



20 - 22 July 2022
Prague, Czech Republic



CONFERENCE PROGRAM (Time Zone: Prague Time - GMT+2)
(ONLINE PART)

July 21 th , 2022				
Time	HALL-A	HALL-B	HALL-C	HALL-D
08:30-08:45	Welcome Speech by Dr. Simon WINBERG - Chair of ICECET'22			
08:45-09:15	Keynote Speaker Dr. Marinko Barukčić (FERIT Osijek, Croatia) <i>Computational Intelligence and Electrical Engineering</i>			
09:15-11:15	Session A-I: Big Data - Data Science	Session B-I: Communications-1	Session C-I: Computer/Software Eng. - 1	Session D-I: Electric Vehicles and Machines
11:15-11:30	COFFEE BREAK			
11:30-13:30	Session A-II: High Voltage Engineering	Session B-II: Communications-2	Session C-II: Computer/Software Eng. - 2	Session D-II: IoT and Neural Networks
13:30-14:00	LUNCH			
14:00-16:00	Session A-III: Machine/Deep Learning - AI - 1	Session B-III: Cybersecurity and Cryptography - 1	Session C-III: Microelectronics and VLSI	Session D-III: Robotics and Control Systems - 1
16:00-16:15	COFFEE BREAK			
16:15-18:15	Session A-IV: Machine/Deep Learning - AI - 2	Session B-IV: Cybersecurity and Cryptography - 2	Session C-IV: Electric Vehicles / Machines and High Volt. Eng.	Session D-IV: Robotics and Control Systems - 2
End of the first day				
July 22 nd , 2022				
Time	HALL-A	HALL-B	HALL-C	HALL-D
08:40-09:00	Keynote Speaker Dr. Atilla MAGYAR (University of Pannonia, Veszprem, Hungary) <i>Direct Optimization in Electrical Energy Systems</i>			
09:00-11:00	Session A-V: Machine/Deep Learning - AI - 3	Session B-V: Power Electronics	Session C-V: Renewable Energy - 1	Session D-V: IoT, Neural Networks and Human - Computer Interaction
11:00-11:15	COFFEE BREAK			
11:15-13:15	Session A-VI: Machine/Deep Learning - AI - 4	Session B-VI: Computer / Software Eng. and Power Electronics	Session C-VI: Renewable Energy - 2	Session D-VI: Big Data, IoT and Neural Networks
13:15-13:45	LUNCH			
13:45-15:45	Session A-VII: Machine/Deep Learning - AI - 5	Session B-VII: Mechatronics, Electric Vehicles, Robotics	Session C-VII: Renewable Energy - 3	Session D-VII: MIXED - 1
15:45-16:00	COFFEE BREAK			
16:00-19:00	Session A-VIII: Machine/Deep Learning - AI - 6	Session B-VIII: MIXED - 4	Session C-VIII: MIXED - 3	Session D-VIII: MIXED - 2
19:00-19:15	CLOSING			

08:45-09:15

Keynote Speaker
Dr. Marinko Barukčić
 (FERIT Osijek, Croatia)
Computational Intelligence and Electrical Engineering

09:15-11:15

Parallel Session A-I: Big Data - Data Science
Chair: Simon Winberg

ID	Authors	Title
94	Songmei Yu ; Sofya Poger	Using Matrix Operations to Measure Individual Social Influence in Mobile Messaging Apps
241	Naomichi Tabuchi ; Kazuyuki Matsumoto ; Minoru Yoshida ; Ryota Nishimura ; Kenji Kita	Analysis of Lifestyle Habits from Weblogs of Patients with Intractable Diseases Using Deep Learning
993	Alejandro Mozo Quesada ; Francisco López Valverde ; Sergio Gálvez Rojas	Clustering students' online behavior and relation with academic performance
115	Logenthiran Machap ; Kohbalan Moorthy	Survival analysis for the identified cancer gene subtype from the co-clustering algorithm
625	Elena Yasinovskaya ; Yuri Akatkin ; Mikhail Bich ; Andrey Shilin	Collaboration At The Stage Of Semantic Assets Development
969	Salma A Gheith ; Ahmed Al-Sadek	Prediction of Hypotension in Hemodialysis Session
306	Nhat Hoang Bach ; Van Duc Nguyen ; Le Ha Vu	Improving the classification of propeller ships using LOFAR and triple loss variational auto encoder
764	Nhat Hoang Bach ; Van Duc Nguyen ; Le Ha Vu	Using cubic splines interpolation to enhance classification of marine mammals signal
811	Iztok Jr. Fister ; Iztok Fister ; Sancho Salcedo-Sanz	Time Series Numerical Association Rule Mining for assisting Smart Agriculture

09:15-11:15

Parallel Session B-I: Communications - I
Chair: Cheryl O. Tayo

ID	Authors	Title
50	Khomotso C Tsoane ; Dr Topside Mathonsi ; Dr Deon Du Plessis	An Enhanced Wireless Sensor Monitoring System to Combat Underground Copper Cable Theft
453	Cheryl O. Tayo	Design and Development of a WSN for Water Quality Monitoring System of Shrimp Aquaculture
366	Pape Waly Sarr ; Ibra Dioum ; Aminata Diop	A new broadband compact meander dipole antenna for RFID applications
25	Nan-Hung Cheng ; Yu-Yun Lin ; Yung-Fang Chen	On Receiver Performance by Using K-exponential Pulse Shaping Filters
950	Mathews Chauke ; Thomas Olwal ; Munguakonkwa Emmanuel Migabo	A Geography of Things (GoT)-Based Groundwater Quality Management System
887	Sümeýe Nur Karahan ; Aykut Kalaycıođlu ; Selçuk Taşcıođlu	MIMO Detection Algorithms – Deep Learning Based and Traditional Methods
461	Pavel Tulupov ; Boris Sorokin ; Anatoliy Korolev	Coverage impact of reconfigurable intelligent surfaces in 6G mobile networks
325	Lior Wunsch ; Liad Vaksman ; Aviel Glam	Evaluating Fault-Tolerance Algorithms for Multicast Services
430	Mohanad Mezher ; Amjed Razzaq Alabbas	BER Performance of Reed-Solomon Codes with 16 PSK Modulation Over In-Vivo Radio Channel
767	Dinh Van Linh ; Vu Van Yem	Carrier Frequency Offset Estimation and Compensation Technique for Massive MIMO-OFDM Wireless Communication System

09:15-11:15

Parallel Session C - I: Computer/Software Eng. - 1

Chair: Sindhusa Kodali

ID	Authors	Title
855	Mitsu Shah ; Sindhusa Kodali ; Anup Rani ; BHARATHI V	Seamless interfacing with Thunderbolt™ 4.0
253	Shanwen Wu ; Satoshi Kumano ; Kei Marume ; Masato Edahiro	An ILP Task Mapping for MIMD Processor with Vector Accelerator in Model-Based Development
57	Elda Agron Maraj ; Shkelqim Kuka	Prediction of Coronary Heart Disease Using Fuzzy Logic: Case Study in Albania
292	Abdulkareem abdalla ; Turki Abdalla ; Adala Chyaid	Grasshopper Algorithm based Fuzzy system for Trajectory Tracking of Robot Manipulator
469	Vitaliy Lysenko; Dmytro Polishchuk ; Maryna Hachkovska; Nataliia Zaiets	Development of a management system for information flows of a greenhouse complex based on the scenario-synergetic approach
967	Saraa I Kaleal ; Nagham Aziz ; Maha Abdulrhman	Multi area load frequency control using fuzzy type-2
607	Ikhlass Ammar ; Yamen Eltouati ; Moez Yeddes	Verification of Bounded Inclusion Problem for Timed Automata with Diagonal Constraints
11	Sahin Aydin ; Cem Berke Çebi	Comparison of Choreography vs Orchestration Based Saga Patterns in Microservices
42	Shalini Padayachee ; Adrian Reis Pillay ; Lindiwe Mzobe ; Clio Tarryn Noel ; Timothy T Adeliyi	Leveraging advancements of eLearning technology for more accessibility for student learning
851	Kurniawan T Martono	Analysis of Usability Game Educational Learning of Wayang Characters Using Usability Scale System

