

8th INTERNATIONAL CONFERENCE

on

ELECTRONICS, COMPUTERS
and ARTIFICIAL INTELLIGENCE

ECAI 2016, June 30– July 02, 2016



PROGRAM

hosted by

PETROLEUM-GAS UNIVERSITY OF PLOIESTI, ROMANIA

- Department of Automatic Control, Computers and Electronics

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ECAI 2016, June 30– July 02, 2016

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PROGRAM

Wednesday, June 29, 2016

Wednesday, June 29, Participants' arrival

Thursday, June 30, 2016

June 30, 8:00-8:50, conference desk

Registration of the participants

June 30, 9:00-9:40, OFFICIAL OPENING

AP9, keynote room

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

09:00-09:05 Welcome message of Prof. Nicolae Paraschiv,
Chair of ECAI 2016, Petroleum-Gas University of Ploiesti

09:05-09:10 Welcome message of Prof. Pascu-Mihai Coloja,
Rector of the Petroleum-Gas University of Ploiesti

09:10-09:15 Welcome message of Prof. Nicu Bizon,
Chair of ECAI 2016, University of Pitești

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

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

09:25-09:30 Welcome message of Prof. Lucian Doru Dascalescu,
Past-Chair Electrostatics Processes Committee IEEE IAS

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

09:35-09:40 Welcome message of Takeshi Yamakawa,
Honorary Chair of the ECAI 2016

09:40-09:45 Sponsors' message

June 30, 09:40-13:30, ECAI KEYNOTE LECTURES –I, AP9

Chairs: Nicu Bizon, Nicolae Paraschiv

09:45-10:25, Lucian Doru Dascalescu

Electrostatics of Dispersed Media Research Unit

10:25-11:05, Kazumi Nakamatsu

Intelligent Decision Technology from the Viewpoint of Reasoning-based Intelligent Systems

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

Chairs: Nicu Bizon, Nicolae Paraschiv

11:35-12:15, Petia Koprinkova

A novel approach for multidimensional data clustering and visualization

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

12:15-12:45, Round Tables 1: Problems regarding interaction between the academia engineering with the economic and business environment

Organized by: Mazare Alin – Gheorghita, Ionescu Laurentiu – Mihai, and S.C. TECHNOVOLT S.R.L.

12:15-13:15, Round Table 2: Postgraduate continuous learning by interlinking training and research platforms for system engineering with the latest technological advances

Organized by Dr. Ing. Grigore Stamatescu, ASTI Automation

Participants FESTO Romania, SIEMENS Romania, ABB Romania, SYSCOM18, Mikon System, Rittal Systems Romania, Phoenix Contact Romania

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

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

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

June 30, 15:30-17:00, ECAI Afternoon sessions
June 30, 15:30-17:00 -- Workshop IWSSS 2016_A
June 30, 15:30-17:00 -- Electrical Engineering session
June 30, 15:30-17:00 -- Workshop IWTOTC 2016
June 30, 15:30-17:00 -- Electronic Circuits & Equipment _A
June 30, 15:30-17:00 -- Software & Computer Applications _A
June 30, 15:30-17:00 -- Workshop IWTOTC 2016 poster session
June 30, 15:30-17:00 -- ECAI Poster session 1

June 30, 15:30-17:00, International Workshop on Systems Safety & Security- IWSSS – 2016 session A room AP9
Chairs: Grigore Stamatescu, Emil Pricop
15:30-16:15 <i>Invited talk:</i> Prof. Reuven Cohen
Network Attacks on a Smart City Wireless Mesh
16:15-16:30 Zeeshan Afzal, Stefan Lindskog
IDS Rule Management Made Easy
16:30-16:45 Cristian Dragana, Grigore Stamatescu, Andrei Dobrin, Dan Popescu
Evaluation of continuous consensus algorithm in border surveillance missions
16:45-17:00 Emil Pricop, Sanda Florentina Mihalache, Nicolae Paraschiv, Jaouhar Fattahi, Florin Zamfir
Considerations regarding security issues impact on systems availability

June 30, 15:30-17:00, Electrical Engineering session room AP10
Chairs: Ires Iskender, Cornel Ianache
15 :30-16:00 <i>Invited talk:</i> Ires Iskender, Sami Arslan
Design Aspects of a 26500-rpm, 2-kW High-Speed Permanent Magnet Synchronous Generator for Turbomachinery Systems
16 :00-16:15 Ali Mamizadeh, Ires Iskender
A New Approach in Efficiency Analysis of Induction Motor Without Using Torquemeter and Encoder
16:15-16:30 Langa HM, Twala B
The Implementation of the Unity Displacement Factor Frequency Converter - Tackling Short Circuit and Overvoltage Problems
16:30-16:45 Mustapha Jamma, Mohamed Barara, Mohammed Akherraz, Bogdan-Adrian Enache
Voltage oriented control of three-phase PWM rectifier using space vector modulation and input output feedback linearization theory
16:45-17:00 Naci Genc, Hasan Uzmus, Ires Iskender
Dynamic Behavior of DC-DC Boost Converter Controlled with Cascade PI-ASC

