

10th INTERNATIONAL CONFERENCE
on
ELECTRONICS, COMPUTERS
and ARTIFICIAL INTELLIGENCE
ECAI 2018, June 28– June 30, 2018



PROGRAM

hosted by

'Gheorghe Asachi' TECHNICAL UNIVERSITY, IASI, ROMANIA:

- Faculty of Electronics, Telecommunications and Information Technology

Organizers:

UNIVERSITY OF PITESTI, PITESTI, ROMANIA:

- Faculty of Electronics, Communications and Computers

'Gheorghe Asachi' TECHNICAL UNIVERSITY, IASI, ROMANIA:

- Faculty of Electronics, Telecommunications and Information Technology

POLITEHNICA UNIVERSITY OF BUCHAREST, BUCHAREST:

- Faculty of Electronics, Telecommunications and Information Technology

- Faculty of Automatic Control and Computers

JAN WYZYKOWSKI UNIVERSITY, Polkowice, Poland

NEVŞEHİR HACI BEKTAŞ VELI UNIVERSITY, NEVŞEHİR, TURKEY:

- Nevşehir Vocational School

'Valahia' UNIVERSITY, TARGOVISTE, ROMANIA:

- Faculty of Electrical Engineering, Electronics and Information Technology

PETROLEUM-GAS UNIVERSITY OF PLOIESTI, ROMANIA

- Department of Automatic Control, Computers and Electronics

MILITARY TECHNICAL ACADEMY, BUCHAREST, ROMANIA:

- Faculty of Electronics and Informatics Military Systems

FUZZY LOGIC SYSTEMS INSTITUTE, FUKUOKA, JAPAN

NATIONAL COMMUNICATIONS STUDIES AND RESEARCH INSTITUTE -
INSCC, Bucharest, RO

NUCLEAR RESEARCH INSTITUTE, Mioveni, ROMANIA

Under auspices of some sections and institutes of the Romanian Academy:

"INFORMATION SCIENCE AND TECHNOLOGY" SECTION OF THE
ROMANIAN ACADEMY

INSTITUTE OF COMPUTER SCIENCE OF THE ROMANIAN ACADEMY
(Iasi Branch)

Technical sponsorship of the

IEEE ROMANIA SECTION

IEEE INDUSTRY APPLICATIONS SOCIETY



ECAI 2018, June 28– June 30, 2018

Honorary Chairs: Takeshi Yamakawa

Conference Chairs: Nicu Bizon and Daniela Tärniceriu

Technical Program Committee (TPC) Chairs: Horia-Nicolai (L.) Teodorescu, Ioan Lita

Program Chair: Mihai Oproescu

Treasurer Chais: Marian Raducu

Publication Chairs: Valeriu Ionescu

Local Arrangements Chairs: Luminita Constantinescu, Corina Savulescu,

Public relation Chairs: Robert Beloiu

Technical Program Committee (TPC)

Adina Magda Florea (Ro)	Filippo Spertino (It)	Miguel Salmeron (USA)
Adriana Florescu (Ro)	Florin Constantinescu (Ro)	Mihaela Ungureanu (Ro)
Alexandru M. Morega (Ro)	Florin Ghe. Filip (Ro)	Mihai Maricaru (Ro)
Alexandru Serbanescu (Ro)	Franco Maloberti (It)	Mihai Tarata (Ro)
Amit Chaudhry (In)	Fuad F. Mammadov (Az)	Mihai Togan (Ro)
Angela Russo (It)	Gabriel Radulescu (Ro)	Milan Stork (Cz)
Anthony C. Davies (UK)	George Lojewski (Ro)	Mircea Ivanescu (Ro)
Arif M. Hashimov (Az)	Gheorghe Brezeanu (Ro)	Mircea Stefanescu (Ro)
Avireni Srinivasulu (In)	Gheorghe Gavrioloia (Ro)	Mohammad Alim (USA)
Calin Vladeanu (Ro)	Gheorghe Serban (Ro)	Musa Yilmaz (Tr)
Catalin Buiu (Ro)	Gianfranco Chicco (It)	Naser M. Tabatabaei (Ir)
Cengiz Taplamacioglu (Tr)	Hakan Kuntman (Tr)	Nesimi Aktas (Tr)
Cezar Plesa (Ro)	Harold Szu (USA)	Nicolae D Alexandru (Ro)
Charles Shoniregun (UK)	Hasan Kaplan (Al)	Nicolae Paraschiv (Ro)
Chingiz Hajiyev (Tr)	Henri-George Coanda (Ro)	Nicolae Tapus (Ro)
Constantin Paleologu (Ro)	Horia Andrei (Ro)	Nicolae Voicu (Ro)
Constantin Vertan (Ro)	Horia N. Teodorescu (Ro)	Nicu Bizon (Ro)
ConstantinNegoita (USA)	Hossein Shayeghi (Ir)	Ozan Erdinc (Tr)
Cornel Ioana (Fr)	Ioan Dumitrache (Ro)	Patrick Coirault (Fr)
Cornel Panait (Ro)	Ioan Florea Hantila (Ro)	Peter Hill (UK)
Corneliu Burileanu (Ro)	Ioan Lita (Ro)	Petrica Ciotirnae (Ro)
Cosmin Popa (Ro)	Ioan Nicolaescu (Ro)	Radu Dobrescu (Ro)
Cristian Negrescu (Ro)	Ion Bogdan (Ro)	Romeo Calarasu (Ro)
Cristian Patrascioiu (Ro)	Ion Sima (Ro)	Salem M.Abdel-Badeeh (Eg)
Daniel Caragata (Cl)	Ion Tutanescu (Ro)	Sergiu Nedeveschi (Ro)
Daniel Pasquet (Fr)	Ires Iskender (Tr)	Silviu Ionita (Ro)
Daniela Tarniceriu (Ro)	Iulian Rincu (Ro)	Sorin Puscoci (Ro)
Dmitry Pavlyuchenko (Ru)	Jaafar M.H.Elmirghani (UK)	Stefan V. Nicolaescu (Ro)
Doina Banciu (Ro)	Javier J. B. Landatxe (Es)	Svasta Paul (Ro)
Dorel Aiordachioaie (Ro)	Jean-Paul Gaubert (Fr)	Takeshi Yamakawa (Jp)
Driss Mehdi (Fr)	Jiri Pinker (Cz)	Teodor Petrescu (Ro)
Nicolae Militaru (Ro)	Liviu Goras (Ro)	Terence Goh (Sg)
El Emary M. Ibrahim (Jo)	Luca Dan Serbanati (Ro)	Toshitaka Yamakawa (Jp)
Emil Pricop (Ro)	Lucian Anton (Ro)	Vasile Lazarescu (Ro)
Emil Simion (Ro)	Lucien Dascalescu (Fr)	Victor Valeriu Patriciu (Ro)
Ersan Kabakci (Tr)	Maaruf Ali (KSA)	Vlad Budu (Ro)
Fary Z. Ghassemlooy (UK)	Madalina Georgescu (Ro)	Vyacheslav Tuzlukov (So.K)
Nicolae Militaru (Ro)	Marian Gaiceanu (Ro)	Wim Melis (UK)
Nitul Dutta (In)	Mihail Aurel Titu (Ro)	Stefan Simion (Ro)
Zdzislaw Polkowski (Po)		Zdenek Vostracky (Cz)

Steering Committee Chairs:

