

CONFERENCE PROGRAM

(Online Part)

November 5 th , 2024			
Time	HALL-A	HALL-B	HALL-C
09:00-09:30	Opening Speech <i>Mahendra Gooroochurn</i> ICECCME 2024 Conference Chair		
	Keynote Speech <i>Prof.Dr. Ovidiu STAN</i> (Technical University of Cluj-Napoca, ROMANIA) Title: Method to Increase Dependability in a Cloud-Fog-Edge Environment		
09:30-11:45	Session A-I: Artificial Intelligence - I	Session B-I: Control & Robotics	Session C-I: IoT & Deep Learning
11:45-12:00	COFFEE BREAK		
12:00-14:00	Session A-II: Artificial Intelligence - II	Session B-II: Control & Energy	Session C-II: IoT & Math. Modelling
14:00-14:30	LUNCH		
14:30-16:45	Session A-III: Big Data & Data Science	Session B-III: Comm. & Cybersec.	Session C-III: Mixed - I
16:45-17:00	COFFEE BREAK		
17:00-19:00	Session A-IV: Machine Learning	Session B-IV: Comp. Vision & Power El.	Session C-IV: Mixed - II

Opening Speech
Mahendra Gooroochurn
 ICECCME 2024 Conference Chair

09:00-09:30

Keynote Speech
Prof.Dr. Ovidiu STAN
 (Technical University of Cluj-Napoca, ROMANIA)
Title: Method to Increase Dependability in a Cloud-Fog-Edge Environment

09:30-11:45

Parallel Session A-I: Artificial Intelligence - I
 Chair: Shashishekhar Ramagundam

ID	Authors	Title
523	Marcello Polenghi , Riccardo Zich, Emanuele Ogliari, Roberto Caldelli, Claudio Loconsole, Piergiorgio Carotta	Statistical Approach to Agglomerative Hierarchical Clustering on Large Datasets: A Case Study of Energy Community in Italy
547	David Timmermann , Claudius Kocher, Georg Heppner, Tristan Schnell, Rüdiger Dillmann	Multi Classification Pareto Optimal Disassembly Planning
556	Mattia Braggio , Matteo Lo Russo	A bibliometric analysis on Artificial Intelligence in the energy forecasting
581	Rifat Al Mamun Rudro, Md. Faruk Abdullah Al Sohan , Afroza Nahar, Syma Kamal Chaity	Sustainability in E-Commerce: AI and Augmented Reality Can Facilitate E-Shopping Journey
43	Ahmed Shareef , Ruben Picek	Enhancing Business Insights: AI Based Chat Toolset for ERP Systems
70	Laurie Butgereit , Mahendra Gooroochurn, Yannick Bosquet	Dispensing Climate Change Information in Mother Tongue using a GPT-4 Based a ChatBot: a Case with Mauritian Creole
91	Christopher Menart , Michael Raymer	Partially Supervised Multi-Semantic-Stage Neural Networks
117	Matthew Saad , Zakariya Qawaqneh	Closed Domain Question-Answering Techniques in an Institutional Chatbot
145	Faaiz Joad , Rachad Atat, Hayat Mbayed, Abdulrahman Takiddin	Recurrent Graph Neural Network-Based Identification of Replay Attacks in Power Networks
202	Shashishekhar Ramagundam , Niharika Karne	A Survey of Generative AI: A Game Changer for Free Streaming Services and Ad Personalization with Current Techniques, Identifying Research Gaps and Addressing Challenges

09:30-11:45

Parallel Session B-I: Control & Robotics

Chair: Carla Viveiros

ID	Authors	Title
25	Gentiga Muhammad Zairin, Hera Khairunnisa, Rochma Sudiati, Arina Luthfiana, Anisa Yuniawati, Bella Natasha Yogasuria	SIJAK (Tax Simulation): Application For More Tax-Conscious Generation
161	Verica Radaisavljevic-Gajic , Faris Omar Mohmoud Safieh	Discrete-Time Optimal Quadratic Performance Loss of a Linear Controller Driven by a Sylvester Equation Designed Reduced-Order Observer
411	Jorge E Cote-Ballesteros , Jhon Edisson Rodriguez- Castellanos, David Camilo Bulla Avila, Andres Felipe Espinosa Silva, Luis Efrén Barrero Páez	Mechatronic Power Control Design for PT6 Engine Test Stand
548	Erwin T. Hegedus , Marcian D. Mihai, Ghada Ben Othman, Dana Copot, Isabela R. Birs, Cristina I. Muresan	Comparative analysis for the maintenance phase of depth of anesthesia: decentralized or decoupled?
226	Annika Kienzlen , Alexander Verl	Methods for Localization in Multi-Scale Material Flow Simulation for Virtual Commissioning
171	Philip Keller , Genesis Perez Rivera, Tristan Schnell, Rüdiger Dillmann	Online Vision-Based 3D Reconstruction for Shared Human-Robot Workspaces
122	Putri Haryani , Ayatulloh Michael Musyaffi, Hera Khairunnisa, S.E., M.Ak, Ellis Annisa, Rochma Sudiati, Hilmun Azzahra	Gamification of Enterprise Resource Planning in Education: A Bibliometric Analysis
215	Ezequiel França dos Santos	Experimental Shake Gesture Detection API for Apple Watch
449	S. Al Qallaf, R. Nour Eldine, J. Al Meer, B. Al Tayyar, S. Esmaili , A. Alateyah	CyberShell: Meeting the Need for Both Fashion and Smart Functionality Using Electronic Wearables