June 30, 15:30-17.00, International Workshop on Trends and Opportunities in Teaching Career - 2016 room A-II-5
Chairs: Adriana Lazar, Zdzislaw Polkowski
15 :30-16:00 <i>Invited talk:</i> Zdzislaw Polkowski, Julian Vasilev, Dariusz Zajac, Lidia Florina Arnautu
A content analysis of existing educational portals for teaching data warehouse and business intelligence
16:00-16:15 Adriana Lazăr, Claudiu Langa
Related Review of Theories Developed on Using CLIL in Primary Schools in Romania
16:15-16:30 Adriana Lazar
Suggestions on Introducing CLIL in Primary Schools
16:30-16:45 Claudiu Langa, Floretina Dumitru
Perspective of the Romanian remigrant students on the process of adapting to the Romanian school
16:45-17:00 Georgiana Dumitru
The teachers' perceptions concerning the difficulties met in teaching and types of adopted solutions

June 30, 15:30-17.00, Electronic Circuits & Equipment _A session room B-II-3
Chairs: Dorel Aiordachioaie, Adrian Moise
15 :30-16:00 <i>Invited talk:</i> Yasin Kabalci, Ersan Kabalci
A Low Cost Smart Metering System Design for Smart Grid Applications
16:00-16:15 Luiza Grigorescu
The Errors Study of the Second Order Current-Mode RC Oscillators
16:15-16:30 Luiza Grigorescu, Ioana Diaconescu
Theoretical And Experimental Research On The Current-Mode RC Oscillators
16:30-16:45 Anisia Culea-Florescu, Dorel Aiordachioaie
Some Results on Change Detection Based on Advanced Signal Processing Paradigm
16:45-17:00 Ioan Lita, Daniel Alexandru Visan, Ion Bogdan Cioc, Alin Gheorghita Mazare, Rodica Mihaela Teodorescu
Indoor Environmental Parameters Monitoring for Building Automation Systems

June 30, 15:30-17.00, Software & Computer Applications _A session room B-III-3
Chairs: Horia-Nicolai L. Teodorescu, Mihaela Oprea
15 :30-16:00 <i>Invited talk:</i> Horia-Nicolai L. Teodorescu, Speranta Cecilia Bolea
On the Algorithmic Role of Synonyms and Keywords in Analytics for Catastrophic Events
16:00-16:15 Horia-Nicolai L. Teodorescu, Mironela Pirnau
Analysis of requirements for SN monitoring applications in disasters – A case study
16:15-16:30 Alexandru Petrini, Valeriu Manuel Ionescu
Implementing the Huffman Coding Algorithm on Windows 10 IoT Core
16:30-16:45 Florentina Toader
Evolutionary Algorithms for Job Shop Scheduling
16:45-17:00 Petre Anghelescu, Vlad Gabriel Ilescu, Constantin Mara, Mihai Bogdan Gavriloaia
Automatic Thresholding Method for Edge Detection Algorithms

June 30, 15:30-17.00, International Workshop on Trends and Opportunities in Teaching Career – 2016 poster session room Poster Hall
Chairs: Corina Savulescu, Florin Tecau
Florin Tecau
The Stimulation of the Critical Thinking of the Engineers Students
Florin Tecau
Educational Pyramid
Emanuel Soare
Situation-centred Approaches in Postmodern Curriculum Design
Sofia Loredana Tudor
The role of non-formal and informal education in competences training - transversal competences
Sofia Loredana Tudor
A Teaching Approach of the Digital Competence into the School Curriculum
Savulescu Corina, Polkowski Zdzislaw, Dutta Nitul
Collaborative Data Management for Business - A review of collaborative techniques
Ionut Bulgaru
School Organizational Culture
Ionut Bulgaru
Knowledge of the affective-sympathetic relationships between the members of the educational group
Ciprian Lapusan, Olimpiu Hancu, Ciprian Rad, Liliana Dache, Vistrian Maties
Integrated learning platform based on Lego NXT and Matlab for teaching mechatronics

**June 30, 15:30-17.00, Poster session 1
room Poster Hall**

Chairs: Horia Andrei, Gabriel Rădulescu

Cristian Andrei Badea, Horia Andrei, Alexandru Gonciariuc and Emanuel Rus

Predictive Methods to Increase Energy Efficiency in Processes of Wastewater Treatment

G. CARUTASU, M. A. BOTEZATU, C. BOTEZATU, M. PIRNAU

Cloud Computing and Windows Azure

Simona-Vasilica OPREA, Adela BĂRA, George CĂRUȚAȘU, Alexandru PÎRJAN

Prosumers' Renewable Small-Size Generation Forecasting Analyses With ARIMA Models