Takeshi Yamakawa, Florin Filip, Franco Maloberti, Lucien Dascalescu, Filiz Kilic, Ersan Kabalci, Dan Cascaval, Corneliu Burileanu, Dumitru Chirlesan, Serban Valeca, Nicolae Paraschiv, Horia-N. (L.) Teodorescu, Ioan Nicolaescu, Adina Magda Florea, Cristian Negrescu, Daniela Tarniceriu, Radu Dobrescu, Alexandru Serbanescu, Ion Stanculescu, Henri-George Coanda, Mihai Oproescu, Horia Andrei, Ioan Lita, Serban Gheorghe, Nicu Bizon, Maaruf Ali, Sorin Puscoci

PROGRAM

Wednesday, June 27, 2018

Wednesday, June 27, Participants' arrival

Thursday, June 28, 2018

June 28, 8:00-8:50, conference desk

Registration of the participants

June 28, 9:00-9:40, OFFICIAL OPENING

Aula Magna, keynote room

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

09:00-09:05 Welcome message of Daniela Tărniceriu,
Chair of ECAI 2018, 'Gheorghe Asachi' Technical University, Iasi

09:05-09:10 Welcome message of Rectors,
Rector of the 'Gheorghe Asachi' Technical University, Iasi

09:10-09:15 Welcome message of Nicu Bizon,
Chair of ECAI 2018. University of Pitesti

09:15-09:20 Welcome message of Rectors,
Rector of the University of Pitesti

09:20-09:25 Welcome message of Florin-Gheorghe Filip,
Romanian Academy

09:25-09:30 Welcome message of Mircea Eremia
chair of the IEEE Romanian section

09:30-09:35 Welcome message of Horia-Nicolai (L.) Teodorescu,
'Gheorghe Asachi' Technical University, Iasi , and c.m. - Romanian Academy

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

09:40-09:45 Sponsors' message

June 28, 09:40-13:30, ECAI KEYNOTE LECTURES –I, keynote room

Chairs: Daniela Tărniceriu and Nicu Bizon

09:45-10:25, Stefan Wolfgang Pickl

Resilience of Complex Networks - Intelligent Simulation and Optimization to Stabilize Critical Infrastructures

10:25-11:05, Dipankar Pal

Effort Delay and Appropriate Optimizing Techniques

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

Chairs: Stefan Wolfgang Pick and Dipankar Pal

11:35-12:15, Avireni Srinivasulu

Emerging Device Technology

12:30-14:00, Round Tables, Brokerage events, tour of the paintings from the university hall (named "Hall of lost steps")

12:30-14:00, Round Tables 1: room A

2018 summer meeting of the SSCS and EDS IEEE Romanian chapters: The current interests and next challenges in field of applied electronics for industry, government and academia

Organized by "SSCS and EDS IEEE Romanian chapters":

12:30-14:00, Round Tables 2:, room B

Bridging the gap: career development and effective collaboration between academia and industry

Organized by "IEEE Young Professionals Affinity Group Romania"

June 28, 15:30-17:00, ECAI Afternoon sessions

June 28, 17:00-17:30 Coffee break

June 28, 17:30-19:00, Cultural program

Miguel Llobet - Variațiuni pe o temă de Fernando Sor

Eugen Toboș - chitară Master I

Sergio Assad - suita Summer Garden - p. I-IV

Eugen Toboș - chitară Master I

Răzvan Lupu - chitară An IV

Leopold Mozart - Divertiment în Re Major

Ioana Simionel - vioară An III

Alexandra Dănilă - vioară An II

Emilian Rusu - violoncel An III

June 28, 15:30-18:00, ECAI Afternoon sessions

June 28, 15:30-17:00, ECAI sessions

June 28, 15:30-17:00, ECAI Poster and E-sessions

June 28, 15:30-17:00, ECAI workshops

June 28, 15:30-17.00, 7th Workshop on Automotive and Intelligent Transport Systems – WAITS 2018 room A

Chairs: Ionita Silviu, Marius Minea

15:30-15:45 Ionita Silviu

Modeling Human Sensory-Motor Action for Vehicle Braking Based on Fuzzy Inferences

15:45-16:00 Razvan Andrei Gheorghiu, Angel Ciprian Cormos and Valentin Iordache
Analysis of driver behaviour influence in urban traffic flows

16:00-16:15 Marius Minea, Viviana Laetitia Minea and Valentin Alexandru Stan
A Survey on Wi-Fi Usability for Additional Safety Communications in Subway Environment

16:15-16:30 Irina-Georgiana Oancea and Emil Simion
Challenges in Security Automotive

16:30-16:45 Nicu Bizon, Jose Manuel Lopez-Guede, Ioan Cristian Hoarcă, Mihai Culcer and Mariana Iliescu
Fuel Cell (FC) Hybrid Power System with mitigation of the load power variability by the FC fuel flow control

16:45-17:00 Nicu Bizon, Alin Gheorghita Mazare, Ionescu Mihai Laurentiu, Mihai Oproescu, Jose Manuel Lopez-Guede, Mihai Varlam, Mircea Raceanu and Ioan Cristian Hoarcă
Renewable (REW) / Fuel Cell (FC) Hybrid Power System with mitigation of the REW variability by the FC fuel flow control

June 28, 15:30-17.00, Bio-medical applications room B

Chairs: Sorin Puscoci, Sorin Soviany

15:30-15:45 Cristian Ravariu, Florin Babarada, Janel Arhip, Elena Manea and Catalin Parvulescu
Personalized Mio-electrical Monitoring System Based on ADS1298 and MIM Electrodes

15:45-16:00 Victor Cojocaru, Eugen Niguleanu, Teodor Fedorisin and Rihart Galus
Intelligent device for controlled therapeutic hypothermia

16:00-16:15 Ionescu Marius
Measuring and detecting blood glucose by methods non-invasive

16:15-16:30 Sorin Soviany, Virginia Sandulescu, Sorin Puscoci and Cristina Soviany
A Biometric System with Hierarchical Feature-level Fusion

16 :30-16:45 Stefan-Radu Bala
Human being approached as an adaptive self-regulated system

16:45-17:00 Ahmet Kayabasi, Berat Yildiz, Muhammet Fatih Aslan and Akif Durdu
Comparison of ELM and ANN on EMG Signals Obtained for Control of Robotic-
Hand

June 28, 15:30-17.00, Electronic Circuits & Equipment - I room C

Chairs: Dipankar Pal, Avireni Srinivasulu, Luminita Scripcariu

15:30-15:45 Kurapati Roja, Avireni Srinivasulu and Musala Sarada
A Voltage Mode All Pass Filter Employing Voltage Difference Transconductance
Amplifier

15:45-16:00 Sergiu Oprea, Ștefan George Roșu, Constantin Rădoi, Adriana Florescu
and Mihail Ștefan Teodorescu
Implementation of Resonant Current Controllers Using 16-bit, Fixed-point Digital
Signal Controllers

16:00-16:15 Felix Diaconu, Luminita Scripcariu, Petre Daniel Matasaru and Lucian
Gafencu
Hardware Design of a 7-DFT Computing Circuit Operating on a Galois Field

16:15-16:30 Taninki Sai Lakshmi, Avireni Srinivasulu and Nicu Bizon
A Power Efficient 5-bit 5-GS/s Parallel Comparator Analogue-To-Digital Converter

16:30-16:45 Kurapati Roja, Kaza Malathi Santhoshini, Sarada Musala and Avireni
Srinivasulu
Voltage Difference Transconductance Amplifier based Voltage Mode Band Pass Filter
with constant Q-Factor

16:45-17:00 Cristian Ravariu, Florin Babarada, Dan Mihaiescu, Elena Manea, Catalin
Parvulescu and Alina Popescu
Technology of fabrication and functional validations of planar-Nothing On Insulator
devices with oxide instead vacuum

