ECC 2019
The Sixth Euro-China Conference on Intelligent Data Analysis and Applications (ECC2019) Arad-Romania
https://www.ecc2019.ro/

PROGRAM

October 15-18 ARAD - ROMANIA
WELCOME MESSAGE

ECC 2019 hosted by Aurel Vlaicu University is the sixth Euro-China Conference on Intelligent Data Analysis and Applications. The aim of this conference is to provide an internationally respected forum for scientific research in the broad area of intelligent data analysis, computational intelligences, signal processing, and all associated applications of AI.

Our pleasant duty is to gratefully acknowledge the support provided by the sponsors and co-sponsors of the ECC 2019 conference to thank the reviewers for their work and all those involved in the preparation of the workshop and the program. Last but not least, we would like to thank the authors for their valuable contribution!

The General Co-Chairs wish all participants a pleasant stay in Arad and a successful workshop!
CHAIRS

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<tr>
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International Program Committee and other Committees
https://www.ecc2019.ro/committees/
GENERAL INFORMATION

Venue
The 6th edition of the Euro-China Conference on Intelligent Data Analysis and Applications (ECC 2019) will take place at Hotel Continental, in Arad, Romania. The conference room will be in the hotel mezzanine.

Registration desk
A registration desk will be open all throughout the event where participants can register and receive information on the event.

Language
The official language of the workshop is English.

Presentations
Presentations can be made by using data projectors. All authors are kindly requested to take their presentation on a USB and upload it on the workshop laptop during the break before their session. Each presentation will be a maximum of 15 minutes, plus 5 minutes for discussions.

Internet
There will be free of charge internet facilities.

Social programs
- A Welcome Conference Dinner will take place on the evening of the 1st day at Ratio Restaurant, https://ratio.ro/ Address: Piața Avram Iancu 10, Arad
- The Conference Dinner will take place in the evening of the 2nd day in Arad at Restaurant Ratio Beach, http://www.ratiobeach.ro/. Address: Str. Malul Muresului, Arad, Strandul Neptun.
• Wine Tasting and Dinner in the Vineyards of Aramic, Timis, [http://crama-aramic.ro/](http://crama-aramic.ro/) will take place on the afternoon of the 3rd day

**Insurance**
The Organizers of the workshop do not provide insurance and do not take responsibility for any loss, accident or illness that might occur during the workshop or in the course of travel to or from the meeting site. It is therefore the responsibility of the participants to check their coverage with their insurance provider.

**Voltage**
The electricity supply is 220 V AC (50 Hz).

**Weather**
Weather in October is pleasant, ranging between 10 and 26 °C.

**Taxi companies**
Taxi Verbita: 004 0741 200 300
Taxi Europa: 004 0257 275 555
Program

ECC 2019
Tuesday, October 15th

08:30–09:00 Registration
Hotel Continental, mezzanine
*The registration desk will be open all throughout the conference*

09:00 – 09:10 Opening
Opening address by the general co-chairs.

09:10 – 11:00 Keynote presentations I, II & III
*Chair: Valentina E. Bălaș*

**Kuo-Hui Yeh** (Taiwan)
*Trusted IoT Framework*

**Praveen Kumar Khosla** (India)
*Data Analytics for Cyber Security*

**Guojun Wang** (China)
*Cleanroom Computing – Building Efficient and Secure Network Services*

11:00 – 11:30 Coffee break

11:30 – 13:00 Keynote presentations IV & V
*Chair: Valeriu Beiu*

**Jerry Chun-Wei Lin** (Norway)
*Utility-Oriented Pattern Analytic and Mining Techniques*

**Oana Geman** (Romania)
*Big Data Analysis and Applications in Biomedical Field*
13:00 – 14:30 Lunch break
   Restaurant – ground floor, Hotel Continental

14:30 – 14:50 Session
   Chair: Vlad Dragoi

Shou-Ching Hsiao, PrivGRU:
   A Privacy-preserving GRU Inference System using Additive Secret Sharing

14:50 – 16:00 Keynote presentation VI
   Chair: Oana Geman

Vlad Dragoi (Romania)
   Discrete mathematics applied in error correcting codes, and network reliability