Ioana Diaconescu, Roxana Patrascu, Luiza Grigorescu, Eduard Minciuc

Energy Efficiency Aspects of Urban Waste Recovery

Aurel-Dorian Floarea, Valentin Sgârciu

Smart Refrigerator - A next generation refrigerator connected to the IoT

Claudiu Pirnau, Mihail Titu, Liviu Rosca

The integration of information technologies in the knowledge based organizations

Marius Enulescu

CBTC with AD-HOC networks

Marius Enulescu

Track circuit with SIMO

Gabriel Oprea, Horia Andrei

The optimization of energy consumption for an industrial consumer

Barca Cristian, Barca Claudiu, Cucu Cristian, Gavriloaia Mariuca-Roxana, Vizireanu Radu, Fratu Octavian, Halunga Simona

A Virtual Cloud Computing Provider for Mobile Devices

Beibei Zhu, Xiaoyu Wu, Lei Yang, Yinghua Shen

Automatic detection of books based on Faster R-CNN

Leila Graini, Kaddour Saouchi, Silviu Ionita, Grigore-Adrian Iordachescu

Optical Similaritons in Optical Communication Systems

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

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

Friday, July 01, 2016

July 01, 09:30-11:00, ECAI KEYNOTE LECTURES II, AP9 room

Chairs: Nicu Bizon, Nicolae Paraschiv

09:30-10:10, Silvia Curteanu

Artificial intelligence tools applied for modelling and optimization of chemical engineering processes

10:10-10:50, Erol Kurt

Electromagnetic Optimization of a Permanent Magnet Synchronous Generator

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

July 01, 11:00-14:00 ECAI morning sessions

July 01, 11:30-14:00 – Communication session

July 01, 11:30-14:00 -- Robotics, mechatronics and control session

July 01, 11:30-14:00 -- Young Researchers session

July 01, 11:30-14:00 -- Electronic Circuits & Equipment _A

July 01, 11:30-14:00 -- Workshop IWSSS 2016 session B

July 01, 11:30-14:00 -- Workshop IWAE 2016 session

July 01, 11:30-14:00 -- Workshop IWAE 2016 poster session

July 01, 11:30-14:00 -- ECAI Poster session 2

July 01, 11:30-13.15, Communication - session room B-III-1

Chairs: Constantin Paleologu, Alexandru Savulescu

11:30-12:00 *Invited talk:* Constantin Paleologu, Jacob Benesty, Cristian Stanciu, Cristian Anghel, Mircea Stenta

Robust Regularization of the Recursive Least-Squares Algorithm

12:00-12:15 Ioan Tache

Optimum Bit-Rate Allocation on Satellite Transponder for best Perceptual Video Quality

12:15-12:30 Nita Stefania Loredana

On Recommendation Systems Applied in Big Data

12:30-13:00 Zdzislaw Polkowski, Corina Savulescu, Nitul Dutta, Mykhailo Shtefanitsa

Mobile Solutions in Small and Medium Enterprises

13 :00-13:15 Rodica Mihaela Teodorescu, Ion Bogdan Cioc, Bogdan Andrei Vochin, Adrian Ioan Lita

LabVIEW Application Used for Remote Control of a Mobile Robot with XBee Communication

July 01, 11:30-13.15, Control, robotics and mechatronics section room AP10
Chairs: Cristian Patrascioiu, Sanda Florentina Mihalache
11:30-12:00 Cristian Patrascioiu, Cao Minh Ahn
Characterization and Control of the Distillation Column with Heat Pump
12:00-12:15 Serket Quintanar-Guzman, Somasundar Kannan, Miguel A. Olivares-Mendez, Holger Voos
Lightweight robotic arm actuated by Shape Memory Alloy (SMA) Wires
12:15-12:30 Baiesu Alina-Simona, Carbureanu Madalina
Internal Model Control for Wastewater pH Neutralization Process
12:30-13:00 Sanda Florentina Mihalache, Marian Popescu
Development of ANFIS Models for PM Short-term Prediction. Case Study
13:00-13:15 Popa Cristina, Alexandru Popa
Improving FCC Plant Performance with Model Reference Adaptive Control Based on Neural Network
13:15-13:30 Ion Pana, Florinel Dinu, Gabriela Bucur
Analysis of a filter used in the natural gas gathering system - Recommendation on the measuring of the pressure drop

July 01, 11:30-13.15, Young Researchers session - with technical support of IEEE-IAS-RO Chapter room AI-II-5
Chairs: Cosmina Rosca, Gabriel Rădulescu
11:30-11:45 Cosmina Mihaela Rosca, Nicolae Paraschiv
Frequency sampling algorithm applied in microwave measurements based on step-size control method
11:45-12:00 Bogdan Gavriiloaia, Radu Vizireanu, Octavian Fratu, Cristian Barca, Constantin Mara, Petre Anghelescu
Design of Multi-band Microwave Filter with Asymmetric Polygonal Microstrip Loops
12:00-12:15 Bogdan Constantin Neagu, Gheorghe Grigoras, Florina Scarlatache
Power Losses Estimation in Harmonic Polluted LV Distribution Networks with a Fuzzy Approach
12:15-12:30 Andrei George Florea, Cătălin Buiu
Synchronized dispersion of robotic swarms using XP colonies
12 :30-12:45 Ion Bogdan Andrei, Nicu Bizon
Performance evaluation of five PWM modulation strategies applied to spread the power spectrum of the power converters
12 :45-13:00 Bogdan-Adrian Enache, Florin-Marian Bîrleanu, Marin Răduț
Modeling a PV panel using the manufacturer data and a hybrid adaptive method