June 28, 15:30-17.00, Software & Computer Applications - I, room D

Chairs: Shaidah Jusoh, Mironela Pirnau

15:30-15:45 Mironela Pirnau

Sentiment analysis for the tweets that contain the word "earthquake"

15:45-16:00 Adrian Groza and Oana Maria Popa

The impact of summarisation on textual entailment - a case study on global warming arguments

16:00-16:15 Gheltu Stefan - Andrei

Correlation of the Formants of the Romanian Vowels

16:15-16:30 Alexandru Ene

A new method for the generation of test words in a typing learning program

16:30-16:45 Iveta Markechová and Hana Stúpalová

Functionally Graded Virtual Robogami: A Geometry Approach

16:45-17:00 Shaidah Jusoh

Intelligent Conversational Agent for Online Sales

June 28, 15:30-17.00, Software & Computer Applications - II, room E

Chairs: Victor-Emil Neagoe, Dorel Aiordachioaie

15:30-15:45 Vlad-Călin Chirilă-Berbentea and Victor-Emil Neagoe

Semi-Supervised Hyperspectral Image Classification using Virtually Labeled Training Data based on the Improved Gaussian Mixture Clustering

15:45-16:00 Dorel Aiordachioaie and Theodor D. Popescu

Change Detection by Feature Extraction and Processing from Time-Frequency Images

16:00-16:15 Radu Grigoras and Iulian B. Ciocoiu

Deep Learning Algorithms for Single Image Deraining

16:15-16:30 Iulian Aciobanitei, Paul Danut Urian and Mihai Lica Pura

A Cryptography API: Next Generation Key Storage Provider for Cryptography in the Cloud

16:30-16:45 Ioan Pavaloi and Cristina Nita

Iris recognition using SIFT descriptors with different distance measures

16:45-17:00 Maulisa Oktiana, Khairun Saddami, Fitri Arnia, Yuwaldi Away and Khairul Munadi

Improved Cross-Spectral Iris Matching Using Multi-Scale Weberface and Gabor Local Binary Pattern

June 28, 15:30-17:00, Poster session I

“Poster Hall

Chairs: Horia Andrei, Ioan Lita

15:30-15:40 Jose Manuel Lopez-Guede and Nicu Bizon
Modeling an ANN-based control for optimal operation of PEMFC systems

15:40-15:50 Florentina Magda Enescu, Nicu Bizon, Andrei Cirstea and Cosmin Stirbu
Blockchain Technology Applied in Health. The Study of Blockchain Application in the Health System (I)

15:50-16:00 Alexandru Nitu, Cosmin Stirbu and Florentina Magda Enescu
Mobile application for a smart city

16:00-16:10 Paul Cristian Andrei, Mihai Maricarur, Marilena Stanculescu, Ioan Florea Hantila, Veronica Paltanea and Gheorghe Paltanea
Experimental Results For The First Magnetization Curve Obtained Using An Original Device

16:10-16:20 Bogdan Enache, Paul Cristian Andrei, Costin Cepisca and Horia Andrei
Harmonic Analysis for Linear Circuits Based on Voltage Relative Values and Standard Limits

16:20-16:30 Mihai Oproescu, Vasile-Gabriel Iana, Mirel-Dorin Stanica, Mirela Gherge, Ioan Lita
Determining the Risk Level Regarding to the Positioning of an Exam Machine Used in the Nuclear Environment

16:30-16:40 Laurentiu-Mihai Ionescu, Alin Mazare, Nadia Belu and Adrian-Ioan Lita
Intelligent Monitoring System To Combat Water Stress In Plant Crops

16:40-16:50 Razvan Andrei Gheorghiu, Angel Ciprian Cormos, Mihai Radu and Marius Minea
Digitally migration concept for railway fail-safe protection circuit

June 28, 15:30-17:00, Poster session II

“Poster Hall

Chairs: Valentin Alexandru Stan, Emil Pricop

15:30-15:40 Iulian Aciobanitei, Lorena Leahu and Mihai Lica Pura
A PKCS11 Driver for Cryptography in the Cloud

15:40-15:50 Bogdan-Mihai Gavriiloaia, Nicolae Militaru, Dragos -Nicolae Vizireanu, Marian Novac, Cristian Cucu, Constantin Mara and Cristian Barca
Multi-band Response Antenna Bio-inspired from Biological Neuron Morphology

15:50-16:00 Luminita Scripcariu, Felix Diaconu, Petre-Daniel Mătășaru and Lucian Gafencu

AES Vulnerabilities Study

16:00-16:10 Vlad M. Chiriac, Ciprian Romeo Comsa and Danut Burdia

Safety Concepts for Body Control Automotive Functionalities

16:10-16:20 Doru Florin Chiper and Laura Teodora Cotorobai

A Unified VLSI architecture for 1D IDCT and IDST based on pseudo-band correlations

16:20-16:30 Valentin Alexandru Stan, Razvan Andrei Gheorghiu, Valentin Iordache and Florin Codrut Némțanu

Highly efficiency radio network solution for Smart City infrastructure

16:30-16:40 Hajar Hafs, Anass Zaaoumi, Omar Ansari, Abdellah Bah, Mohamed Asbik and Mustapha Malha

Effect of the Nanofluid (Brackish water/ Al_2O_3) on the Passive Solar Still Desalination Performance with Heat Storage System

June 28, 15:30-17:00, E –session I

E –session room

Chairs: Mihai Oproescu, Florin Mocanu

15:30-15:40 Hamza Ur Rehman, Mohsin Naeem, Masam Khan, Gulbadan Sikander and Shahzad Anwar

Eye Tracking based Real-Time Non-Interfering Driver Fatigue Detection System

15:40-15:50 Rajoniaina Léonard Ismaël and Ravonimanantsoa Ndaohialy Manda-Vy

Modeling Mpls Routers By Petri's Networks

15:50-16:00 Constanța Zoie Rădulescu, Iulia Cristina Rădulescu, Radu Boncea and Electra Mitan

A group decision approach based on rough multi-attribute methods for Cloud Services Provider selection

16:00-16:10 Michal Jasinski, Tomasz Sikorski, Paweł Kosteła and Klaudiusz Borkowski

Global power quality indices for assessment of multipoint power quality measurements

16:10-16:20 Marta Bałkiewicz-Pantuła

The algorithm for determining the coefficient of flicker on the example of a wind power plant

16:20-16:30 Marek Jasiński, Elżbieta Jasińska, Michał Jasiński and Łukasz Jasiński

Computer-aided appliances to underground machines maintenance – selected issues

16:30-16:40 Radu Rădescu and Mihai Casandra

The Original Method of Fixed Constraints Transform for Lossless Text Compression

16:40-16:50 Radu Rădescu and Andrei Petru Bărar

The Performances of the Fixed Constraints Transform Applied in Text Compression

16:50-17:00 Alexandru Lavric and Adrian Ioan Petrariu

High-Density Low Power Wide Area Networks for IoT Applications

**June 28, 17:30-19:00,
Cultural program
room**

**June 28, 19:00-21:00:
ECAI Welcome Dinner**

Friday, June 29, 2018

**June 29, 09:30-11:00, ECAI KEYNOTE LECTURES II,
Aula Magna**

Chairs: Horia-Nicolai (L.) Teodorescu and Stefan Wolfgang Pick

09:30-10:10, Florin-Gheorghe Filip

Collaborative Automation Systems and the Corresponding Enabling I&C
Technologies

10:10-10:50, Rudolf Mester

Cars that sense, perceive, and (re)act: Perspectives of highly automated driving

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

June 29, 11:00-14:00 ECAI morning sessions

June 29, 11:30-14:00, ECAI sessions

June 29, 11:30-14:00, invited ECAI workshops

June 29, 13:00-14:00, ECAI poster session,

June 29, 11:30-14:00, Electronic Circuits & Equipment - II room C

Chairs: Horia Andrei, Cristian Ravariu, Ciprian Comsa

11:30-11:45 Boris Siro, Alexandru Savulescu and Cornel Ianache

The simulation of crude oil extraction in Canadian pumping with the DTC electric drive in a wide range of operating frequencies