16:00–16:45 Keynote presentation VII
   Chair: Marius Bălaș

Shahnaz Shahbazova (Azerbaijan)
   Models and methods of design of knowledge based fuzzy neural networks

16:45-17:00 Coffee break
   Hotel Continental, mezzanine

17:00 – 18:00 Keynote presentation VIII
   Chair: Shahnaz Shahbazova

Marius M. Balas (Romania)
   Green Skyline Cities by Intelligent Rooftop Greenhouses

18:30 Departure for the Welcome Conference Dinner
   Meeting point: Conference Registration Desk

The Welcome Conference Dinner will take place at:
   Ratio Restaurant – Address: Piața Avram Iancu 10, Arad
Wednesday, October 16th

09:00 – 11:00 Keynote presentation IX
Chair: Marius Balas
Valeriu Beiu (Romania)
   Why AI Hardware (Makes Perfect Sense) Now -
   The Fourth AI Wave

11:00–11:15 Session
Chair: Marius Balas
Maria Visan and Angela Ionita, Myths and facts about
   Smart City Development

11:15–11:30 Coffee break
   Hotel Continental, mezzanine

11:30 – 13:30
Doctor Honoris Causa awarding to the Professors:

- Lakhmi C. Jain, Sidney University of Technology
  (Australia)

- Mircea A. Ciugudean, Politehnica University
  Timisoara (Romania)

13:30 – 14:45 Lunch break
   Restaurant – ground floor, Hotel Continental
14:45 – 16:00 Session
Chair: Simon Cowell


Vito Santarcangelo, Muhammed Imran Tariq, Michele Di Lecce, Emilio Massa, Nicolo Montesano, Antonio Notarnicola and Massimiliano Giacalone, Blockchain Fuzzy as Innovative Tool for the certification of Corporate Social Responsibility

Muhammad Naeem, Tauseef Jamal, Jorge Diaz Martinez, Muhammad Imran Tariq, Emiro De-La-Hoz-Franco, Nicolo Montesano, Fouad Hadjselem and De-La-Hoz-Valdiris Ethel, Trends and future perspective challenges in Big Data


16:00 Departure for the trip to Basilica Maria Radna

19:30 Banquet at Ratio Beach:

Ratio Beach Restaurant – Address: Str. Malul Muresului, Arad, Strandul Neptun.

11/19
Thursday, October 17th

09:00 – 11:00 Keynote presentations X, XI & XII
Chair: Marius Mircea Balas

Florin G. Filip (Romania)
Evolution in DSS Domain: from Model-Oriented to Data-Driven Solutions

Anca L. Ralescu (Romania)
On Context-dependent measures of similarity

Robert Howlett (UK)
Smart Microgrids: Artificial Intelligence in a Low Carbon Energy Future

11:00 – 11:15 Coffee break

11:15 – 13:00 Session
Chair: Anca Ralescu

Gabor Kiss, Manchurian Artificial Intelligence in Autonomous Vehicles

Muhammad Touqeer, Salma Jabeen and Rida Irfan, A grey relational method for multi attribute decision making based on three trapezoidal fuzzy numbers

Muhammad Touqeer, Salma Jabeen and Rida Irfan, Evaluation model for manufacturing plants with linguistic information in terms of three trapezoidal fuzzy numbers

Muhammad Touqeer, Abid Hafeez, Multi-attribute decision making using grey relational projection method based on interval type-2 trapezoidal fuzzy numbers

Muhammad Ilyas Yasin, Muhammad Javaid Afzal, Shahzadi Tayyaba, Muhammad Waseem Ashraf, Cornel Barna and Marius Balas, Fuzzy Parametric estimation of Curvilinear Microchannel for Retinal Vein Occlusion (RVO)
Maham Akhlaq, Saheer Manzoor, Shahzadi Tayyaba, Muhammad Waseem Ashraf and Ali Asif, Fabrication and Characterization of Nano-Porous Anodic Aluminium oxide Membrane for Bio-MEMS

13:00 – 14:00 Lunch break
Restaurant – ground floor, Hotel Continental

14:00 – 15:00 Keynote presentation XIII
Chair: Anca L. Ralescu
Dana V Rad (Romania)
The effect of internet content awareness on online aggressiveness