July 01, 11:30-13.15, Electronic Circuits & Equipment _B session room B-II-3
Chairs: Milan Stork, Marius Olteanu
11:30-12:00 <i>Invited talk:</i> Milan Stork
Fractional-Order Oscillator Control
12:00-12:15 Pavel Karlovsky, Radek Linhart, Jiri Lettl
Sensorless Determination of Induction Motor Drive Speed Using MRAS Method
12:15-12:30 Emre Hasan Dursun, Akif Durdu
Position Control by using PD Type Fuzzy Logic: Experimental Study on Rotary Servo System
12:30-12:45 Siro Boris, Marius Olteanu
A methodology for determining commutation quality indicators when using a PWM power source for an electric drive
12 :45-13:00 Gheorghe Serban, Gabriel Vasile Iana, Petre Anghelescu
Fault detection of direct radiator loudspeaker systems by phase characterisation

July 01, 11:30-13:30, International Workshop on Systems Safety & Security- IWSSS – 2016 session B room AP9
Chairs: Dan Popescu, Nicolae Paraschiv
11:30-11:45 Pavol Sokol, Veronika Kopčová
Lessons learned from correlation of honeypots' data and spatial data
11:45-12:00 Cristina Cică, Lucian Filipoaia
Border surveillance optimization using a multi-objective mathematical model
12:00-12:15 Daniela Tudorică, Nicolae Paraschiv, Cornel Marinescu, Bogdan Tudorică
A Robust Wireless Solution for Leak Detection and Localization in Oil Pipelines
12:15-12:30 Omar Abdulwahabe Mohamad, Rasha Talal Hameed, Nicolae Tăpuș
Design and implementation of real time tracking system based on Arduino Intel Galileo
12:30-12:45 Sorin Dobrescu, Oana Chenaru, Nicoleta Matei, Loretta Ichim, Dan Popescu
A Service Oriented System of Reusable Algorithms for Distributed Control of Petroleum Facilities in Onshore Oilfields
12:45-13:00 Otilia Cangea, Carmen-Silvia Oprina, Mihai-Octavian Dima
Implementing Quantum Cryptography Algorithms for Data Security
13:00-13:15 Dominic Eugeniu Moraru, Dorian Octavian Sidea
Design extension condition on PHWR accident scenario
13:15-13:30 Andrada Livia Sumalan, Dan Popescu, Loretta Ichim
Flood Evaluation in Critical Areas by UAV Surveillance

July 01, 11:30-13.15, 3rd International Workshop on Applied Electronics session room B-III-3
Chairs: Iana Vasile Gabriel, Adrian Beteringhe
11:30-12:00 Invited talk: Iana Vasile Gabriel, Ionita Silviu, Ionescu Valeriu
System for interpreting the characteristics of metal objects based on signal acquired from a magnetic loop antenna
12:00-12:15 Ayse Kocalmis Bilhan, Abuzer Caliskan, Sencer Unal
Simulation Of A Photovoltaic Panels By Using Matlab/Simulink
12:15-12:30 Necmi Altin, Ertan Ozturk
Maximum Power Point Tracking Quadratic Boost Converter for Photovoltaic Systems
12:30-12:45 Jose Antonio Ramos-Hernanz, Jose Manuel Lopez-Guede, Ekaitz Zulueta-Guerrero, Fernando Oterino-Echavarri, Nicu Bizon, Andres Larrea
Study of the behavior of the Incremental Conductance algorithm for MPPT
12 :45-13:00 Adrian Beteringhe, Ion Sima
A New Chemometric Tool to Predict the Boiling Points of some Cycloalkanes
13:00-13:15 Kanyalag Phodong , Rachada Kongkachandra
Improvement of Word Alignment in Thai-English Statistical Machine Translation by Grammatical Attributes Identification

July 01, 11:30-14.00, 3rd International Workshop on Applied Electronics – 2016 poster session room Poster Hall
Chairs: Mihai Oproescu, Popa Cristina
Mihai Oproescu, Marian Raducu, Luminita Mirela Constantinescu
Evaluation of the performance of new Extremum Seeking Control algorithm to locate accurately the peaks on multimodal functions
Ioan Cristian Hoarca, Nicu Bizon
Performance of the Global MPPT Algorithms – a brief overview and case studies
Mihai Catalin Arva
First stage analysis on determining the Signal Quality Coefficient in vibro-acoustic domain - Waveform integrity analysis
Mihai Catalin Arva
Second stage analysis on determining the Signal Quality Coefficient in vibro-acoustic domain - Frequency domain analysis
Radut Marin, Nicu Bizon
Determining the power generated by the Photovoltaic Window blinds tilted at different angles for vertical and horizontal orientations