11:45-12:00 Boris Siro, Cornel Ianache and Alexandru Savulescu

Space Vector PWM-DTC in an application for crude oil extraction in Canadian version

12:00-12:15 Vasile Mihai Suci, Sorin Ionut Salcu, Lucian Nicolae Pintilie, Petre Dorel Teodosescu and Zsolt Mathe

Theoretical efficiency analyses of a buck-boost converter for wide voltage range operation

12:15-12:30 Norbert Csaba Szekely, Mircea Bojan, Petre Dorel Teodosescu and Sorin Ionut Salcu

LED performance analysis under various current waveforms

12:30-12:45 Andrei Platon, Sergiu Oprea, Adriana Florescu and Ștefan George Roșu
Simple and Digital Implementation of PI Controller Used in Voltage-Mode Control

12:45-13:00 Mihai Andrei Ionescu

Voltage control design for grid connected photovoltaic systems

13:00-13:15 Stefan Marciu, Gabriela Bucur, Adrian Moise, Cristina Popescu and Dragomir Orhei

Automatic positioning system for photovoltaic panels

13:15-13:30 Tudor Cătălin Apostolescu, Georgeta Ionașcu, Lucian Bogatu, Silviu Petrache and Adrian Laurentiu Cartal

Animatronic Robot Humanoid Head with 7 DOF: Design and Experimental Set-Up

13:30-13:45 Adrian Abunei, Ciprian Comsa and Dumitru Mnesciuc

Open source hardware and software V2V emergency braking warning application

13:45-14:00 Mihail Aurel Titu, Stefan Titu and Alina Bianca Pop

Optimizing and Modeling the drying process of the Natural Gas through the Taguchi method

June 29, 11:30-14.00, Software & Computer Applications - III, room D

Chairs: Dipankar Pal, Stefan Wolfgang Pick

11:30-11:45 Stefan Gheltu and Horia-Nicolai (L.) Teodorescu
Correlations and Dependencies of the Formants During Speech in Romanian

11:45-12:00 Gökay Dişken, Lütfü Sarıbulut, Zekeriya Tüfekci and Ulus Çevik
Real-Time Speaker Independent Isolated Word Recognition on Banana Pi

12:00-12:15 Ana-Maria Ghimes, Valentin-Alexandru Vladuta, Adrian Ionita and Victor-Valeriu Patriciu
Applying neural network approach to homomorphic encrypted data

12:15-12:30 Valeriu Manuel Ionescu and Florentina Magda Enescu
The implementation of a software system for detecting a pattern in an ambient light sensor data stream

12:30-12:45 Cristina Oprea, Radu Preda, Ionut Pirnog and Robert Dobre
Video Shot Boundary Detection for Low Complexity HEVC Encoders

12:45-13:00 Dănuț Anton and Emil Simion
Linux Unified Key Setup (LUKS) – The Good, the Bad, the Ugly

13:00-13:15 Victor Grigoraş and Carmen Grigoraş
Digital Implementation of Nonlinear Systems

13:15-13:30 Stefan Daniel Dumitrescu, Andrei Marius Avram, Luciana Morogan and Stefan-Adrian Toma
RoWordNet - A Python API for the Romanian WordNet

June 29, 11:30-14.00, Software & Computer Applications - IV, Room E

Chairs: Zdzislaw Polkowski, Tudor Barbu

11:30-11:45 Maria Viorela Muntean and Daniela Onita
Aggregation Agent for Preprocessing and Forecasting Time-Series Data

11:45-12:00 Constantin Grumazescu, Valentin-Alexandru Vladuta and Andrei Timofte
Hybrid identity based cryptographic scheme optimization using machine learning in WSN

12:00-12:15 Vlad M. Chiriac
Optimization algorithm for passive source localization

12:15-12:30 Adrian Ciobanu, Tudor Barbu and Mihaela Luca
Image Restoration for Halftone Pattern Printed Pictures in Old Books

12:30-12:45 Mostafa Abdulghafoor Mohammed, Raed Abdulkareem Hasan, Munef Abdullah Ahmed, Nicolae Tapus, Mohammad Khamees Khaleel, Marwan Ali Shanan and Ahmed Hussein Ali

A Focal load balancer based algorithm for task assignment in cloud environment

12:45-13:00 Marius Alexandru Dinca, Nicoleta Angelescu, Dan Constantin Puchianu, Predusca Gabriel and Liana Denisa Circiumarescu

Web platform for integration of transcoding in AWS cloud domain with 3d Web graphics

13:00-13:15 Valentin-Alexandru Vladuta, Ana-Maria Ghimes, Constantin Grumazescu and Victor-Valeriu Patriciu

Trajectory influence on data collection in Wireless Sensor Networks using an Unmanned Aerial Vehicle

13:15-13:30 Tudor Barbu

Compound Hyperbolic PDE-based Additive Gaussian Noise Removal Solution combining Second- and Fourth-order Diffusions

13:30-13:45 Mihail Aurel Titu, Alina Bianca Pop and Stefan Titu

The correlation between intellectual property management and quality management in the modern knowledge-based economy

13:45-14:00 Zdzislaw Polkowski

The Method of Implementation of Information and Telecommunication Technologies In Small And Medium Enterprises

June 29, 11:30-14:00 , Young Researchers session - with technical support of IEEE-IAS-RO Chapter room A

Chairs: Horia-Nicolai (L.) Teodorescu, Victor-Emil Neagoe

11:30-11:45 Mihai C. Arva, Mirel Stanica and Nicolae Anghel Analysis on vibration and resonance characteristics of an low speed 3-phase stepper motor

11:45-12:00 Anwar Chitheer Jasim Al Bazooni, Nicolae Tapus and Imad Ali Hassoon Al Tameemi

Enabling a Multi-Level Users Management Policy in Cloud of Big Data

12:00-12:15 Alexandru Mihai Antonescu, Marius Enachescu and Lidia Dobrescu

Synchronous Current Switching Technique for Adjusting the CMOS Ring Oscillator Duty Cycle

12:15-12:30 Ramona Luca and Silviu Ioan Bejinariu

Classification Method for Human Locomotion

12:30-12:45 Zahra Bouramdane, Anass Zaaoumi, Abdellah Bah, Nadia Martaj and Mohammed Alaoui

Numerical analysis of acoustic field in standing wave thermoacoustic engine with different stack lengths

12:45-13:00 Gabriel Bonteanu
A Review of Capacitance Multiplication Techniques

13:00-13:15 Raluca Maria Aileni, Bogdan Hurezeanu and Sever Pasca Wavelet transform for seizures detection in EEG records

13:15-13:30 Raluca Maria Aileni, Sever Pasca and George Suciuc
MIoT applications for wearable technologies used for health monitoring

13:30-13:45 Fernando Georgel Birleanu and Nicu Bizon
A Review and Application of Integrity Techniques for Securing FPGA-based Designs

13:45-14:00 Eva Tuba, Edin Dolicanin and Milan Tuba
Water Cycle Algorithm for Robot Path Planning

June 29, 11:30-14.00, Workshop IWSSS room B

Chairs: Nitul Dutta, Emil Pricop, Grigore Stamatescu

11:30-12:00 Snehal Sathwara, Nitul Dutta and Emil Pricop
IoT Forensics: A digital investigation framework for IoT systems

