexandru Ivan and Horia Andrei

Simulation method and measurement system of electromagnetic force used in micromanipulation systems

17:00-17:30 Coffee break, Discussions and Brokerage events

ECAI CLOSING CEREMONY

June 30, 17:30-18:00, ECAI Closing Ceremony, TG1

Closing speeches

17:30-17:40 Mihai Oproescu, Program Chair of ECAI 2017 ,

17:40-18:00 Time of closing speeches for the ECAI participants

June 30, 18:00-20:00: , ECAI Gala Dinner

Saturday, July 01, 2017

9:00-17:00, ECAI trip

Departure at 9.00, July 01, from “Valahia” University Parking lot,

Arrival will be at about 14.00, July 01.

Sunday, July 02 2017

Participants’ departure

End of ECAI conference actions

ECAI 2017, June 29 – July 01, 2017, Timetable and Program

Date	Time	Session or activity	Location	
June 29	8:00-8:50	Authors Registration	“CD”	
	9:00-9:40	ECAI Opening Ceremony	TG1-room	
	9:40-11:00	ECAI KEYNOTE LECTURES I.1	TG1-room	
	11:00-11:30	Coffee break & Brokerage events		
	11:30-12:10	ECAI KEYNOTE LECTURES I.2	TG1-room	
	12:15-12.45,	RT1: Data scientist as a National security Actor	A102-room	
	12:15-13:15	RT2: SmartVibes & SENZOREX projects for security solutions	A201-room	
		RT3: Issues and challenges in Smart Grid	A202-room	
		RT4: The importance of modelling and simulation in virtual prototyping	A301-room	
	12:15-14.00	Brokerage events	Poster Hall	
	14:00-15.30	Lunch	“R” – ECAI restaurant	
	15:30-17:00	ECAI Afternoon sessions		
		Software & Computer Applications – 1	A102-room	
		Electrical Engineering	A201-room	
		Control, robotics and mechatronics	A202-room	
		Workshop IWSSS 2017 – 1	A301-room	
		ECAI Poster session 1	Poster Hall	
17:00-17:30	Coffee break & Brokerage events			
18:30-21:00	ECAI Welcome dinner	VALAHIA BUILDING		
June 30	9:00-9:30	Authors Registration	“CD”	
	9:30-11:00	ECAI KEYNOTE LECTURES II	TG1-room	
	11:00-11:30	Coffee Break & Brokerage events		
	11:30-14:00	ECAI morning sessions		
		Electronic Circuits & Equipment	A102-room	
		Young Researchers	A201-room	
		Software & Computer Applications-2	A202-room	
		Workshop IWTOTC 2017	A301-room	
	13:00-14:00	Workshop IWSSS 2017-2	TG6-room	
	13:00-14:00	ECAI Poster session 2	Poster Hall	
	14:00-15:30	Lunch	“R” – ECAI restaurant	
	15:30-17:00	ECAI Afternoon sessions		
		Bio-medical applications	A102-room	
		Microwaves & EMC	A201-room	
		Workshop OCSC 2017	A202-room	
		Workshop WAITS 2017	A301-room	
		Workshop IWAE 2017	TG6-room	
ECAI E-session		E-session room		
ECAI Poster session 3		Poster Hall		
17:00-17:30	Coffee Break & Brokerage events			
17:30-18:00	ECAI Closing Ceremony			
18:00-20:00	ECAI Gala Dinner	“R” – ECAI restaurant		
20:00-23:00	Free time (shopping & sightseeing)			
July 01	9:00 – 17:00	ECAI Trip, Participants departure	Departure at 9.00, July 01, from Valahia Parking	
July 02		Participants departure		

Workshop on Automotive and Intelligent Transport Systems – WAITS 2017

International Workshop on Systems Safety & Security - IWSSS 2017

International Workshop on Applied Electronics – IWAE 2017

International Workshop on Trends and Opportunities in Teaching Career - IWTOTC-2017

“R” – ECAI restaurant

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June 29 – July 01, 2017

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The ECAI Proceedings will be submitted to the IEEE Xplore® database and also to be evaluated and included in the ISI Web of Knowledge database.

Extended version of selected papers presented in ECAI sessions will be free published in special issues of the SCI Indexed, SCOPUS and ISI Web of Science Indexed Journals., after that papers will be further reviewed as normal.

The best presented papers will be selected by the technical committee for publication in:

- the Journal of Romanian Academy “Revue Roumaine des Sciences Techniques, serie Electrotechnique and Energetique”, ISSN 0035-4066, Thomson Reuters JCR impact factor 0.524 for 2015/16.

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