July 01, 11:30-14.00, Poster session 2 room Poster Hall
Chairs: Ersan Kabalci, Popescu Cristina
Maria Viorela Muntean, Alexandru Donea
A Hybrid Intelligent Agent based Expert System for user location using GPS Data
Mehmet Celalettin Ergene, Akif Durdu, Halil Cetin
Imitation and Learning of Human Hand Gesture Tasks of the 3D Printed Robotic Hand by Using Artificial Neural Networks
Adela-Gabriela Husu, Mihail-Florin Stan, Nicolae Fidel, Cosmin Cobianu, Horia Andrei
Analysis of Economic and Energy Efficiency for the Grid-Connected PV Systems
Cosmin Cobianu, Mihail-Florin Stan, Nicolae Fidel, Adela-Gabriela Husu
Case Study Concerning to the Radiation Levels Emitted by Mobile Phones on the Human Body
Florina Scarlatache, Gheorghe Grigoras and Bogdan Neagu
Decision Making Methodology Based on Fuzzy Logic in Optimal DG Location
Bhagyashri Sonkusare, Atul Kumar Sahai, Gourang Mulay, Rajib Chattopadhyay, Vinaya Gohokar
Improved performance of Multi-model Ensemble through the bias correction based on ANN technique
Petr Pichlík, Jiří Zďenek
Train Velocity Estimation by Extended Kalman Filter
Yasin Kabalci, Ersan Kabalci
The Low Cost Voltage and Current Measurement Device Design for Power Converters
Vicu Straticiu, Irina Nicolae, Rodica Strungaru, Mihaela Ungureanu
A preliminary study on the effects of music on human brainwaves
Gabriela Bucur, Adrian Moise, Ion Pana, Dragomir Orhei
Integrating PLCs in Automatic Systems for Dimensional Inspection
Badre Bossoufi, Hala Alami Aroussi, Silviu Ionita, Luminita-Mirela Constantinescu
Speed Control for PMSM Drive System Using Predictive Control
Mirel Stanica, Man Ion, Mihai Opoescu
The analysis of open loop and the working mode stepper motor at different frequencies

July 01, 15:30-17:00 ECAI ECAI Afternoon sessions
July 01, 15:30-17:00 – Bio-medical applications session
July 01, 15:30-17:00 -- Microwaves & EMC session
July 01, 15:30-17:00 -- Software & Computer Applications _B session
July 01, 15:30-17:00 -- Workshop OCSC-2016 session
July 01, 15:30-17:00 -- 5th Workshop WAITS 2016
July 01, 15:30-17:00 -- E – session
July 01, 15:30-17:00 -- ECAI Poster session 3

July 01, 15:30-17.00, Bio-medical applications session room AP9
Chairs: Stefan Bala, Gabriel Rădulescu
15:30-16:00 <i>Invited talk:</i> Mengjia Yan, Yurou Duan, Siqi Deng, Xiaoyu Wu, Wenjia Zhu
Facial beauty assessment under unconstrained conditions
16 :00-16:15 Rasha Talal Hameed, Omar Abdulwahabe Mohamad, Nicolae Țăpuș
Healthcare Monitoring System for Fetal Electrocardiogram Using Least Mean Square Based Adaptive Noise Canceling Approach
16:15-16:30 Stefan Miruna I. E. Nicolae, R. Strungaru G. M. Ungureanu
Efficient tracking of ERD based on the adaptive identification of the subject's reactive band
16:30-16:45 Rasha Talal Hameed,Omar Abdulwahabe Mohamad, Omar Talal Hamid, Nicolae Țăpuș
Patient Monitoring System Based on e-health Sensors and Web Services
16 :45-17:00 Ștefan-Radu Bala
Correlation of electroencephalographic potentials in biofeedback techniques with subjective patient's reactions in elaboration of wellness patterns for medical analysis

July 01, 15:30-17.00, Microwaves & EMC session room AP10
Chairs: Dumitru Cazacu, Ilona Piekarz
15:30-15:45 Ilona Piekarz
Measurement of dielectric material using open-ended couple-line section feed by simplified magic T circuit as microwave sensor
15:45-16:00 Dumitru Cazacu, Valeriu Ionescu, Silviu Ionita,Elena Virjoghe
On The Multishell Cylindrical Magnetostatic Shields:Analytical And Numerical Approach
16:00-16:15 Ilona Piekarz
Sensitivity Improved Four-Coupled-Line Section Microwave Sensor for Dielectric Material Detection
16:15-16:30 Jakub Sorocki
Slot-Coupled Directional Coupler for Application in 4x4 Butler Matrix Operating at 24 GHz
16:30-16:45 Jakub Sorocki
3-dB Directional Coupler Realized with the Use of Fully Planar Microstrip Technique
16 :45-17:00 Florin Enache, Daniel Deparateanu, Andrei Enache, Florin Popescu
Sparse Array Antenna Design Based on Dolph-Chebyshev and Genetic Algorithms