09:15-11:15

Parallel Session D - I: Electric Vehicles and Machines

Chair: Irin Akter

ID	Authors	Title
37	Marinko Barukčić ; Toni Varga ; Vedrana Jerković Štil ; Tin Benšić	Co-simulation framework for estimating the rotor bar currents of a cage induction motor using FEA and ANN
441	Genadijs Kobenkins ; Marks Marinbahs ; Anatolijs Bizans ; Vsevolod Burenin ; Olegs Sliskis	Evaluation of the Strength of Traction Geared Motor Units by Permissible Stresses and the Level of Vibration Activity
770	Priyanka Golatgaonkar ; Rajaram Ugale ; Dr. Bhalchandra Chaudhari	Modification in Method of Images for Three Dimensional Magnetic Field Analysis of a Transverse Flux Permanent Magnet Machine
856	Bhuvan Khoshoo ; Orwell Madovi ; Anmol Aggarwal ; Shanelle Foster	Impact of Rotor Segmentation on Electromagnetic Performance of PM Machine
52	Václav Kolář ; Jiří Cigánek	Monitoring of the contact force of a pantograph
85	Irin Akter ; Md. Ashikur Rahman ; Ummay Afrina Jahan Sutapa ; Md. Rifat Shahriar ; Shishir Roy ; K. M. Sazzad Ibne Sayed)	Proposed Automated Wheelchair with Voice Recognition System
145	João Rodrigues ; Weder Nunes ; Marcelo Brunoro ; Reginaldo Nunes	Comparison of Well-to-Wheel energy efficiency between combustion vehicles and electric vehicles.
255	Julin Hu ; Yuji Wei ; Hongwen He ; Ruchen Huang ; Jie Xing	Research on Shift Control Strategy of Hybrid Electric Vehicle Based on an Improved DCT Configuration
452	Jingwei Dou ; Hongwen He ; Jianwei Li ; Yingjuan Tang ; Xuyang Zhao ; Yunlong Wang	The State Estimation Strategy of Vehicular Batteries under a CPS Architecture
16	Jaroslav Dragoun ; Martin Vins ; Martin Sirovy	Synchronous Generator Active and Reactive Power Oscillations Reduction by BESS
987	Romain Mannini ; Julien Eynard ; Stéphane Grieu	Predictive management of batteries in microgrids equipped with electric vehicles

11:15-11:30

1st COFFEE BREAK

11:30-13:30

Parallel Session A-II: High Voltage Engineering
Chair: Marinko Barukčić

ID	Authors	Title
946	Daniel Aguilar-Torres ; Omar Jiménez-Ramírez ; Juan Antonio Jimenez-García ; Guillermo Luque-Zúñiga ; Gonzalo Alonso Ramos-López ; Ruben Vazquez-Medina	Thermo-acoustic analysis of apples when dehydrated in an ultrasound-assisted convection system
254	Yuji Wei ; Julin Hu ; Hongwen He ; Ruchen Huang ; Jie Xing ; Miaoqie Gao	Research on Shifting Strategy of Hybrid Electric Vehicle Based on Dynamic Programming Algorithm
266	Muhammad Majid Hussain ; Muhammad Siddique ; Waqas Javed ; Abdul Razaq ; Muhammad Naveed Akhter ; Farhan Hameed Malik	Machine Learning based Voltage Regulation Technique using Smart Rotating Magnetic Inverter
355	Galina Tatkeyeva ; Iskander Kurabayev ; Nodir Ataulaev ; Xasan Murodov	Experimental research of the developed method to determine the network insulation for ungrounded AC systems in laboratory conditions
397	Murtadha MURTADHA Sami ; Stefan GHEORGHE	Transient stability improvement and voltage regulation in power system hosting Renewables by SVC
449	Filipe A Barata ; César Ferrolho ; Paulo Gamboa	Power quality and modeling analysis of a university campus electrical distribution system
450	Filipe A Barata ; Miguel Oliveira ; Francisco Reis	Characterization of a power substation for Electric Vehicle Charging Stations based on Voltage Transformers for Auxiliary Services
454	FANG YANG ; Carson Foster ; Evan Creeden ; Scott Slocum	University Microgrid Testbeds: A Literature Survey
460	Georgiana Ion ; Sorina Costinas ; Stan M Andrei	Assessment of life cycle of autotransformers
484	Pradip Khatri ; Khagendra Thapa	Artificial Bee Colony Algorithm Based DG units Siting and Sizing based on Loadability Improvement of Distribution Feeder of Nepal

11:30-13:30

Parallel Session B-II: Communications - II
Chair: Phoka Rathebe

ID	Authors	Title
33	Sundhara Ganesan Rajamani ; Shreyas Acharya Neelavara ; Arunvel Thangamani	Custom Wireless Sensing System for Evaluation of Automotive Cabin Thermal Comfort Metrics
973	André A Rouco ; Ana Beire ; Nuno Cota ; António Serrador	Public Mobile Wideband Networks Interference Impact Assessment on Railways GSM-R Network
138	Haidar N Al-Anbagi ; Ivo Vertat	Pre-detection Combining of Small Satellite Downlink's Replicas
505	John Robie ; Alireza Famili ; Angelos Stavrou	Receiver Density Analysis for High Probability Detection of Forward Scattered Airborne Signals
800	Ismail Erturk	Improving Drone Data Gathering WSN Application Performance with a Predefined p-based Approach for Slotted p-Persistent CSMA MAC
875	Boutebel Abdeldjalil ; Atmani Mouloud ; Djamil Boukredera ; Aïssani Djamil	Multi-channel Conflict-Free Scheduling Algorithm for IEEE 802.15.4e/TSCH Networks
1025	Reorapetse Ramoliti Samuel RRS Molose ; Bassey Isong ; Bassey Isong ; Adnan M. Abu-Mahfouz	Data Aggregation Schemes for Maximal Network Lifetime: review
315	Ahmad Fauzi Abas	Tunable Graphene-Silicon-Silicon Oxide Optical Absorber for Optical-Wireless Communication and Sensor Applications
303	Aqiel Almamori ; Radhi Issa	Broadband Reflectarray Design for Wireless Applications
564	Muhammad Asfar Saeed	Coaxial Feed Ultra-Wideband Microstrip Antenna for Medical Applications

11:30-13:30

Parallel Session C - II: Computer/Software Eng. - 2
Chair: Timothy T Adeliyi

ID	Authors	Title
214	Darrel Tristan U Virtusio ; Fil Janssen Tapaganao ; Rafael Maramba	Enhanced Iris Recognition System Using Daugman Algorithm and Multi-Level Otsu's Thresholding
317	Kreshnik Vukatana	OCR and Levenshtein distance as a measure of image quality accuracy for identification documents
759	Mehmet Cinci ; Ceren Cubukcu Cerasi ; Muaz Gultekin	Token Based Novel Approach To Web Service Security
467	Ahmed Abozaid ; Ayman Ezzat	Multi-Modal Online Exam Cheating Detection
805	Zahraa S. AlHakeem	An Automatic System for Detection of Fires in Outdoor Areas
847	Yu-Ting Lin ; Meng-Yuan Jiang ; Jiun-Jian Liaw	Combination of weather factors and area of high variation to estimation PM2.5 concentration
943	Nippon Datta ; Juel Sikder ; Sajib Tripura ; Utpol Kanti Das	Emotion, Age and Gender Recognition using SURF, BRISK, M-SVM and Modified CNN
945	Juel Sikder ; Nippon Datta ; Dhonita Tripura	A Deep Learning Approach for Recognizing Covid-19 from Chest X-ray using Modified CNN-BiLSTM with M-SVM
997	Mario Nady Shoukry ; Ayman Ezzat	Multi-modalities Analysis In Profiled Learning
562	Shweta Aladakatti ; Kaustubh Ghormade ; Jasdeep Jain; Sailesh Rathi ; Yojak Raote ; Vinay Kumar ; Ankit P Navik	Enhanced battery life for video conferencing use case in the educational PC segment
909	Tsakani G Mboweni ; Themba Masombuka ; Cyrille Dongmo	A Systematic Review of Machine Learning DevOps