15:30: Departure for the Conference Dinner
Meeting point: Conference Registration Desk
The Conference Dinner will take place at Crama Aramic
**Friday, October 18**

09:00 – 11:00 Keynote presentations XIV & XV  
*Chair: Marius Mircea Balas*

**Simon R. Cowell** (Romania)  
*The Unreasonable Effectiveness of Moore-Shannon Hammocks*

**Duma F. Virgil** (Romania)  
*Biomedical Imaging using Optical Coherence Tomography (OCT). An Insight into Technology, Devices, and Applications*

11:15 – 11:45 Coffee break

11:45-12:45 Tutorial  
**Roxana-Mariana Beiu**  
*Designing Optical Sensors for the Internet Era.*

12:45 – 14:00 Lunch break  
*Restaurant – ground floor, Hotel Continental*

14:00 – 14:30 Keynote presentation XVI  
**Barnali Dey** (India)  
*Fuzzy Logic based cognition in RF sensing: A case study to vehicular communication*

14:30 – 15:30 Award Session
POSTER SESSION

Ankit Mundra and Shikha Mundra, Optimized Deep Neural Network for Cryptanalysis of DES

Ankit Mundra, Biogeography-Based Meta Heuristic Optimization for Resource Allocation in Cloud for E-Health Services

Ankit Mundra, Shikha Mundra and Vivek Kumar Verma, A Deep Learning based Hybrid Framework for Stock Price Prediction


Chao-Fan Xie, Lu-Xiong Xu, Ruobin Wang, Fuquan Zhang, Application of Fuzzy Neural Network in Chromatographic Separation

Chao-Fan Xie, Lu-Xiong Xu, Ruobin Wang, Fuquan Zhang, Concentration Control of SMB System Based on Hierarchical Fuzzy Controller

Chih-Yuan Ye and Mu-En Wu, Using Support Vector Machine for Option Trading on Settlement Day

Chunjie Yang, Bingchun Jiao, Hongbo Kang, Yifan Wu and Yanwei Li, Contribution Title Design of Production Field Intelligent Temperature Acquisition System based on Digital Filtering Algorithm

Donglai Jiang, Juan Zhang, Association analysis of case data oriented to legal texts

Feng Zhou, Xiaonan Hu, Sheng Yan, Lina Zhu, Xia Fang, A Meteorological Public Opinion Method Research Base on Deep Random Forest

Fengna Liang, Xiufang Zhang, Hui Li, Hua Yu, Qiuyan Lin, Miaohua Jiang, Jinxin Zhang, Land Use Classification Based on Maximum Likelihood Method
Fuquan Zhang, Yiou Wang, Guifen Zhao, A Fuzzy Creative Works Generation Algorithm Based on Graph Neural Network

Hao Li, Jiancong Fan, Chinese Text Emotional Analysis Based on Bi-LSTM Model Fusing Emotional Features

Hongbo Kang, Yanwei Li, Chunjie Yang, Yifan Wu, Yan Liu and Bingchun Jiao, Temporary Communication System Based on Tethered Unmanned Aerial Vehicle

Hua Yu, Kaiwen Zheng, Hui Li, Fengna Liang, Jinxin Zhang, Fuquan Zhang, Temporal and Spatial Changes of Forest Leaf Area Index Based on MODIS: A Case Study of Fujian Province

Hui Li, Fengna Liang, Zijun Qin, Jinxin Zhang, Ku Wang, Miaohua Jiang, Spatial Distribution of Heavy Metals in Soil Based on Kriging Interpolation

Huo Yunyan, Prediction of credit risk in Electronic Commerce financial industry based on Decision Tree Method

Jian Chen, Han Zhu, Tsu-Yang Wu, Li Lin, An Improved Median Filter Method based on Multi-directional Template combined with Image Feature

Jinxin Zhang, Hui Li, Xiufang Zhang, Hua Yu, Min Wang, Yazhi Shen, Miaohua Jiang, Fuquan Zhang, A Sensitivity Analysis Method of Soil Erosion Based on Land Use Type

Long Zhao, Yongquan Liang and Jiancong Fan, Adaptive density peak algorithm based on K-nearest neighbors with pre-screening strategy