July 01, 15:30-17.00, Software & Computer Applications _B session room A-II-5
Chairs: Margarita Terziyska, Alina Baiesu
15:30-15:45 Invited talk: Margarita Terziyska, Yancho Todorov, Marius Olteanu
Influence of the input space selective fuzzification in semi fuzzy-neural networks
15:45-16:00 Kayhan Çelik, Erol Kurt
A New Image Encryption Algorithm Based on Lorenz System
16:00-16:15 Mihai Bucurica, Radu Dogaru, Ioana Dogaru
Improving computational efficiency for implementing a sound propagation simulation environment using Python and GPU
16:15-16:30 Daniel Deperateanu, Florin Enache, Andrei Enache, Florin Popescu, Ioan Nicolaescu
Sparse Array Antenna Optimization Using Genetic Algorithms
16:30-16:45 George Suci, Cristina Butca, Victor Suci, Ioana Mihaila, Romulus Cheveresan
Search Based Applications for Speech Processing
16:45-17:00 Sorin Soviany, Virginia Sandulescu, Sorin Puscoci
A Multimodal Biometric Identification Method for Mobile Applications Security

July 01, 15:30-17.00, Workshop on Optical Communication Systems Connectivity, OCSC-2016 session room B-II-3
Chairs: Sorin Puscoci, Otilia Cangea
15:30-16:00 Invited talk: Viorel Manea, Sorin Puşcoci, Monica Petre, Dan Alexandru Stoichescu
The approach of Wavelength Dense Multiplexing using Free Space Optical systems
16:00-16:15 Niculina Badalan, Paul Svasta, Ciprian Ionescu
Determining the LEDs Junction Temperature as a Function of Forward Voltage in Given Operating Conditions
16:15-16:30 Daniel Alexandru Visan, Mariana Jurian, Ion Bogdan Cioc, Laurentiu Mihai Ionescu, Adrian Ioan Lita
Delta Encoder for Fiber Optic Based Data Transmission of Signals from Sensors
16 :30-16:45 Dan Tudor Vuza, Marian Vladescu
The approach of Wavelength Dense Multiplexing using Free Space Optical systems

July 01, 15:30-17.00, 5th Workshop on Automotive and Intelligent Transport Systems – WAITS 2016 room B-III-1
Chairs: Emil Pricop, Valentin Alexandru Stan
15:30-16:00 <i>Invited talk:</i> Valentin Alexandru Stan, Radu Serban Timnea, Razvan Andrei Gheorghiu
High reliable radio data infrastructure for public automation applications - LoRa Networks
16:00-16:15 Mihai Dima, Iulian Adrian Chihaiia, Maria Claudia Surugiu
Communications centralized control system aimed at rail traffic
16:15-16:30 Razvan Andrei Gheorghiu, Radu Serban Timnea, Valentin Stan, Dorin Laurentiu Buretea
Simulation of traffic management systems using Arduino boards
16:30-16:45 Somasundar Kannan, Serket Quintanar-Guzmán, Jan Dentler, Miguel A. Olivares-Mendez, Holger Voos
Control of Aerial Manipulation Vehicle in Operational Space
16 :45-17:00 Razvan Andrei Gheorghiu, Valentin Alexandru Stan, Radu Serban Timnea
Personal monitor and automatic location transmission in case of traffic events

July 01, 15:30-17.00, E – session ECAI-2016 room B-II-3
Chairs: Florin Zamfir, Mihai Oproescu
Songbin Ding, Ruichen Ge, Qianqian Gu, Xiaoli Wang
The Study Of Wide-body Aircraft Family Using NSGAI
Shahad Fais Thabet, Ahmed Saadoon Ezzulddin, Omar Talal Hamid
Minimization and Optimization the Performance of Dual-Band BPF Using E-Shape Microstrip Structure
Wen Zhang, Heng Wang, Kaijun Ren, Junqiang Song
Chinese Sentence Based Lexical Similarity Measure for Artificial Intelligence Chatbot
Hussain Makasarwala, Prasun Hazari
Using Genetic Algorithm for Load Balancing Issue in Cloud
Valentin Pupezescu, Radu Radescu
The Influence Of Data Replication In The Knowledge Discovery In Distributed Databases Process
Radu Radescu, Valentin Pupezescu
Ball Automatic Detection and Tracking in Long Shot Views
Pornrat Jatunarpit, Krerk Piromsopa, Chris Charoanlap
Development of Thai Text-Mining Model for Classifying ICD-10 TM
Naratich Na-Lampang, Wiwat Vatanawood
Development of an Ontology-Based Configuration Management System
Marouane El Azaoui, Hassane Mahmoudi, Chafik Ed-dahmani