12:00-12:15 Iuliana Marin, Nicolae Goga and Andrei Doncescu
Security of an electronic healthcare system which facilitates the detection of preeclampsia through a smart bracelet

12:15-12:30 Xinxin Lou, Karl Waedt, Yuan Gao, Ines Ben Zid and Venesa Watson
Combining Artificial Intelligence planning advantages to assist preliminary formal analysis on Industrial Control System cybersecurity vulnerabilities

12:30-12:45 Gabriel Rădulescu and Ileana Dumitru
Detecting Forged Images – a Robust Java Implementation Algorithm

12:45-13:00 Viorel Mihai, Cristina Elena Hanganu, Grigore Stamatescu and Dan Popescu
WSN and Fog Computing Integration for Intelligent Data Processing

13:00-13:15 Ihor Romanets, Anatoliy Sachenko and Lesia Dubchak. Method of Protection Against Traffic Termination in VoIP

13:15-13:30 Emil Vlasceanu, Dan Popescu and Loretta Ichim
Ground Control Station for an Unmanned Aerial Vehicle Integrated in IoT

13:30-13:45 Andrada Sumalan, Loretta Ichim and Dan Popescu
Person detection in video surveillance

13:45-14:00 Stefania Loredana Nita and Marius Iulian Mihailescu
On Artificial Neural Network used in Cloud Computing Security – A Survey

**June 29, 11:30-14:00, Workshop OCSC,
room F**

Chairs: Sorin Puşcoci, Marian Raducu

11:30-11:45 Ionut-Valentin Grecu, Elena-Alexandra Grecu, Madalina-Varvara Bal, Alexandru Aloman and Nicolae-Victor Petrescu

Main Solutions for Extending Radio Coverage in TETRA Networks

11:45-12:00 Viorel Manea, Sorin Puşcoci and Dan Alexandru Stoichescu

Considerations on interference between FSO systems

12:00-12:15 George Suci, Adrian Pasat, Carmen Nădrag, Cristina Bălăceanu and Alexandru Drosu

Design of an internship recruitment platform employing NLP based technologies

12:15-12:30 Cristina-Gabriela Gheorghe, Radu Dragomir and Dan Alexandru Stoichescu

Latency requirement for 5G mobile communications

12:45-13:00 Daniel Alexandru Visan, Ioan Lita, Mariana Jurian and Mirela Gherghe
Pseudorandom Sequence Generator for Spread Spectrum Communications

13:00-13:15 Cornel Barbut

Fiber Optic Deployments in Romania between Metropolitan Fiber Optic Networks and Indoor Fiber Optic Infrastructure A practical view on where are going the Fiber Optic Deployments

**June 29, 13:00-14:00, Poster session III,
Poster Hall**

Chairs: Doru Florin Chiper, Ovidiu Constantin Novac, Corina Savulescu

13:00-13:10 Marian Popescu

Comparative Study of PID and Fuzzy Level Control using DeltaV Distributed System

13:10-13:20 George Sisman, Nicu Bizon and Mihai Oproescu

The importance of PLC in the predictive maintenance of electronic equipment

13:20-13:30 Corina Savulescu

A Computer Tool for Statistical Analysis

13:30-13:40 Ovidiu Constantin Novac, Cornelia Mihaela Novac, Ionel Gabriel Pinte, and Mircea Gordan

Comparison of APNs and GCM mobile platforms notifications services

13:40-13:50 Mihail-Florin Stan, Nicolae Fidel, Ionut Mina and Cosmin Cobianu
Increasing the reliability of an industrial cold production system using Fault Tree Analysis (FTA)

**June 29, 13:00-14:00, Poster session IV,
Poster Hall**

Chairs: Mihail Aurel Titu, Ioan Lita, Luminita Mirela Constantinescu

13:00-13:10 Rodica-Mihaela Teodorescu

Designing and testing by virtual methods of an amplitude corrector circuit

13:10-13:20 Rodica-Mihaela Teodorescu

Virtual tool for the determination of time zone difference

13:20-13:30 Mihail-Florin Stan, Nicolae Fidel, Ionut Mina and Adela-Gabriela Husu

Improvement of Wireless Power Transfer Efficiency for Home Electronics and Appliances with the Use of SMD Components

13:30-13:40 Horia-Nicolai (L.) Teodorescu

A comparative scientometric study of ECAI conference series

13:40-13:50 Adrian Ioan Lita, Daniel Alexandru Visan, Laurentiu Mihai Ionescu and Alin Gheorghita Mazare

Temperature Control System for Accelerated Aging Tests on Printed Circuit Boards

June 29, 13:00-14:00, E –session II

E –session room

Chairs: Mihai Oproescu, Florin Mocanu

13:00-13:10 Chantima Buaklee and Sukree Sinthupinyo

Similar Cluster Recommendation of Product Purchases by Pages Liked Analysis

13:10-13:20 Qiuyu Liao and Sukree Sinthupinyo

Exclusiveness Centrality: A Novel Centrality Measure to Find Behavioral Influencers on Twitter

13:20-13:30 Pitipat Yosaki and Sukree Sinthupinyo

Prediction of Post likes Using Clustering and Regression Technique

13:30-13:40 Mihai Dima, Iulian Adrian Chihai, Maria Claudia Surugiu and Marius Minea.

Preventive Maintenance of the Railway Infrastructure employing Robotized Platform and Virtual Instrumentation

13:40-13:50 Mariam Ibrahim and Qays Al-Hindawi.

Attack Graph Modeling For Nuclear Power Plant

13:50-14:00 Mariam Ibrahim and Ahmad Alsheikh

Assessing Level of Resilience Using Attack Graphs

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

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

June 29, 15:30-17:00, E- sessions

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

June 29, 17:30-18:00, ECAI Closing Solemnity

**June 29, 15:30-17:00, Electrical Engineering – I
room A**

Chairs: Gheorghe Grigoras, Bogdan Constantin Neagu

15:30-15:45 Mariana Dumitrescu and Gelu Gurguiatu

Intelligent Tools and Methods in Power Delivery Quality and Efficiency Evaluation

15:45-16:00 Gheorghe Grigoras, Nicu Bizon, Florentina Magda Enescu, José Manuel López Guede, Guadalupe Flores Salado, Raymond Brennan, Connie O’driscoll, Megersa Dinka and Mohamed Gar Alalm

ICT based Smart Management Solution to Realize Water and Energy Savings through Energy Efficiency Measures in Water Distribution Systems

16:00-16:15 Cristian Patrascioiu, Marian Popescu and Sabin Stamatescu

Teaching System for Pneumatic Actuators

16:15-16:30 Minh Anh Cao, Marius Olteanu and Nicolae Paraschiv

Specific Problems of the Propylene-Propane Distillation Column Control with Heat Pump

16:30-16:45 Pavel Koblre, Tomáš Košťál, Jakub Zedník, Jiří Pavelka, Xiaofeng Yang

Task of Energy Router in Smart Grids

16:45-17:00 Mariana Dumitrescu

Artificial Intelligence Computational Basic Models and Analysis for Power Delivery Safety and Efficiency Evaluation

**June 29, 15:30-17:00, Electrical Engineering - II
room B**

Chairs: Ovidiu Constantin Novac, Luminita Mirela Constantinescu

15:30-15:45 Mihaela Cornelia Novac, Marius Codrean, Ovidiu Constantin Novac, Cornelia Gordan and Mihaela Codrean

Current Aspects and Trends in the Numerical Modeling of Induction Heating Equipments

15:45-16:00 Marius Codrean, Mihaela Cornelia Novac, Mihaela Codrean and Ovidiu Constantin Novac