11:30-13:30

Parallel Session D - II: IoT and Neural Networks
Chair: Md. Ashikur Rahman

ID	Authors	Title
131	Nikola G Cvetković ; Pavle Milenković ; Vladan Lapčević ; Vladimir Rajović ; Mihajlo Karličić ; Goran Rapić	Wireless Programming of the AVR Microcontroller Family
870	Abdullah AA Almohaimed	Efficient Differential Reconfigurable Harvester for WSN Applications
487	Vaisnav Ashok ; Sandhya Ashok ; Shatharajupally Vinaykumar ; Thilagavathy Ramaiah	FPGA Implementation and Comparison of Sigmoid and Hyperbolic Tangent Activation Functions in an Artificial Neural Network
46	Kailash Jamuda ; RADHIKA LAMA ; Sandip Karmakar	A Secured Scheme for Optimal Navigation of a Berthing Ship
446	Godlove Suila Kuaban ; Mateusz Nowak ; Piotr Czekalski ; Krzysztof Tokarz ; Julius Tangka ; Kjartan Siggurðsson ; Agris Nikitenko ; Karlis Berkolds ; Raivo Sell	An IoT Course Program to Foster the Adoption of IoT Driven Food and Agriculture in Sub-Saharan Africa (SSA)
846	Ting-Yu Chen ; Li-Wei Lo; Yan-Ting Lin ; Jiun-Jian Liaw	Building IoT sensors to estimate PM2.5 concentrations
1072	Philipp Raich ; Wolfgang Kastner	Failure Detectors for 6LoWPAN: Model and Implementation
912	Iryna Vergunova	Neural Approximation of the solution for Evolutionary Partial Differential Equation
21	Petr Kurilovich	Using population algorithms to optimize the objective function when training artificial neural networks
71	Hamed Samimi ; Hilmi Dajani	Cuffless Blood Pressure Estimation Using Cardiovascular Dynamics

13:30-14:00

LUNCH

14:00-16:00

Parallel Session A-III: Machine/Deep Learning - AI - 1
Chair: Muhammad Mokhzaini Azizan

ID	Authors	Title
65	Omar Al-Khadher ; Azharudin Mukhtaruddin ; Fakroul Ridzuan Hashim ; Muhammad Mokhzaini Azizan ; Husin Mamat ; Mohamed Mani	Comparison of non-intrusive load monitoring supervised methods using harmonics as feature
74	Chatree Nilnumpetch ; Somkid Amornsamankul ; Pawalai Kraipeerapun	Cascade Generalization and Complementary Neural Networks for Multiclass Classification
107	Aurimas Petrovas ; Romualdas Bausys	Regionally morphing objects for the genetic WASPAS-SVNS game scene generation algorithm
109	Boubacar Tawayé Abdoul ; Issoufou Tiado Mahamadou ; Adamou Hassane Nassirou	Performance evaluation by simulation of the synchronous course transcription system in the ad hoc network of the DOUNG (Digital Open Universities - New Generation)
227	Retno Larasati	Explainable AI for Breast Cancer Diagnosis: Application and User's Understandability Perception
238	Jean Claude Joseph Badji ; Cherif Diallo	A CNN-based Attack Classification versus an AE-based Unsupervised Anomaly Detection for Intrusion Detection Systems
295	Amin Kabi	Challenges Encountered by Artificial Intelligence Applications in Today's Interconnected World
650	Miguel A Ramirez	Reinforcement Learning-Based Supervisor System Proposal for Fault-Tolerant Control of Direct Fired Heater
726	Sikandar Khan ; Adnan Adnan ; Naveed Iqbal	Applications of Artificial Intelligence in Transportation

14:00-16:00

Parallel Session B-III: Cybersecurity and Cryptography - 1
Chair: Sandra L Kopecky

ID	Authors	Title
803	Myrna Mohamad Ramadan ; Khoula Al Harthy	Proposed architecture of integrate Blockchain with VAT system in Oman
113	Tomohiro Fujii ; Masao Hirokawa	On Performance of Concealing-Restoring System for Analog Signals on Physical Layer
114	Samaneh Pazouki ; Noorbakhsh Amiri-Golilarz ; S. Mahdi Kazemi-Razi ; abdullah aydeger	A self-healing cybersecurity mechanism for cyberattacks targeting artificial neural network-based human brain implants controlling smart homes
568	Sinan I Ismaila ; Vivian Nwoacha ; Jules R DEGILA ; Saidat A. Onashoga	Data Architectures' Evolution and Protection
575	Elena Smirnova ; Sergey Skryl' ; Artyom Sychev ; Mikhail Sychev	Cybersecurity elements in remote payment systems: research models
596	Gaetano Perrone ; Simon Pietro Romano ; Francesco Caturano ; Angelo Delicato ; Daniele Capone	Dockerized Android: a container-based platform to build mobile Android scenarios for Cyber Ranges
705	Michael Heidenreich	Evaluation study of an IT security measurement method for micro-enterprises
968	Gaetano Perrone ; Luigi Urbano ; Simon Pietro Romano	Reinforced WAVSEP: a Benchmarking Platform for Web Application Vulnerability Scanners
1012	Sandra L Kopecky ; Catherine Dwyer	Nature Inspired Metaheuristic Effectiveness Used in Phishing Intrusion Detection Systems with Firefly Algorithm Techniques
1060	Ayei E. Ibor ; Moses Adah Agana ; Bassey Igbo Ele ; Idongesit Eteng ; Prince Ana	Hybrid Intrusion Detection Technique for Malicious Network Attacks with Machine Learning

14:00-16:00

Parallel Session C - III: Microelectronics and VLSI
Chair: Maliha Naaz

ID	Authors	Title
691	Rajasekhar Nagulapalli ; Ravi Kumar ; Santosh Kumar Vishvakarma	A Novel Gain Enhanced Folded Cascode OPAMP in 28nm CMOS technology
914	Ravi Kumar ; Rajasekhar Nagulapalli ; Rushikesh Hake ; Santosh Kumar Vishvakarma	A Low-Power 2-to-7 Modulus Programmable Prescaler with 50% Output Duty Cycle
1043	Alex Fuller	Analyzing Arc Flash Hazards for Semiconductor Manufacturing Equipment
1000	Alaa M. Ali ; Noha Gaber	On-chip Optofluidic Structure for Hormonal Detection Using Stable Fabry-Pérot Resonator
781	Hayk Vardanyan	Driver's Output Impedance Correction Approach Using CCCS
722	Arsen Hekimyan ; Grigor Travajyan ; Karen Melikyan	Slew Rate Calibration Method for High Speed Systems
788	Narek Avdalyan ; Armen MR Petrosyan ; Sevak Ghukasyan ; Zhanna Khojayan	Development of a Method for Reducing the Power, Area and Delay Time for a Static Random Access Memory Cell
886	Mansi Thakare ; Babita Jajodia	Hardware Implementation for Determining Perfect and Non-Perfect Square Roots using Dwandwa Yoga on FPGA
966	Maliha Naaz	A Survey Paper on Capacitor Less Low Dropout Regulator
401	Evgeny Balzovsky	Experimental study of a generator of short bipolar voltage pulses based on the summation of two time-shifted opposite monopolar pulses

14:00-16:00

Parallel Session D - III: Robotics and Control Systems - 1
Chair: Marcel Nicola

ID	Authors	Title
520	Hanane Sefraoui ; Khalid Salmi ; Hajar Chadli ; Abdelhak Ziyat	Adaptive Locking Range of the Software Phase-Locked Loop (SPLL)
180	Volodymyr Sokolov ; Oleg Krol ; Oleksiy Romanchenko ; Oksana Stepanova	Energy efficiency of ventilation systems with vortex regulation devices
211	Volodymyr Sokolov ; Oleg Krol ; Oleksiy Romanchenko ; Petko Tsankov	Estimation of additional internal braking force for hydraulic cylinder piston
272	khansaa dheya aljafaar	Automation system for monitoring the quality of water sources to maintain their sustainability using microcontroller
339	Irina Cherepanka ; Yuriy V Kyrychuk ; Artem Sazonov	Research Of Dual-Channel Capacity Mems Sensitive Element Of Automated Gravimetric System With Artificial Intelligence Elements
738	Muhammad Babar Intiaz ; Yuansong Qiao ; Brian Lee	Prehensile Robotic pick-and-place in clutter with Deep Reinforcement Learning
47	Marcel Nicola ; Claudiu I NICOLA	Improved Performance of PMSM Control Based on Nonlinear Control Law and Computational Intelligence
93	Denis Vasko ; Ján Kardoš	Time Suboptimal Variable Structure Control with Neural Controller
685	Marah T Alhalabi ; Abdelrahman Rashed ; Yazan Barham ; Reem Salim ; Mohammed Ghazal	Two-Area Load Frequency Control for Power System Dynamic Performance Enhancement with a Graphical User Interface Integration
604	Andres Udal ; Igor Astrov ; Heigo Mölder ; Tanel Jalakas ; Taavi Möller	Experimentally Adjusted Modelling and Simulation Technique for a Catamaran Autonomous Surface Vessel