Backstepping Control of the Doubly Fed Induction Generator using Xilinx System Generator for Implementation on FPGA
Marouane El Azzaoui, Hassane Mahmoudi, Badre Bossoufi
Comparative Study of the Sliding Mode and Backstepping control in Power Control of a Doubly Fed Induction Generator
Marouane El Azzaoui, Hassane Mahmoudi, Chafik Ed-dahmani
Emulation of Wind Conversion Chain Equipped with a Doubly Fed Induction Generator
Noppon Prakannoppakun, Sukree Sinthupinyo
Skill Rating Method in Multiplayer Online Battle Arena
Mahdis Kia
Ball Automatic Detection and Tracking in Long Shot Views

July 01, 15:30-17.00, Poster session 3 room Poster Hall
Chairs: Marian Popescu, Gabriela Bucur
Omar Abdulwahabe Mohamad, Rasha Talal Hameed, Nicolae Țăpuș
Improved Performance of Energy Consumption In Wireless Sensor Networks Based on ZigBee Transceiver Protocol
Jakub Sorocki
Low-Loss UWB Bandpass Filters Using Composite Right/Left-Handed Unit Cells
Bogdan Doicin, Marian Popescu, Cristian Patrascioiu
PID Controller Optimal Tuning
Iлона Piekarz
Microstrip UWB Vivaldi Type Antenna for Operation in C and X Bands
Alexandru Ene, Cosmin Stirbu
A Java application for the failure rate prediction using feed forward neural networks
Altan Gencer
Modelling and analysis of operation PMSG based WECS under different load conditions
Alexandru Ene, Andrei Ene
A foreign language vocabulary learning software application
Silviu Teodoru
System Solution for Gas Consumption Monitoring
Ioana Roxana Dragomir, Marilena Lazar
Statistical assessment - as a part of security assessment applied to a block cipher
Carmen-Silvia Oprina, Mihai-Octavian Dima, Otilia Cangea
Neural Networks for Recognizing Modulations of RF Carriers
Niculina Badalan, Constantin Ropoteanu, Cristina Marghescu
Investigation of Heat Dissipation Limits for High Power LEDs
Ioana Roxana Dragomir, Marilena Lazar
Generating and testing the components of a block cipher
Maria Viorela Muntean, Raul Boldea
Intelligent Agents based Improved Map-Reduce Method for Multiple Databases

Robert Alexandru Dobre, Cristian Negrescu
Automatic Music Transcription Software Based on Constant Q Transform
Liviu Serbanescu, Madalina Mihailescu
Software Architecture For Inventory Management Of Stock Parts Based On Informations Retrievel
Mihaescu Mihai
Design and implementation of a multiport power converter 2-inputs & 1-output
17:00-17:30 Coffee break, Discussions and Brokerage events

ECAI CLOSING CEREMONY

July 01, 17:30-18:00, ECAI Closing Ceremony,

AP9

Closing speeches

17:30-17:35 Emil Pricop, Program Chair of ECAI 2016

17:35-17:40 Mihai Oproescu, Program Chair of ECAI 2016

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

July 01, 18:00-20:00:

ECAI Gala Dinner

Saturday, July 02, 2016

9:00-17:00, ECAI trip - Tour of the Prahova Valley

Departure at 9.00, July 02, from UPG Parking lot

Arrival will be at about 17.00, July 02.

Participants' departure

Sunday, July 03 2016

Participants' departure

End of ECAI conference actions

Visiting suggestions & sightseeing in Ploiesti city:

The Clock Museum - The Clock Museum in Ploiești is unique in the museum network of Romania and is one of the few of its kind in Europe. Clock Museum has a collection of historic timepieces owned by several famous Romanians, including King Carol I, and an 18th-century rococo Austrian clock that belonged to Wallachian prince Alexandru Ioan Cuza.

Address: Ploiesti, Str. Nicolae Simache, 1

The Oil Museum - unique in Romania, Ploiesti. This museum ighlights the important role of oil in the economic development of both the city and the country, especially in the 19th century when Romania was a petroleum pioneer.

Address: Ploiesti, Str. Dr. Bagdasar, 8

The Museum of History and Archeology he Museum of History and Archeology is hosted by an imposing edifice, architectural and historical monument, former secondary boys school St. Peter and Paul, whose foundation was poured on May 31, 1865. The permanent exhibition includes he permanent exhibition were opened: the coins collection, the medals collection, the room dedicated to the writer I.A.

Bassarabescu and the Lapidarium. In 1997 the museum was enriched with the hall "Mihai Viteazul si Ploiestii"- on the occasion of the anniversary of 400 years of documentary attestation of Ploiesti, the "Sport in Prahova county along the centuries" hall and a hall with archeological vestiges from Tragsor Reservation.

Address: Ploiesti, Str. Toma Caragiu, 10

The Art Museum Ploiesti has its origins in the Picture Gallery of Ploiesti City, set up in November 1931 as a result of the consistent efforts of an influential group of intellectuals in Ploiesti. The museum houses paintings by N. Tonitza, N. Grigorescu, S. Luchian, T. Pallady famous Romanian painters of the nineteenth century and the twentieth century and is structured on different collections: paintings, graphics, sculpture and decorative art.