Considerations on the Numerical Modeling of the Induction Heating Process Using the Elta and Flux 2D Software

16:00-16:15 Bogdan Constantin Neagu, Gheorghe Grigoras and Florina Scarlatache
Influence of Outliers on Transformer Power Losses Estimation Using a Statistical Based Data Mining Approach

16:15-16:30 Pavel Karlovsky and Jiri Lettl
Loss Reduction in Induction Motor Drive Using Model Predictive Control

16:30-16:45 Aurelian Costea and Paul Schiopu
New design and improved performance for smoke detector

16:45-17:00 Aurelian Costea and Paul Schiopu
Design and implement of independent position confirming and correcting system

June 29, 15:30-17:00, Electronics Systems & Software Applications room C

Chairs: Stefan Wolfgang Pick, Horia-Nicolai (L.) Teodorescu

15:30-15:45 Bogdan Nedelcu, Andreea Jigau and Valentin Sgarciu
Mining Medical Data

15:45-16:00 Radu Matei and Daniela Matei
Circular IIR Filter Design and Applications in Biomedical Image Analysis

16:00-16:15 Horia-Nicolai (L.) Teodorescu
Design Considerations for Uniform, Fast Cooling Hypothermia Equipment

16:15-16:30 Silviu Ioan Bejinariu, Hariton Costin, Florin Rotaru, Ramona Luca and Cristina Nita
Black Hole vs Particle Swarm Optimization

16:30-16:45 Zdzislaw Polkowski
The Method of Implementing the General Data Protection Regulation in Business and Administration

16:45-17:00 Victor-Emil Neagoe and Catalina-Elena Neghina
An Artificial Bee Colony Approach for Classification of Remote Sensing Imagery

June 29, 15:30-17.00, Communication room D

Chairs: Ioan Lita, Daniela Tărniceriu

15:30-15:45 Dragos Ioan Sacaleanu, Razvan Popescu, Irina Petra Manciu and Lucian Andrei Perisoara
Data Compression in Wireless Sensor Nodes with LoRa

15:45-16:00 Motuma Abafogi, Akif Durdu and Bayram Akdemir
A New Approach to Mobile Robot Navigation in Unknown Environments

16:00-16:15 Ilona Costea, Catalin Dumitrescu and Florin Codrut Nemtanu
Advanced Terrestrial and Aerial Monitoring and Inspection System for Critical Infrastructures

16:15-16:30 Grigore Adrian Iordachescu
Arduino Based Polarization Detector for Microwave Frequencies

16:30-16:45 Ionuț Dragoș Dobrescu, Codruț Săvulescu and Silviu Ciochină
Terrestrial networks for in-flight coverage - Standalone mobile operators implementations: ecosystem, radio design considerations, spectrum coexistence, techno-economic feasibility study

June 29, 15:30-17.00, Workshop IWAE room E

Chairs: Razvan Andrei Gheorghiu, Valentin Alexandru Stan

15:30-15:45 Anass Zaaoui, Abdellah Bah, Mohammed Alaoui, Abdellah Mechaqrane and Mohammed Berrehili
Application of artificial neural networks and adaptive neuro-fuzzy inference system to estimate the energy generation of a solar power plant in Ain Beni-Mathar (Morocco)

15:45-16:00 Andrei Cirstea, Florentina Magda Enescu, Nicu Bizon, Cosmin Stirbu and Valeriu Manuel Ionescu
Blockchain Technology Applied in Health The Study of Blockchain Application in the Health System (II)

16:00-16:15 Cosmina - Mihaela Rosca and Nicolae Paraschiv
Frequency sampling algorithm applied in microwave measurements based on extreme points

16:15-16:30 Aykut Tahtirvanci and Akif Durdu
Performance Analysis of Image Mosaicing Methods for Unmanned Aerial Vehicles

16:30-16:45 Maria Claudia Surugiu, Razvan Andrei Gheorghiu and Ionel Petrescu
Signal propagation analysis in the vehicle communications through tunnels

June 29, 15:30-17:00, Poster session IWTOTC - I “Poster Hall

Chairs: Luminita Mirela Constantinescu, Savulescu Corina

15:30-15:40 Bulgaru Ionu
Motivation in school learning – applied approach

15:40-15:50 Bulgaru Ionut

The relationship between the managerial styles and the characteristics of the educational group

15:50-16:00 Dumitru Georgiana

Psycho-pedagogical aspects concerning the development of the students' metacognitive competences

16:00-16:10 Tudor Sofia Loredana

The open resources and their influences on the formation of specific competences for the teaching profession

16:10-16:20 Tudor Sofia Loredana

The valorification of students competences learned in nonformal and informal environment

16:20-16:30 Langa Claudiu

Managing conflict situations within the school system organization

16:30-16:40 Bloju Loredana

Developing foreign language communication skills for the future teachers using the digital resources

16:40-16:50 Oproescu Ana

The role of alternative assessment methods on school performance

16:50-17:00 Oproescu Ana

The role of pedagogical practice in teaching skills training

June 29, 15:30-17:00, Poster session IWTOTC - II

“Poster Hall

Chairs: Oproescu Ana, Marian Raducu

15 :30-15:40 Lazăr Adriana

Extracurricular Activities for Fostering Language and Literature in Primary School

15 :40-15:50 Pescaru Maria and Pescaru Cristina Maria

Methods of Interdisciplinarity Approach to Literary Content to Achieve Moral-Civic Education in Primary School

15 :50-16:00 Pescaru Maria

Strategies for Achieving Moral-Civic Education in Primary Education

16 :00-16:10 Popescu Doina

Some effects of oral assessment applied to a literature course for English language teaching students: A case study

16 :10-16:20 Cristea Gabriela

The Relationship Between Pedagogy - Education Policy - Education Reform. A Historical Perspective

16 :20-16:30 Păduraru Monica Elisabeta and Mihăilă Robert Alexandru
Comparative Analysis of E-Learning Platforms on The Market

June 29, 15:30-17:00, E –session III

E –session room

Chairs: Mihai Oproescu, Florin Mocanu

15:30-15:40 Petre Anghelescu and Stefan Vladimir Nicolaescu
Chatbot Application using Search Engines and Teaching Methods

15:40-15:50 Petre Anghelescu and Andrei-Florin Popa
Design and Implementation of a Framework for a Social Network Application

15:50-16:00 Wirawat Sunthornchuen and Sukree Sinthupinyo
Words Diffusion An Analysis of across Facebook Pages in Thailand

16:00-16:10 Alin Zamfiroiu, Radu Boncea and Rădulescu Constanța Zoie
Modelling the users' profiles based on their behaviour in social applications

16:10-16:20 Sabina-Daniela Axinte and Ioan C. Bacivarov
Improving the quality of web applications through targeted usability enhancements

16:20-16:30 Saloua Marhraoui, Ahmed Abbou, Abdellah Ziouh, Nezha El Hichami
and Salaheddine Rhaili
Design and Simulation of a Sun Tracking and Maximum Power Point Tracking in
Solar Array System

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

ECAI CLOSING CEREMONY

June 29, 17:30-18:00, ECAI Closing Solemnity,
Aula Magna

Closing speeches

17:30-17:40 Mihai Opreescu, Program Chair of ECAI

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

June 29, 18:00-20:00:

ECAI Gala Dinner

Saturday, June 30, 2018

9:00-17:00, ECAI trip - Tour of the Iasi city

Departure at 9.00, June 30, from Hall (conference desk).

Arrival will be at about 17.00, June 30.