16:00-16:15

2nd COFFEE BREAK

16:15-18:15

Parallel Session A-IV: Machine/Deep Learning - AI - 2
Chair: Chérif Diallo

ID	Authors	Title
736	Efrem Efremov ; Ventsislav V Vassilev	Accuracy of ASR Software in Bulgarian Language and its Application in Journalism
820	Abdulla Mazin Mghames	Classifying Infected Palms with Dubas's Bug Based on Artificial Intelligence
521	Jayanta Choudhury ; Chenhua Shi	Enhanced Performance of Finite Boundary Isolation Forest (FBIF) for Datasets with Standard Distribution Properties

930	Apurva Sharma	Analysis of link prediction algorithms based on similarity
1014	Mariya M Zhekova ; George Totkov ; George Pashev	Methodology for creating natural language interfaces to information systems in a specific domain area
1039	Salma Tamer Abdelshafy ; Ayman Ezzat	Recognition of Butterfly strokes using different Machine Learning Models
998	Maria Theresa F. Calangian ; Vincent Peter C Magboo	Predicting Drug-Target Interaction (DTI) based on Machine Learning with Lasso Dimensionality Reduction and SMOTE from Protein Sequence and Drug Fingerprint
290	Darko Androcec ; Ruben Piccek	Cloud ERP API Ontology
18	Filipe Mendes ; Armando M. Fernandes; Luis Fernandes; Fernando Piedade; Paulo Chaves	Study on the Application of EfficientDet to Real-Time Classification of Infrared Images from Video Surveillance
953	Alex Romanova	Unsupervised Pairwise Entity Classification Model to Detect Free Associations

16:15-18:15

Parallel Session B-IV: Cybersecurity and Cryptography - 2
Chair: Issa Ahmed Abed

ID	Authors	Title
1017	Sandra L Kopecky ; Catherine Dwyer	Nature Inspired Metaheuristic Effectiveness Used in Phishing Intrusion Detection Systems with Grey Wolf Algorithm Techniques
403	Emmanuel Opara ; Hayden Wimmer ; Carl M Rebman	Auto-ML Cyber Security Data Analysis using Google, Azure and IBM Cloud Platforms
332	Giovanni B Gaggero ; Mansueto Rossi ; edit Paola Girdinio ; Mario Marchese	Cybersecurity Issues in Communication-Based Electrical Protections
147	Huber Nieto-Chaupis	Particles Detector as Random Numbers Generator at the Internet of Space Things Based at the BB84 Protocol
101	Radhika Lama ; Sandip Karmakar	Lightweight Authentication approach for Marine Internet of Things
294	Mustafa Munther Mashkour ; Lahieb Mohammed Jawad	Compressed and Uncompressed Video Steganography: Review
646	Marius Raab ; Alexios Karagiozidis ; Martin Gergeleit	Methods for Delaying Integrated Circuits using a Broad Ion Mill
258	Fita Nicolae Daniel ; Cristina Pupaza ; Marioara Tulpan ; Grigorie Emilia ; Romulus Nicolae Visan ; Roxana Herbei	Implementation of integrated industrial security management in critical energy infrastructures
24	Saja A. Hussein ; Issa Ahmed Abed; Zaid Alaa Hussien	Lightweight And Secure Authentication Protocol For Wearable Device In Smart Healthcare
92	Tiyani Hlongwane ; Topside E Mathonsi ; Deon Du Plessis ; Tonderai Muchenje	Facial Recognition For Effective Transactions in E-Business

16:15-18:15

Parallel Session C - IV: Electric Vehicles / Machines and High Volt. Eng.
Chair: Rajaram Ugale

ID	Authors	Title
121	Ignacio J Torres Herrera ; Lanh Nguyen ; Ricardo Aguilera ; Quang Ha ; Trung Le	UAV Target Tracking using Nonlinear Model Predictive Control
916	Tiandong Xi ; Sebastian Kehne ; Marcel Fey ; Christian Brecher	Application of Optimal Control for Synchronous Reluctance Machines in Feed Drives of Machine Tools
502	Noha Shouman	Battery Energy Storage System for Stochastic Based Power Dispatch Incorporating Renewable Energy Sources Uncertainty
848	Zhenhui Xu ; Wei Wang ; Kai Zhao ; Edyta Dzieminska ; Wenjing Cao ; Tielong Shen	A Feedback Control Scheme for Distributed Energy System Used Waste Incinerator
857	Ancuta-Mihaela Aciu ; Maria-Cristina Nitu ; Aurelia Scornea	Study Of Zeolitic Molecular Sieves For The Treatment Of Transformer Oils
949	Caio Fleming Ferreira Cunha ; André Tomaz de Carvalho ; Bruna Andrade Bastos Fonseca ; Diogo Rafael Correa Marques ; Leonardo Neves Vilela ; Hélio Paiva Amorim Júnior	An Alternative Partial Discharge Monitoring System for High Voltage Equipment
956	Sören Graupner ; Matthias Müller-Mienack ; Andre Lehmann ; Volodymyr Kalashnikov ; Hendrik Kondziella ; Thomas Bruckner	Curative redispatch employing distributed flexibility
167	Emmanuel Ogunwole ; Samson O Ayanlade ; Dolapo Owolabi ; Abdulsaraq Jimoh ; Abdulsamad Jimoh ; Fatina Aremu	Performance Comparative Evaluation of Metaheuristic Optimization Algorithms for Optimal Placement of Flexible Alternating Current Transmission System Device
492	Juan Felipe Chaves Santander ; Markus Duchon ; Hans-Peter Schwefel	New Method for Earth Fault Localization using the Hilbert Transform

16:15-18:15

Parallel Session D - IV: Robotics and Control Systems - 2
Chair: Jonqlan Lin

ID	Authors	Title
396	Amila Dubravic ; Damir Demirović ; Amira Serifovic-Trbalic	Optimization of PID Controller Using PSO Algorithm for a First Order Plus Dead Time (FOPDT) Process - A Simulation Study
734	Suphanut Plengkham	Development of an Automated Viral Plaque Assay Program and ELISpot Counting Program on 96-Well Plate Platform
782	Ashan E Kudabalage ; Supun G Dissanayaka ; Chaowalit Hamontree	Feed Rate Optimization For Five Axis Milling With An Iso-Scalloped Tool Path
876	Jonqlan Lin ; Zong-Hou Zhou	Design and Implementation of a Cable-Driven Dexterous Continuum Manipulators in Confined Space Usage
354	Mohammed Khudhair ; Muhammad Ragab; Kareem M. AboRas; Nabil H. Abbasy	A Newly Resilient Combination of $\sqrt{2}$ PID and PD Controllers to Boost the Frequency Response in a Two-Area Hybrid Power System with Nonlinearities Using Wild Horse Optimizer
128	Raymond Joseph R Meimban ; Cara Larize De Villa	Development of a Remote-Controlled Non-Nitrogen-Based IED Detecting Robot using an Electronic Nose System
980	Yitao Zhang ; Sheraz Baig ; Taleb Vahabzadeh ; Juri Jatskevich	Maximum Efficiency Volts-per-Hertz Control of Induction Motor Drives Considering Core Losses, Saturation, and Inverter Losses
657	moulahecene fateh	Angular Position Control of DC Gear-Motor Using PID Controllers for robotic Arm