Address: Independentei Blvd., 1, Ploiești

The I.L. Caragiale Museum present the image of the largest Romanian playwright, whose works have been translated and interpreted in countries like France, Japan, Spain, Italy and Belgium and is located in Ploiesti.

Address: Kutuzov Street, 1, Ploiesti

The Memorial Museum Nichita Stanescu presents "Nichita phenomenon" in the space where he was born, grew up and was educated as a man and as a poet. The exhibit include the writer opera published during his lifetime, awards that have recognized his value as a national poet (Prize for the youngest poet – Struga 1965, Grad Prix “Golden Wreath” - Struga 1982), unique manuscripts and documents, photographs and various personal items that complete Nichita image as a man and poet. Address: Ploiești, Str. Nichita Stănescu, nr. 1

ECAI 2016, June 30 – July 01, 2016, Timetable and Program

Date	Time	Session or activity	Location	
June 29	20:30-22:00	Participants' arrival		
1 June 30	8:00-8:50	Authors Registration	"CD"	
	9:00-9:40	ECAI Opening Ceremony	AP9-room	
	9:40-11:00	ECAI KEYNOTE LECTURES I.1	AP9-room	
	11:00-11:30	Coffee break & Brokerage events		
	11:30-12:10	ECAI KEYNOTE LECTURES I.2	AP9-room	
	12:15-12.45	RT1: Problems regarding interaction between the academia engineering with the economic and business environment	AP9-room	
	12:15-13:15	RT2: Postgraduate continuous learning by interlinking training and research platforms for system engineering with the latest technological advances	Senate Council Hall	
	12:15-14.00	Brokerage events	Poster Hall	
	14:00-15.30	Lunch	"R" – ECAI restaurant	
	15:30-17:00	ECAI Afternoon sessions		
		Workshop IWSSS 2016_A	AP9-room	
		Electrical Engineering session	AP10-room	
		Workshop IWTOTC 2016	A-II-5-room	
		Electronic Circuits & Equipment_A	B-II-3-room	
		Software & Computer Applications_A	B-III-3-room	
		Workshop IWTOTC 2016 poster session	Poster Hall	
17:00-17:30	Coffee break & Brokerage events	Poster Hall		
18:30-21:00	ECAI Welcome dinner	UPG Student House		
July 01	9:00-9:30	Authors Registration	"CD"	
	9:30-11:00	ECAI KEYNOTE LECTURES II	AP9 - room	
	11:00-11:30	Coffee Break & Brokerage events		
	11:30-13:15	ECAI morning sessions		
		Communication session	B-III-1-room	
		Control, robotics and mechatronics session	AP10-room	
		Young Researchers session	A-II-5-room	
		Electronic Circuits & Equipment_B	B-II-3-room	
		Workshop IWSSS 2016_B	AP9-room	
		Workshop IWAE 2016	B-III-3-room	
	13:00-14:00	ECAI Poster session 2	Poster Hall	
		Workshop IWAE 2016 poster session	Poster Hall	
	14:00-15:30	Lunch	"R" – ECAI restaurant	
	15:30-17:00	ECAI Afternoon sessions		
		Bio-medical applications session	AP9-room	
		Microwaves & EMC session	AP10-room	
Software, and computer applications_B		A-II-5-room		
Workshop OCSC 2016		B-II-3-room		
Workshop WAITS 2016		B-III-1-room		
ECAI E-session		B-III-3-room		
17:00-17:30	Coffee Break & Brokerage events	Poster Hall		
17:30-18:00	ECAI Closing Ceremony	AP9		
18:00-20:00	ECAI Gala Dinner	"R" – ECAI restaurant		
20:00-23:00	Free time (shopping & sightseeing)			
July 02	9:00 – 17:00	ECAI Trip Participants departure	Departure at 9.00, July 02, from UPG Parking lot	
July 03		Participants departure		

Workshop on Automotive and Intelligent Transport Systems – WAITS 2016,
Workshop on Systems Safety & Security - IWSSS 2016,
Workshop on Applied Electronics – IWAE 2016,
Workshop on Trends and Opportunities in Teaching Career - IWTOTC-2016,
“R” – ECAI restaurant

8th INTERNATIONAL CONFERENCE
on
ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE
ECAI 2016, June 30 – July 02, 2016

Financial & technical sponsorship



PAPERS PUBLISHING

The papers will be published in the ECAI proceedings and will be indexed in IEEE Xplore® and submitted to ISI Web of Knowledge databases.

The selected papers will be free published in the FETC Scientific Bulletin – Series: *Electronics and Computer Science* Journal (ISSN 1453-1119) and other sponsorship journals, after those papers will be further reviewed as normal.

Proceedings' Editors: Nicu Bizon and Nicolae Paraschiv

Text processing: Mihai Oproescu

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