Participants' departure

Sunday, July 01 2018

Participants' departure

End of ECAI conference actions

Visiting suggestions & sightseeing in Iasi city:

Iași is the second-largest city in Romania, after the national capital Bucharest, and the seat of Iași County. Located in the historical region of Moldavia, Iași has traditionally been one of the leading centres of Romanian social, cultural, academic and artistic life. The city was the capital of the Principality of Moldavia from 1564 to 1859, then of the United Principalities from 1859 to 1862, and the capital of Romania from 1916 to 1918. Known as The Cultural Capital of Romania, Iași is a symbol in Romanian history.

Palace of Culture: Located in the perimeter of the mediaeval Princely Court of Moldavia (from 1434), the construction was conceived as a rebuilding and expansion project of the former Princely Palace of Moldavia, dated to the time of Prince Alexandru Moruzi (1803–1806, architect Johan Freywald), and rebuilt by Prince Mihail Sturdza (1841–1843, architect Nicolae Singurov), from which it preserved the foundations and first floors. It was from this latter building that the Palace inherited the legend of the 365 rooms, as many as the days within one year.

Church of the Three Hierarchs: Built by Prince Vasile Lupu between 1637 and 1639, and restored between 1882 and 1904, this is one of Iași's most beautiful churches. Its exterior stone pattern work is exquisite and reveals Turkish, Georgian and Armenian influences. It also contains the marble tombs of Prince Lupu and his family (to the left), plus those of Prince Alexandru Ioan Cuza (to the right) and Moldavian prince Dimitrie Cantemir.

Palas Iași is a commercial and business centre in Iași, Romania. Located in the Civic Centre district, in the vicinity of the emblematic Palace of Culture, Palas Mall is part of a large lifestyle center, with a total built area of over 270,000 square metres

The Iași Botanical Garden, now named after its founder, Anastasie Fătu (Romanian: Grădina Botanică "Anastasie Fătu"), is a botanical garden located in the Copou neighbourhood of Iași, Romania. Established in the year 1856 and maintained by the Alexandru Ioan Cuza University, it is the oldest and largest botanical garden in Romania.

The Bojdeuca of Ion Creanga: Ion Creangă (also known as Nică al lui Ștefan a Petrei, Ion Törcălu and Ioan Ștefănescu; March 1, 1837 – December 31, 1889) was a Moldavian, later Romanian writer, raconteur and schoolteacher. A main figure in 19th century Romanian literature, he is best known for his Childhood Memories volume, his novellas and short stories, and his many anecdotes.

The Metropolitan Cathedral, Iași (Romanian: Catedrala Mitropolitană din Iași), located at 16 Ștefan cel Mare și Sfânt Boulevard, Iași, Romania, is the seat of the Romanian Orthodox Archbishop of Iași and Metropolitan of Moldavia and Bukovina, and the largest historical Orthodox church in Romania. It is dedicated to Saint Parascheva, to the Presentation of Jesus and to Saint George. Its form was inspired by the late Italian Renaissance style (Trinită dei Monti in particular), with Baroque elements dominating the interior and exterior decorative features. The Metropolitan Cathedral is listed in the National Register of Historic Monuments.

The Copou Park or Copou Gardens is the oldest public park in Iași, Romania. Its development started in 1834 under the reign of Mihail Sturdza, making the park one of the first public gardens in Romania and a Iași landmark. In its centre lies the Obelisk of Lions (1834), a 13.5 m (44 ft) tall obelisk dedicated to Regulamentul Organic, the first law on political, administrative and juridical organization in the Romanian Principalities. Other landmarks include Eminescu's Linden Tree, the Mihai Eminescu Museum and the Junimea Alley..The park covers approximately 10 hectares.

The Saint Mary Cathedral of Iași is a Catholic temple first built in 1753 entirely of wood to replace the old church that stood in this place before. In 1782-1789 it was rebuilt in bricks. Following the 1802 earthquake and then the fire of 1827, the building underwent further changes, followed by renovations of 1861, seeing extensions made and the interior repainted by Italian artist Giuseppe Carta from Palermo. Also, during that time, white marble altars and via crucis icons were installed.

The Golia Monastery (Romanian: Mănăstirea Golia) is a Romanian Orthodox monastery located in Iași, Romania. The monastery is listed in the National Register of Historic Monuments. In 2012, the conservation of the Monastery was awarded the European Union Prize for Cultural Heritage / Europa Nostra Award.

Visiting suggestions & sightseeing in Bucharest city:

Known for its wide, tree-lined boulevards, glorious Belle Époque buildings and a reputation for the high life (which in the 1900s earned its nickname of "Little Paris"), Bucharest, Romania's largest city and capital, is today a bustling metropolis. Romanian legend has it that the city of Bucharest was founded on the banks of the Dambovita River by a shepherd named Bucur, whose name literally means "joy." His flute playing reportedly dazzled the people and his hearty wine from nearby vineyards endeared him to the local traders, who gave his name to the place.

The Arch of Triumph

Initially built of wood in 1922 to honor the bravery of Romanian soldiers who fought in World War I, Bucharest's very own Arc de Triomphe was finished in Deva granite in 1936. Designed by the architect, Petre Antonescu, the Arc stands 85 feet high. An interior staircase allows visitors to climb to the top for a panoramic view of the city. The sculptures decorating the structure were created by leading Romanian artists, including Ion Jalea, Constantin Medrea and Constantin Baraschi.

Revolution Square

The square gained worldwide notoriety when TV stations around the globe broadcasted Nicolae Ceausescu's final moments in power on December 21, 1989. It was here, at the balcony of the former Communist Party Headquarters, that Ceausescu stared in disbelief as the people gathered in the square below turned on him. He fled the angry crowd in his white helicopter, only to be captured outside of the city a few hours later. The square's importance stretches back long before the dramatic events of the 1989 Revolution. On the far side of the square stands the former **Royal Palace**, now home to the **National Art Museum**, the stunning **Romanian Athenaeum** and the historic **Athenee Palace Hotel**. At the south end of the square, you can visit the small, but beautiful, **Kretzulescu Church**.



The Romanian Athenaeum

The work of French architect Albert Galleron, who also designed the National Bank of Romania, the Athenaeum was completed in 1888, financed almost entirely with money donated by the general public. One of the preeminent public fundraising campaigns ever in Romania, the "Give a penny for the Athenaeum" campaign saved the project after the original patrons ran out of funds. With its high dome and Doric columns, the Athenaeum resembles an ancient temple. The lobby has a beautifully painted ceiling decorated in gold leaf, while curved balconies cascade in ringlets off a spiral staircase. A ring of pink marble columns is linked by flowing arches where elaborate brass lanterns hang like gems from a necklace. Inside the concert hall, voluptuous frescoes cover the ceiling and walls. Renowned worldwide for its outstanding acoustics, it is Bucharest's most prestigious concert hall and home of the Romanian George Enescu Philharmonic.



Manuc's Inn

Built between 1804 and 1808 by the wealthy Armenian trader Emanuel Marzaian (called by the Turks, Manuc Bey), the inn was witness in 1812 to the preliminary talks of the Peace Treaty that put an end to the Russian -Turkish War (1806-1812). A favorite meeting and resting place for tradesmen in those times, Manuc's Inn has preserved to this day its old style and flavor. It now serves as a hotel with a restaurant, a wine cellar and a pastry shop.



University Square

Buzzing with crowds and traffic from early morning until late at night, this area is one of the most popular meeting places in Bucharest. The square brings together some remarkable architectural masterpieces on each of its four corners, starting with the **University of Bucharest's** School of Architecture, the **Bucharest National Theatre**, the neoclassical **Coltea Hospital** and its lovely **church** (1702-1794) and the **Sutu Palace**, now home to the Bucharest History Museum. In the middle of the square, on a little island, 10 stone crosses pay respect to those killed during the 1989 revolution. Below the square is an underground passage with shops and eateries, allowing pedestrians to cross from one side of the square to another and to access the subway station.