END OF THE FIRST DAY

July 22nd, 2022

08:40-09:00

Keynote Speaker
Dr. Atilla MAGYAR
 (University of Pannonia, Veszprem, Hungary)
Direct Optimization in Electrical Energy Systems

09:00-11:00

Parallel Session A-V: Machine/Deep Learning - AI - 3
Chair: Jože Rožanec

ID	Authors	Title
76	Nancy Vázquez Morales ; Efrain Ibarra ; Ruben Guerrero ; Ricardo Chapa Garcia	Sack detection and counting using deep learning
89	RIO JAGARIN SILABAN ; Mudrik Alaydrus ; Umaisarah Umaisarah	Combination of Advanced Reservation and Resource Periodic Arrangement for RMSA in the Elastic Optical Network
99	Mohammad Shahzad ; Nacer Belkout ; Khaled Zeraoulia ; Lu Liu ; Bo Yuan	A Load Balancing and Routing Strategy in Fog Computing using Deep Reinforcement Learning
878	DIANNING HE ; Yi Chen ; Shouliang Qi ; Ting Liu	Automated plaque and stenosis characterization using attention-based deep learning network on coronary CT angiography images
307	Hafeez Khan M. A. ; Giri Prasad S ; Angel Arul Jothi J	Detection of Cavities from Oral Images using Convolutional Neural Networks
337	Hung-Chi Chu ; LI-LIEN Chang ; Hao-Chu Chiang	A Traffic Classification Method for Internet Application Services Based on DNN
422	Árpád László Makara ; László Csurgai-Horváth	Classification of Indoor Environment in Neural Network Controlled FR2-band Communication
477	Ali Berkol ; Nergis Pervan ; Talya Tümer ; Hamit Erdem	Lip Reading Multiclass Classification by Using Dilated CNN with Turkish Dataset
125	Falk Schmidsberger ; Richard Vogel ; Alexander Kühn ; Robert Manthey ; Matthias Baumgart ; Matthias Vodel ; Christian Roschke ; Marc Ritter	Data set for long term driving recording using immersive motion simulation in virtual racing – IMSRace
761	Methaq T Gaata ; Ethar Abdul Wahhab	Iris-based Authentication Model in Cloud Environment (IAMCE)

09:00-11:00

Parallel Session B-V: Power Electronics
Chair: Adel El-Shahat

ID	Authors	Title
82	Tom Wanjekeche ; Odunayo Imoru ; Andreas Ndapuka	Experimental Validation of A 9 – Level Cascaded Hybrid Inverter Using 4 Independently Modulated 3- Level Legs
170	Abolfazl Babaei ; Waldemar Ziomek ; Aniruddha Gole	A New Approach for the Failure Detection and the Self-healing Process in A Solar-based Tap Changing Transformer
1064	Mohammed F Allehyani ; Mohamed Abuagreb ; Brian Johnson	The Effect of Frequency Droop Damping on System Parameters and Battery Sizing During Load Change Condition
328	Chandika S Kiriella	A Low Cost Three Phase Induction Motor Drive for Single Phase Fed Industries
404	Zaid H Ali ; Dávid Raisz	PV-UPQC with MFA-SMC controller to Mitigate Power Quality Problems
529	Xuyang Zhao ; Hongwen He ; Ruchen Huang ; Jingwei Dou ; Yunlong Wang ; Chunchun Jia	A deep learning-based power battery capacity estimation model assisted with feature vector construction
537	Adil ALAHMAD ; FIRAT KAÇAR	Medium-Voltage (MV) Motor Drives Topologies and Applications
669	Jingwei Guo	An analytical Model of the Electric Field Distribution and Breakdown Voltage for a Stepped Compound Buried Layer SOI LDMOS

1015	CLAUDINILSON Alves LUCZKIEWICZ ; Edson Da Bortoni	Voltage and Frequency Control in Isolated Generation Using Binary Logic
975	Abolfazl Babaei ; Waldemar Ziomek ; Ani Gole	The Improvement of Power Quality in an ac-ac Direct Matrix Converter by Using Hybrid Filters

09:00-11:00

Parallel Session C - V: Renewable Energy - 1
Chair: Ahunim Abebe

ID	Authors	Title
66	Longyu Chen ; Xiaoru Wang	A Spatial-temporal Frequency Nadir Prediction Method Based on ConvLSTM with Attention
256	Kadhim Sabah Rahimah ; Issa Ahmed Abed	Design and Analysis of Proposed Photovoltaic system
710	David R Walwyn ; Anthony Stephens	Heat Pumps vs Hydrogen Boilers: Weighing Up the Options for the Decarbonisation of Heating in the United Kingdom
77	Naoufel Zitouni ; Rabiaa Gammoudi	Database for control a complex water treatment system powered by photovoltaic generator for deep learning
133	Paula Zenni Lodetti ; Edison Antonio Cardoso Aranha Neto ; Marcos Aurelio Izumida Martins ; Gabriel Henrique dos Santos Costa ; Mathias Arno Ludwig	MAE and RMSE Analysis of K-means Predictive Algorithm for Photovoltaic Generation
836	Haitham Hassan Ibrahim ; Juan Manuel ; Mohamed Atef El Saharty ; edit Walid Ghoneim	A Smart MPPT Algorithm with a Power Independent Tracking System
925	Cordula V Schmid ; Samuel Alpert	A review of roof integrated photovoltaics systems
75	Osamu Ide	Unusual Efficiency of the Resonance Transformer
198	Ahunim Abebe ; Fekadu Shewarga ; Belachew Bantyriga	Feasibility Study and Energy Management of a Hybrid Microgrid for Ethiopian Rural Community
261	Akara Kijkarncharoensin ; Supachate Innet	An unsupervised learning technique to classify the biomass thermal properties on the proximate analysis

09:00-11:00

Parallel Session D - V: IoT, Neural Networks and Human - Computer Interaction
Chair: Aqeel Ahmed

ID	Authors	Title
368	Aqeel Ahmed ; Christos Tjortjis	Machine Learning based IoT-BotNet Attack Detection Using Real-time Heterogeneous Data
576	Mahmoud Iskandarani	System Security Employing Odor Identification with Neural Networks
40	Justinas Jucevičius ; Povilas Mr Treigys ; Jolita Bernatavičienė ; Mantas Trakymas ; Ieva Naruševičiūtė ; Rūta Briedienė	Segmentation Mask Resampling for MRI Prostate Localization Improvement
41	Raymond Joseph R Meimban ; Katrina Angela Butihen	Development of Thermal and TrueColor Imaging for Temperature Monitoring using Infrared Thermography and Closed-Circuit Television Technology
95	Takayuki Hoshino ; Rentaro Yoshioka	A Software Design Method for Creation and Utilization of Experiential Knowledge
1009	Penelope DeFreitas ; Travon Antonio Sheoprashad	Investigating Indoor Navigational Experiences with a Mobile Augmented Reality Prototype versus the Conventional Method
305	Ahmed Iman Twabi ; Isaac Mwakabira ; Lawrence Byson	On the enhancement of collaboration & group support in DHIS2 program rule management
506	Hynek Boril ; Skyler Horn	GAN-Based Augmentation for Gender Classification from Speech Spectrograms
622	Arcadius Benawa ; Erma Lusia ; Alfensius Alwino ; Iwan Irawan ; Petrus Hepi Witono	The Contribution of Pancasila Education and Civic Education on Value Education for The Students During COVID 19 Pandemic in Digital Era