Mai-Hao Gao And Kun Meng, A Survey of Anomaly Traffic Detection Based on Machine Learning

Mu-En Wu, Sheng-Hao Lin, Jia-Ching Wang, Drawdown Constraint Embedded in Ensemble Learning for Stock Trading

Qingda Zhao, Fuquan Zhang, Linjuan Ma, Lung Detec-
tion Based on YOLOv3
San Zhang, Hongbo Kang, Xiangkui Jiang, G. H. Tang, Junsuo Qu, Experimental investigation on warm incremental sheet forming assisted with oil bath heating
San Zhang, Kejie Li, Zhen Li, G. H. Tang, Junsuo Qu, The effect of process parameters on the springback of AZ31B Mg alloy in warm incremental sheet forming assisted with oil bath heating
Sanjiban Sekhar Roy, Valentina E Balas, Mihaela Popa, Ramona Lile and Ishan Nagtode, Prediction of Air-Pollutant Concentrations using Hybrid Model of Regression and Genetic Algorithm
Shou-Ching Hsiao, Zi-Yuan Liu, Raylin Tso, Da-Yu Kao, and Chien-Ming Chen, A Privacy-preserving GRU Inference System using Additive Secret Sharing
Shou-Ching Hsiao, Zi-Yuan Liu, Raylin Tso, Da-Yu Kao, and Chien-Ming Chen, PrivGRU: A Privacy-preserving GRU Inference System using Additive Secret Sharing
Shu-Chuan Chu, Yuxin Chen, Jeng-Shyangpan, and Chen Yang, Internal Search of the Evolution Matrix in Quasi-Affine TRansformation Evolution (QUATRE) algorithm
Shujuan Ji, Chunxiao Bao and Guanguan Sun, Research on Seller's Honest Game Based on Evolution Theory
Shujuan Ji, Chunxiao Bao, and Guanguan Sun, Research on Seller's Honest Game Based on Evolution Theory
Tai-Li Luo and Mu-En Wu, Using Deep Reinforcement Learning to Construct Evaluation Function on Stock Trading
Viviane Gal, Soumya Banerjee and Dana V. Rad, Investigation of Emotion Instances and Class Analysis from Physiological Sensors by Unsupervised Hybrid EMDeep Model
Wei Liu, Yu Mao, Linlin Ci, Fuquan Zhang, A New Approach of Intrusion Detection with Command Sequence-to-Sequence model

Wenpeng Li, Haonan Shi, Hailong Zhang, Shuyong Gao, Yanjun Hao, Junsuo Qu, Design of UHV transmission line selection line

Wenqing Wang, Yan Liu and Chunjie Yang, Design of Intelligent Human Sign Monitoring System Based on Internet of Things

Wenqing Wang, Yifan Wu, Hongbo Kang, Yan Liu, Bingchun Jiao and Yanwei Li, Design of Intelligent Unmanned Vehicle Handling Simulation System

Ximing Lv, Chun-Yan Liu, Inner Mongolia Big Data Industry's Development status and Its Active Promotion to the Construction of China-Mongolia-Russia Economic Corridor

Ximing Lv, Distributed finite-time consensus tracking control for the multi-agent systems under the fixed directed topology graph

Ximing Lv, Distributed finite-time consensus tracking control for the multi-agent systems under the fixed directed topology graph

Xingsi Xue and Xiaojing Wu, Optimizing Ontology Alignment in Vector Space

Xipu Yu, Linjuan Ma, Fuquan Zhang, Hand Detection Based on YOLOv3

Yuqing Wan, Yaoxin Nie, A Case Knowledge Extraction Method for Chinese Legal Texts

Zhan Li, Qian Li, Yongkun Zhu, Zhongyu Hao, Yanjun Hao, Junsuo Qu, Analysis of Power Grid Security Access Protection Based on Internet Technology

Zhanhui Li, Jiancong Fan, Yande Ren, Leiyu Tan, A Novel Feature Extraction Method Based on Neighborhood
Rough Set and PCA for Migraine rs-fMRI

Zhenyu Meng, Cheng Yang, Yuxin Chen, Yuxin Zhong, Jeng-Shyang Pan and Fang Lin, A Parameter adaptive Differential Evolution based on Depth Information

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