Parliament Palace

Built by Communist Party leader, Nicolae Ceausescu, the colossal Parliament Palace (formerly known as the People's Palace) is the second largest administrative building in the world after the Pentagon. It took 20,000 workers and 700 architects to build. The palace boasts 12 stories, 1,100 rooms, a 328-ft-long lobby and four underground levels, including an enormous nuclear bunker.

The Palace of Parliament it is the world's second-largest office building in surface (after the Pentagon) and the third largest in volume (after Cape Canaveral in the U.S. and the Great Pyramid in Egypt). The crystal chandelier in the Human Rights Hall (Sala Drepturilor Omului) weighs 2.5 tons. Some of the chandeliers have as many as 7,000 light bulbs. When construction started in 1984, the dictator intended it to be the headquarters of his government. Today, it houses Romania's Parliament and serves as an international conference centre. Built and furnished exclusively with Romanian materials, the building reflects the work of the country's best artisans. A guided tour takes visitors through a small section of dazzling rooms, huge halls and quarters used by the Senate (when not in session). The interior is a luxurious display of crystal chandeliers, mosaics, oak paneling, marble, gold leaf, stained-glass windows and floors covered in rich carpets.



Village Museum

Founded by royal decree in 1936, this fascinating outdoor museum, the largest in Europe, covers some 30 acres on the shores of Lake Herastrau in Herastrau Park. It features a collection of 50 buildings representing the history and design of Romania's rural architecture. Steep-roofed peasant homes, thatched barns, log cabins, churches and watermills from all regions of the country were carefully taken apart, shipped to the museum and rebuilt in order to recreate the village setting. Throughout the year, the Village Museum hosts special events where you will have a chance to witness folk artisans demonstrating traditional skills in weaving, pottery and other crafts. Folk arts and crafts are available at the museum gift shop.



Snagov Monastery

Where: 25 miles north of Bucharest; Access: car, bus, taxi

In 1458 - more than one hundred years after the church was built (1364) - Romanian prince Vlad Tepes (Vlad the Impaler) added thick defending walls and a dungeon. A plaque on the floor inside the church marks the grave with the presumed remains of the world-known count.

The monastery is located on an island on lake Snagov, and can be accessed on a pedestrian bridge or by boat.



Mogosoaia Palace & Brancovenesc Museum

Located in the village of the same name on the shore of Mogosoaia Lake, this palace reflects the Brancovenesc architectural style, featuring traditional Romanian staircase balconies, arcades and columns. Built by the Walachian prince Constantin Brancoveanu between 1698 and 1702 as a summer residence, the palace features a beautiful Venetian-style loggia on the facade facing the lake and a balcony with intricate Brancovenesc-style carvings overlooking the main courtyard. Today, the palace houses the **Brancovenesc Museum** with exhibits of valuable paintings, wood and stone sculptures, gold and silver embroideries, rare books and precious manuscripts. Inside the complex, there is also a church built in 1688 and decorated by a team of Greek artists. The original interior murals have been well-preserved, including a painting showing Constantin Brancoveanu with his wife, Maria, and their four sons and seven daughters, all wearing royal dress.



ECAI 2018, June 28 – June 30, 2018, Timetable and Program

Date	Time	Session or activity	Location
June 27	20:30-22:00	Participants' arrival	
June 28	8:00-8:50	Authors Registration	"CD" Poster Hall
	9:00-9:40	ECAI Opening Ceremony	Aula Magna
	9:40-12:10	ECAI KEYNOTE LECTURES I	Aula Magna
	11:00-11:30	Coffee break & Brokerage events	Poster Hall
	12:15-12.45	RT1: 2018 summer meeting of the SSCS and EDS IEEE Romanian chapters	Room A
		RT2: Bridging the gap: career development and effective collaboration between academia and industry	Room B
	12:15-14.00	Brokerage events	Poster Hall
	14:00-15.30	Lunch	"R" – ECAI restaurant
	15:30-17:00	ECAI Afternoon sessions	
		Workshop WAITS	Room A
		Bio-medical applications	Room B
		Electronic Circuits & Equipment - I	Room C
		Software & Computer Applications - I	Room D
		Software & Computer Applications - II	Room E
		Poster session I and II	Poster Hall
		E-session	E – session room
17:00-17:30	Coffee break & Brokerage events	Poster Hall	
17:30-19:00	Cultural program	Aula Magna	
19:00-21.00	ECAI Welcome dinner	"R" – ECAI restaurant	
June 29	9:00-9:30	Authors Registration	"CD" Poster Hall
	9:30-11:00	ECAI KEYNOTE LECTURES II	Aula Magna
	11:00-11:30	Coffee Break & Brokerage events	Poster Hall
	11:30-14:00	ECAI morning sessions	
		Electronic Circuits & Equipment - II	Room C
		Software & Computer Applications - III	Room D
		Software & Computer Applications - IV	Room E
		Young Researchers session	Room A
		Workshop IWSSS	Room B
	Workshop OCSC	Room F	
13:00-14:00	Poster session I and II	Poster Hall	
13:00-14:00	E-session	E – session room	
14:00-15:30	Lunch	"R" – ECAI restaurant	
15:30-17:00	ECAI Afternoon sessions		
	Electrical Engineering - I	Room A	
	Electrical Engineering - II	Room B	
	Electronics Systems & Software Applications	Room C	
	Communication	Room D	
	Workshop IWAE	Room E	
	Poster session IWTOTC I and II	Poster Hall	
	E-session	E – session room	
	17:00-17:30	Coffee Break& Brokerage events	Poster Hall
	17:30-18:00	ECAI Closing Solemnity	Room
18:00-20:00	ECAI Gala Dinner	"R" – ECAI restaurant	
20:00-23:00	Free time (shopping & sightseeing)		
June 30	9:00 – 17:00	ECAI Trip	Departure at 9.00, June 30, from Hall; Arrival will be at about 17.00.
July 01		Participants departure	

Workshop on Automotive and Intelligent Transport Systems – WAITS; International Workshop in Systems Safety & Security – IWSSS; International Workshop in Applied Electronics – IWAE; International Workshop in Trends and Opportunities in Teaching Career – IWTOTC; International Workshop in Optical Communication Systems Connectivity OCSC; "R" – ECAI restaurant

10th INTERNATIONAL CONFERENCE
on
ELECTRONICS, COMPUTERS and ARTIFICIAL INTELLIGENCE
ECAI 2018, June 28 – June 30, 2018

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 (up to 10%) will be sent to appropriate IEEE journals for free publishing, after those papers will be further reviewed as normal.

Proceedings' Editors: Nicu Bizon and Daniela Tărniceriu
Text processing: Mihai Oproescu

Local Organizing Committee

UNIVERSITY OF PITESTI:

Faculty of Electronics, Communications and Computers

Luminita Mirela Constantinescu,

Enescu Florentina

Cioc Bogdan

Corina Savulescu

Beloiu Robert

Bostan Ionel

Local Organizing Committee

'Gheorghe Asachi' TECHNICAL UNIVERSITY, IASI, ROMANIA:

- Faculty of Electronics, Telecommunications and Information Technology

Daniela Tarniceriu

Tecla Goras

Nicolae Cleju

Constantin Barabaşa

Arcadie Cracan

Cristian Andriesei

Monica Dobrea

Mirela Rotopanesuc

Conference web site: <http://ecai.ro/>; E-mail: contact@ecai.ro ;

Tel +40 348 453 201, Fax +40 348 453 200

Local Secretary: Oana Strugariu and Ramona Grigoras