11:00-11:15

1st COFFEE BREAK

11:15-13:15

Parallel Session A-VI: Machine/Deep Learning - AI - 4

Chair: Ayman Diyab Alahmar

ID	Authors	Title
183	Khadeja Ali Hamamy Assiry ; Anandhavalli Muniasamy	Predicting Learning Styles Using Machine Learning Classifiers
185	Salma Abdulaziz Alquhtani ; Anandhavalli Muniasamy	Analytics in Support of E-Commerce Systems Using Machine Learning
923	Ziqi Huang	Prior Knowledge-Embedded Machine Learning-Driven Cutting Force Monitoring in Machinery Industry
262	Oussama Lamsellak ; Ahmad Benlghazi ; Abdelaziz Chetouani ; Abdelhamid Benali	Human body action recognition with machine learning for bionic applications: a Sensor Data Fusion Approach
331	Farshad Farahnakian ; Jukka Heikkonen ; Paavo Nevalainen	Abnormal Behavior Detection by Using Machine Learning-Based Approaches in the Marine Environment: A Literature Survey
358	Krish Patel ; Aakash Shanbhag	Exploring ML for predictive maintenance using imbalance correction techniques and SHAP
491	Peter I Mwangi ; Lawrence Nderu ; Leah Mutanu ; Dorcas Gicuku	Hybrid Ensemble Model for Handling Class Imbalance Problem in Big Data Analytics
1046	Jože Rožanec ; Elena Trajkova ; Melike Onat ; Nikolaos Sarantinoudis ; George Arampatzis ; Blaž Fortuna ; Dunja Mladenec	Machine-Learning-Based Soft Sensors for Energy Efficient Operation of Crude Distillation Units
527	Jarrod Grasley ; Ayman Diyab Alahmar	Systematic Mapping of Machine Learning-Based Malware Detection Studies
895	Manthos Kampourakis ; Ioannis Livieris	A decision support system for online predictive maintenance of distribution transformers

11:15-13:15

Parallel Session B-VI: Computer / Software Eng. and Power Electronics

Chair: Janina Elyse A Reyes

ID	Authors	Title
1026	Parastoo Sadat Hosseinian ; Seyyedmilad Ebrahimi ; Juri Jatskevich	Hybrid Parametric Average-Value/Detailed Modeling of Classic HVDC Systems
456	Khalid Mohammed Al-Fouzan ; Omar AlNahabi ; Abdulrhman AlSunaya ; Abdulaziz Alkuhayli ; Mohammed Alharbi	Modeling and Analysis of Multi-terminal DC Grid for Renewable Energy Integration
1047	Eduard A.-Z. Dzhendubaev ; Abrek-Zaur Dzhendubaev ; Yuri Kononov	Simulation of Autonomous Direct Current Electric Power System
1030	Taleb Vahabzadeh ; Sheraz Baig ; Seyyedmilad Ebrahimi ; Juri Jatskevich	Investigation of MIMO State Feedback Controller for Grid-Connected AC-DC Voltage Source Converters
142	Fedor Boendermaker ; Diëgo Zuidervliet ; Peter van Duijsen	A low cost implementation of a dual-stage interleaved bidirectional boost converter
281	Carlos O Flor Sánchez ; Edgar O. Reséndiz Flores	A New Gradient Approach Based on Reproducing Kernel Applied in Metaheuristic Optimization
102	Ahed Jabor Abugabah ; Atif Mehmood ; Ahmad Al Smadi	Smart Health Care System for Early Detection of COVID-19 Using X-ray Scans
1062	Vignesh Sampath ; Iñaki Murtua ; Juan José Aguilar Martín ; Ander Iriondo ; Iker Lluvía ; Andoni Rivera	Vision Transformer based knowledge distillation for fasteners defect detection
406	Samba Sidibe	A New Spectral Intrinsic Decomposition based Image Inpainting Method
772	Lee Eunkyoo	Study on the development of a ship-handling simulation system based on actual maritime traffic conditions

11:15-13:15

Parallel Session C - VI: Renewable Energy - 2

Chair: Salwan O. Khafaji

ID	Authors	Title
285	Adham M. Elmalky ; Mohamad Araji	Optimization of Cooled Building-Integrated Photovoltaics Using Powell's Conjugate Direction Method in Canada
509	Ruan Esterhuizen ; Martial Giraneza ; Khaled M Abo-Al-Ez	An Approach to Voltage Quality Enhancement in Wind Energy Conversion Systems
105	Beatriz B Cardoso ; Ivangelo Vicente ; Jessica C. de Bona ; Marcos Aurelio Izumida Martins ; Rodrigo B. dos Santos	Microgrid in an Isolated System - Ilha das Cobras Case Study
824	Miroslava Smitkova	Hydrogen Economy - Brief Sumarization of Hydrogen Economy
793	Sihyeon Yoon ; Gahyeon Yoon	Optimal Capacity Planning in Renewable Energy Transition Considering Climate Change with a California Case Study
954	Sören Graupner ; Thomas Bruckner	Effects of accelerated coal phase-out and enhanced renewables on redispatch and carbon distribution
1004	Salwan O. Khafaji ; Ekhlas Ekhlas Ayuz ; Dhirgham Al Khafaji	Experimental Study for Three and Six Buckets of Sim- Savonius
69	Jalila DAOUDI ; Abdelghani Aramja ; El Hassan Achouyab	Thermal analysis of a tubular receiver of a fixed spherical solar collector
749	Davut Solyali ; Magd Dhamran	Design of Concentrated Solar Power Linear Fresnel Reflector plant with Molten Salt Thermal Energy Storage
819	Weeranut Intagun	Influence of the blended ratio of rice straw and bagasse on slagging characteristics

11:15-13:15

Parallel Session D - VI: Big Data, IoT and Neural Networks

Chair: Obumneme Umeonwuka

ID	Authors	Title
110	Fadi Fataftah ; Basseyy Isong	Security Issues and Possible Solutions in Cloud Computing and Big Data: A Review
152	Huber Nieto-Chaupis	The Double-slit experiment and Feynman Amplitudes to Interpret the Rise of Omicron at the Covid-19 Pandemic at 2022
1082	Chih-Wei Lin; Chi-Pei Ou Yang; Chia-Hsuan Huang ; Pwi-Chi Wu	Analyze the Behavioral Process of Consumers Choosing Cultural and Creative Hotels
149	Huber Nieto-Chaupis	Evidence of Shannon Entropy Diffusion Along Central Europe at the Covid-19 Pandemic
610	Nina M Figueira ; Pablo G Pochmann ; Abel Peters ; Edson Freitas	A Proposal of C4ISR Application on the Swarm Drones Context in a Low Infrastructure Scenario
174	Nurul Fahmi NF Fahmi	An Implementation Environmental Monitoring Real-time IoT Technology
150	Huber Nieto-Chaupis	Targeting the SARS-CoV-2 Spike Protein with the Usage of an Internet of Viral and Bacterial Things
1021	Abdallah Abdallah ; Flavio Vieira ; Kleber ; Zheng Zeng ; William Hemminger ; Marcos de Abreu	Computationally-Efficient Secured IoT Networks: Devices Fingerprinting using Low Cost Machine Learning Techniques
839	Obumneme Umeonwuka ; Babatunde Adejumobi; Thokozani Shongwe	Deep Learning Algorithms for RF Energy Harvesting Cognitive IoT Devices: Applications, Challenges and Opportunities

13:15-13:45

LUNCH

13:45-15:45

Parallel Session A-VII: Machine/Deep Learning - AI - 5
Chair: Azfar Adib

ID	Authors	Title
760	Fatemeh Rezapoor Nikroo ; Manar Amayri ; Nizar Bouguila	Recursive Parameter Estimation of Beta-Liouville Hidden Markov Models
986	Ramon G Durães ; Turibio Salis ; Frederico Coelho ; Antônio Braga	Explainability Analysis of a Machine Learning Model for Industrial Applications
116	Azfar Adib ; Prof. Wei-Ping Zhu ; M. Omair O Ahmad	Age Classification Based on ECG QRS Wave Using Deep Learning
39	Kelvin Palhares Bastos Sathler	The Use of Machine Learning and Performance Concept to Monitor and Predict Wind Power Output
320	EL FILALI aicha ; El Habib Benlahmar ; El filali sanaa ; Jadli aissam	Application of Deep Learning in the Supply Chain Management: A comparison of forecasting demand for electrical products using different ANN methods
907	Daowei Zhang ; Qiujie Wang ; Ziling Wei ; Shuhui Chen	An Operating System Identification Method Based on Active Learning
132	David O Oriedi ; George W Musumba ; Morris Kaburu ; James Iraya ; David Gichohi ; Sammy Kamundi	Social Network Influence: Making the Case for Semantic Analysis
470	Dorcas Gicuku ; Peter I Mwangi ; Lawrence Nderu ; Tobias Mwalili	An Ensemble Model Based on Deep Sematic Segmentation Network and Graph Convolutional Network for Cloud Detection
896	Spyros Fourakis ; Ioannis E. Livieris ; Giorgos Fiotakis ; Manthos Kampourakis ; Ioannis Livieris ; Stefanos Kokkorikos ; Nikos Kyriakoulis ; Apostolos Chondronasios	A semi-supervised approach for electricity theft monitoring: A use case in Cyprus

13:45-15:45

Parallel Session B-VII: Mechatronics, Electric Vehicles, Robotics
Chair: Debjani Goswami

ID	Authors	Title
746	Debjani Goswami	Design Of High-Performance Three-Phase Switched Reluctance Motor For Electric Vehicle Application
833	Ha Duong Ngo	A Novel Piezoresistive Microphone Mems Sensor For Aerospace Applications
922	Enzo F Romero ; Dante Elias	Design of a haptic palmar-finger feedback system for upper limb myoelectric prosthesis model PUCP-Hand
740	Behrouz Kharabian ; Hossein Mirinejad	Fuzzy Feedback Control of Chaotic Systems via Lyapunov Exponents Placement
728	Alexandra-Bianca Borlea ; Timotei Lala ; Mircea-Bogdan Radac	A hierarchical learning approach for generalized trajectory tracking validated on a magnetic bearing system
898	Plamen Raykov ; Nina Valchkova ; Roman Zahariev	Analytical Coordinate Transformation for Manipulation when Using Robots to Serve People with Disabilities
937	Kaushik Khatua	Low Power State Assignment of Sequential Circuits based on Binary Particle Swarm Optimization and Flip-Flop Selection
134	Naleli J Matjelo ; Sekhants'o Lara ; Mopeli Fabiane ; Makhamisa Senekane ; Mosito Lekhooana	A Differential And Autoregressive Formulation Of A Linear Regression Model For Fitting Spectroscopic Sinc Function Data
978	Ebru Gezgin Sariguzel ; Barış Öz ; Gözde Şimşek ; Sultan Sancar ; Metin Öztürk	Optimization of Waiting Times Between Stations in Unbalanced Production Lines
748	Alexey Zalozhnev	Intelligent System and Human-Computer Interaction for Personal Data Cyber Security in Medicaid Enterprises

13:45-15:45

Parallel Session C - VII: Renewable Energy - 3

Chair: Claudia Borzea

ID	Authors	Title
1069	Syed Asad Abbas Rizvi ; Xin Ai	Congestion Mitigation Service through Flexible Rescheduling of Virtual Power Plant
250	Hannieneth L. Cortez ; John Clen Broma ; Glenn Magwili	Optimal Placement and Sizing of Hybrid Solar-Wind Distributed Generation in Distribution Network using Particle Swarm Optimization Algorithm
44	Sarala Prafulla Adhau ; Ravindra M. Moharil ; Vijaya Sanjay Rajguru ; Mrunmayee Gujar	Study and Analysis of Solar Photo Voltaic Modules with Real Time Experimentation on Solar Simulator/ Solar Emulator
791	Meshari Alshammari	Hydroelectric Energy: Challenges, Solutions and Future Trends
146	Eusébio Z:E. Conceição ; João Gomes ; M ^a Ines Conceição ; M ^a Manuela Lúcio ; Hazim Awbi	Numerical Simulation of the Application of Renewable Energies Methodologies in 3D Auditorium Geometry for Summer Conditions
73	Amir A. Imam ; Jamiu Oladigbolu ; Mustafa Seedahmed	The Effect of Solar Photovoltaic Technologies Cost Drop on the Economic Viability of Residential Grid-Tied Solar Systems in Saudi Arabia
754	Ali Altowati ; Sreejitha Sasikumar ; Reem Almansoori	Modeling and Operation Analysis of Grid-Connected Microgrid
178	Darshni Maneesh Shukla	Control and operation of multifunctional NPC inverter for Grid-connected solar PV
707	ilham ihoume ; Rachid Tadili ; Nora Arbaoui	A comparative experimental study of orange drying in an indirect and greenhouse solar dryers

13:45-15:45

Parallel Session D - VII: MIXED - 1

Chair: Doris Esenarro

ID	Authors	Title
103	Jongmin Lee ; Jongseong Kim	A novel method to create 3D models from conventional 2D drawings for efficient training in shipbuilding.
221	Emad Kareem Mutar	New properties of the equivalent reliability polynomial through the geometric representation
535	Armend Salihu ; Halil Snopçe ; Jaumin Ajdari ; Artan Luma	Generalization of Dodgson's condensation method for calculating determinant of rectangular matrices
745	Tao yu Li ; Zhenkun Huang	Stabilizing Hybrid Systems on Time Scale: A Switching and Impulsive Control Strategy
551	Fernando Ibarra	Digital panels in the development of graphomotor skills in children from 3 to 5 years old. Ambato - Ecuador
195	Mahamadou Issoufou Tiado ; Boukar Abatchia Nicolas ; Nassirou Adamou Hassane ; Mabrouk Toudou Mahaman	Using multiple models to monitor the Service Guarantee in the New Generation of Digital Open Universities (NG-DOU)
928	Emir A. Vela ; Luis Esteban Centeno Untiveros ; Steve A. Surichaqui ; Mijail Jaén Mendoza Flores ; David Huemura	A Wearable Haptic Device Capable of Performing Stretch Stimuli for Navigation
512	Alireza Famili ; Angelos Stavrou	Eternal Flying: Optimal Placement of Wireless Chargers for Nonstop Drone Flights
1013	Christie Nelson ; John Betak ; Mike White ; Brian Petrus ; Matthew Dembeck ; Gagan Kattula ; Andy Lau ; Priyanka Choudhury	Grade Crossing Incidents: A Probability Analysis
864	Paloch Vasudhara ; Wasanchai Vongsantivanich ; Pitch Jantawichayasuit ; Supatcha Chaimatanan	Initial Orbit Determination for Space Situational Awareness System using Triangulation Method
524	Doris Esenarro	Use of Solar Energy in the design of the interpretive trail of the Antankallo waterfall in the district of Matucana, Peru 2022

15:45-16:00

2nd COFFEE BREAK

16:00-19:00

Parallel Session A-VIII: Machine/Deep Learning - AI - 6

Chair: Madhurananda Pahar

ID	Authors	Title
151	Huber Nieto-Chaupis	Combined Monte Carlo and Machine Learning Algorithms to Predict Horizontal Expansion of Lima City
288	Little Flower X ; Poonguzhali S	KNN Based GA for Performance Improvement in Neck Movement Classification of EMG signal
777	Phong Pham-Dinh ; Hieu Nguyen-Duy ; Linh Mai-Van	A Hybrid Linguistic Time Series Forecasting Model combined with Particle Swarm Optimization
488	Madhurananda Pahar ; Marisa Klopper ; Byron Reeve ; Rob Warren ; Grant Theron ; Andreas Diacon ; Thomas Niesler	Automatic Tuberculosis and COVID-19 cough classification using deep learning
1059	Abdus Sattar ; Rohena Begum Mim ; Afra Bente Islam ; Sudipta Roy	Breast Cancer Detection using Machine Learning Approach
447	Subrata Bhattacharjee ; Yeong-Byn Hwang ; Hee-Cheol Kim ; Heung-Kook Choi ; Dongmn Kim ; Nam-Hoon Cho	Invasive Region Segmentation using Pre-trained UNet and Prognosis Analysis of Breast Cancer based on Tumor-Stroma Ratio
383	Abdul Manazir ; Dr. Khalid Raza	pCGP: A Parallel Implementation of Cartesian Genetic Programming for Combinatorial Circuit Design and Time-Series Prediction
699	Ezra Fielding ; Clement Nyirenda ; Mattia Vaccari	The Classification of Optical Galaxy Morphology Using Unsupervised Learning Techniques
334	Xilian Yang ; Yuzhang Wang ; Qunfei Zhao ; Kanru Cheng	Self-supervised spatial-temporal prediction of multi-source sensor data for power systems
130	Mapulane Makhaba , Simon Winberg	Wildfire Path Prediction Spread using Machine Learning
904	Romano Lottering; Kabir Peerbhay; Austin Sharky	Detecting and Mapping Snow Induced Damage to Commercial Forest Plantations Using Sparse Partial Least Squares – Discriminant Analysis
60	Nikhil Singh	Facial Micro-Expression Recognition (FMER) using Model Compression
235	Sunday Ajagbe ; Olukayode Oki, Matthew OLADIPUPO	Investigating the Efficiency of Deep Learning Models in Bioinspired Object Detection
417	Brice Ekome ; Martial Giraneza; Khaled Abo-Al-Ez	SM-PSHP versus DFIM-PSHP For Stability Improvement Of Wind Integrated Power Systems

16:00-19:00

Parallel Session B-VIII: MIXED - 4

Chair: Eduard Dzhendubaev

ID	Authors	Title
489	Samith Chowdhury ; Hessam Keshkar Vanashi ; Farideh Doost Mohammadi	Microgrid Peak Shaving Implementation using Vehicle-to-Grid System
935	Rakshitha C M	A Review on Layered Architecture and Application domains of Blockchain Technology
84	Noria Foukia; Swann Puig	CleverTrash: An ML-based IoT system for waste sorting with continuous learning cycle
522	Doris Esenarro	Use of digital technology in the architectural design process of a multi-family house in Independencia-Lima-Perú 2021
1053	Romano Lottering ; Kabir Peerbhay	Mapping wattle rust induced defoliation within South Africa's wattle commercial forest plantations over two seasons
881	Olga Pyrkina	Development of Security Criteria for Complex Systems of Electronic Money Turnover with the Help of Graph Analytics Tools
834	Mohammed B. M. Kamel ; Peter Ligeti; Christoph Reich	SDABE: Efficient Encryption in Decentralized CP-ABE using Secret Sharing
1073	Anna Diachenko ; Yuri Kononov	The Reactive Corona Effect Investigation Based on PMU Measurements in a Real 500 kV TL
831	Thierry Jossou ; Zakaria Tahori; Godwin Houdji; Ali Lasfar; Métowanou Héribert Ahouandjinou; Aziz Et-Tahir	Best parameters selection for full pregnancy's uterine contractions characterization
135	Naleli Matjelo ; Sekhonyana Moeti; Molise Mokhomolo; Thabo Koetje; Ncamiso Khanyile	Narrow Linewidth RLC Resonator Design Using Positive Feedback Loop

679	Juan Lata ; Natali Astudillo	Energy control and size optimization of a small-scale hybrid renewable energy system with combination of storage systems
63	Snehlata Yadav	Impact of temperature on negative capacitance based Junctionless Accumulation Mode Ferroelectric FET(JAM-FE-FET)
964	Cristian G. Colombo ; Michela Longo; Dario Zaninelli; Fabio Borghetti; Claudio Somaschini; Renato Mazzoncini	Innovative Freight Transport: Case Study on New Technologies Reliability

16:00-19:00

Parallel Session C - VIII: MIXED - 3
Chair: Zlata Jelacic

ID	Authors	Title
188	Mohammed Tahri Sqalli ; Dena Al-Thani	An Application of Ford Fulkerson's Network Flow Algorithm on Education City
774	Isao Nakajima ; Yoshiya Muraki ; Hiroko Ichimura ; Seiji Morita ; Yoshihide Nakagawa	Value and challenges of using the Savitzky-Golay method for ECG noise reduction
335	Zlata Jelacic	Application of Additive Manufacturing in the Development of the Above-knee Prosthetic Device
141	Cheikh Yatma Diop	On the issue of analysis and correction of distortions of the Earth's field in the rooms of hospitals based on 3D computational models
879	Muhammad Usman ; Daud Mustafa Minhas ; Georg Frey	Energy optimization of a residential building using model predictive control - A case study in temperate oceanic climate
1055	Charles Grant ; Adel El-Shahat ; Zain Mirza	Temperature Alteration Using PID Controller for Energy Harvesting for E-Aeroplan Application (Case Study Experimental Investigation)
1065	Adel El-Shahat ; Jason Yu-Chen Qian ; Gozdem Kilaz	Challenges and Solutions Samples to Improve the Utilization of Electric Ships (Brief-State-of-The-Art)
1067	Larry Allen ; Brandon Beckum ; Mathew Taylor ; Jason Yu-Chen Qian ; Adel El-Shahat	Modern Flexible Alternating Current Transmission System Controllers
1076	Adel El-Shahat ; Jason Yu-Chen Qian ; Gozdem Kilaz	In brief Recent Background, Challenges, and Strategies for Electrified Aircraft Development
70	Svetsky Stefan ; Moravcik Oliver ; Dariusz Mikulowski	Some Aspects of Designing All-In-One Personal Software Support for Human-Centered Computing
591	Ali Rezaei Abadchi	Designing a Model for Prioritization of Strategies Using Combined Fuzzy AHP and Fuzzy TOPSIS
112	Takahisa Ueno ; Konosuke Takada	Aerosol Sterilization by Impulse High Voltage with Different Electrode Structures
578	Mir Gholamreza Mortazavi; Mirsaeid Hosseini Shirvani ; Arash Dana	A Discrete Cuckoo Search Algorithm for Reliability-aware Energy-efficient IoT Applications Multi-service Deployment in Fog Environment
237	Yiwen Timothy Zeng; Sivanand Somasundaram; Wai Kiat Lee; Anqi Zhou ; N. Z. XU	Thermal Design and Parametric Optimization of A Naturally Cooled GaN Based Microinverter Packaging Using CFD Simulations

16:00-19:00

Parallel Session D - VIII: MIXED - 2
Chair: Roelien Goede

ID	Authors	Title
148	Huber Nieto-Chaupis	Theory and Simulation of Electromagnetic Systems Governed by Machine Learning Principles
468	Ravi Sharma ; Balázs Villányi	The fundamentals and strategies of maintenance, repair, and overhaul (MRO) in Industry 4.0
80	Janina Elyse A Reyes ; Jolly Ann Villaflores	Web Usability Design Study of Orion Givers a Charity Drive Application for Indigenous Tribes of the Philippines
319	Adel Khelifi ; Ayman Ebraheim ; Musabbeh Saeed ; Hamad Saif ; Fatima Salem ; Hurma ehtesham	An Automobile Smart Services System
842	manlio miguel massiris fernandez ; Claudio Delrieux ; J. Álvaro Fernández	Automated Personnel Digital Twinning in Industrial Workplaces
882	Nelendran N Pillay ; Themba Sivate ; Kevin Moorgas ; Navin Singh	Autonomous Classification and Spatial Location of Objects from Stereoscopic Image Sequences for the Visually Impaired.
327	KT Nshimba ; Roelien Goede	An Architecture Approach to a Secure Home Area Network
938	Bharatesh Chakravarthi ; Prabhu Prasad B M ; Chethana B ; Pavan Kumar B N	Real-time Human Motion Tracking and Reconstruction using IMU Sensors

314	Alain Kabo Mbiada ; Basseyy Isong ; Francis Lugayizi ; Adnan Abu-Mahfouz	Introductory Computer Programming Teaching and Learning Approaches: review
291	Andreea Voina ; Attila Tókos ; Monica Jipa ; Gabriela Circiumaru ; Csaba Bartha ; Alina Caramitu ; D Micu ; Iosif Lingvay	Contributions to energy saving in wastewater treatment plants
673	Phoka Rathebe	Characterization of Radiofrequency Electromagnetic Fields in Two Unoccupied Residential Buildings Proximal to the Network Base-Station
1007	Mounir Belattar	Analysis of Non-Orthogonal Multiple Access Technique Performance Using Nakagami-m Fading Distribution
61	Ahmed Sameer Hatem; Jameel Abed	Design of Patient Health Monitoring Using ESP8266 and Adafruit IO Dashboard
579	Mirsaeid Hosseini Shirvani ; Sara Babaeikiadehi	A Hybrid Meta-heuristic-based Linear Regression Algorithm for Live Virtual Machine Migration in Cloud Datacenters
13	Elegbeleye Femi ; Mbodila Munienge; Anele Mabovana; Esan Omobayo	Data Privacy on using Four Models- A Review
681	Juan Carlos Lata ; Hugo Moyano ; Marlon Poveda)	Technical– economic evaluation of the implementation of a photovoltaic/biomass/energy storage hybrid energy system for isolated areas of the Cerecita community

19:00-19:15

CLOSING