09:30-11:45

Parallel Session C - I: IoT & Deep Learning

Chair: Dev Desai

ID	Authors	Title
345	Christos Iraklis , Sarika Vaibhav Patil, Ahmed Hesham Balawi, Thomas Altmann	A three-layer approach for lithium-ion battery state of charge estimation and prediction using deep neural networks: a practical implementation
90	Stefan Andreas Böhm , Martin Neumayer, Fabian Riß, Alois Christian Knoll	Graph Regression in CAD Data: A Graph Neural Network Architecture for Manufacturing Time Estimation
164	Mira Hesse , Marc Roswag, Tessa T. Taefi	Bat Call Classification in Acoustic Recordings with Drone Noise Using Deep Learning
237	Stefan Andreas Böhm , Martin Neumayer, Rui Song, Fabian Riß, Alois Christian Knoll	Node Classification in CAD Data: A Graph Learning Approach for Machining Feature Localization
472	Parisa Danesh , Ehsan Amini, Huseyin Kusetogullari	Efficient CNN-based Object ID Association Model for Multiple Object Tracking
535	Dev Desai , Riya Gupta, Shweta Shah	An Effective Wireless Communication Architecture using Ultra Lightweight Automatic Modulation Classification Model over Cortex M4 based Edge Device
254	Madhurananda Pahar , Qian Liu	NanoCNN: a CNN-based tool to detect RNA m6A methylations using Oxford Nanopore sequencing
409	Priyadarshini Pattanaik , Lawrence Ibeh, Nguyen Manh Cuong	Identification and Classification of Types of Malarial Parasites Using Customized CNN Model
242	Thibault Carron , Gregory Houzet, Stephane Talbot, David Wayntal, David Telisson	Ecological Transition via IoT Approach in Training Process
544	Carlos Calderon-Cordova , Nilder Calderon, Roger Sarango	Automatic localization system applied to Urban Solid Waste collection vehicles

11:45-12:00

COFFEE BREAK

12:00-14:00

Parallel Session A-II: Artificial Intelligence - II

Chair: Marco Mosca

ID	Authors	Title
294	Tarek Aref	Predicting Stroke Risk Using SMOTE and ROS Machine Learning Techniques
353	Mfanasibili Ngwenya	Credit Scoring in Africa: Employing Logistic Regression on Alternative Data
483	Chenwei Sun , Jivka Ovtcharova	Enhancing Robot Arm Trajectory Tracking through Reinforcement Learning based Compensation
484	Shakthi S , Pratibha Srivastava, Ravi Kumar L, Sg Prasad	Automated Test Case Generation For Satellite FRD Using NLP And Large Language Model
503	Bogdan-Sorin Ilies, Camelia-Florina Andor	Music Recommendation Based on Literary Preferences in Artificial Intelligence
519	Salma Ait Oussous , Dauris Madama Lail, Aouatif Amine, Rachid El Bouayadi	Enhanced Predictive Modeling of Greenhouse Temperature Using Power Long Short Term Memory (PLSTM) model
506	Achouche Sabrina, Bouzayane Sarra , Msheik Khawla	Visual-HAR: A Real-Time Human Activity Recognition Model Based on Visual Sensors
565	Marco Mosca , Roberto Mosca, Matteo Lo Russo	Optimizing Industrial Energy Management: advanced simulators integrated with AI/ML
150	Hsin Yu Lin, Jenn-Jier James Lien, Ya-Ning Chang	Machine Learning in Sports Analytics: Volleyball Match Outcome Prediction

12:00-14:00

Parallel Session B-II: Control & Energy

Chair: Jack Mathebula

ID	Authors	Title
101	Rui Zhong , Chung Ket Thein, Jiali Yan, John Xu, Dunant Halim	Structural Modification Towards Higher Magnetic Flux Density in Radial Rotational Energy Harvester
440	Marius Van Wyk , Gideon Van Der Kolf	Case study of a crudely implemented tandem geyser system with timer control to store excess PV energy
73	Dušan Strušnik, Jurij Avsec	Artificial Intelligence for Predicting District Heating Load from Different Sources Based on Environmental Temperature
419	Muhammad Sohail Munir, Usama Shahid, Usama Nasir, Muhammad Zulkifl Hasan, Muhammad Zunnurain Hussain, Hoor Fatima , Muhammad Atif Yaqub	Machine Learning in Renewable Energy Systems
434	Angela Lopez, Mohamad Nassereddine	Advanced MATLAB Algorithm to Reduce the Impact of EVs on the Distribution Network
469	Jack Mathebula , Nhlanhla Mbuli	Potential Factors for HVDC Evaluation in Selection of the Suitable Location within HVAC System
438	Gonçalo Coelho, Filipe Barata, Luís Elvas, Carla Viveiros	Protection Against Direct Atmospheric Discharges and Overvoltages in Photovoltaic Installations
273	Gabriel Fonseca Oliveira Roma , Geremi Gilson Dranka, Angela Paula Ferreira	Computer Modeling for High-RES Systems: Exploring the Applicability of EnergyPLAN
231	Anne-Laure Perrier, Gregory Houzet, Jonathan Outin, Edouard Rochefeuille , Benoit Stutz, Thierry Lacrevez	Characterization of Corrosive Lithium-Bromide/Water Solutions up to 6 GHz Using a Low Cost SMA Connector
127	Filip Poposki , Darko Babunski, Emil Zaev, Radmila Koleva, Mitko Bogdanoski	Exploring the Synergy of Physics-Based and IT Security Measures in ICS
135	William K. Akuffo , O.P. Odekunle, Stephen K. Armah	Transient Response Enhancement in Time-Delayed Teleoperated Systems via Gain Correction

12:00-14:00

Parallel Session C - II: IoT & Math. Modelling

Chair: S. Shakthi

ID	Authors	Title
220	Yoshit Santosh Tapar, Varad Mahavir Vasagade	Data Analysis To Diagnose I to P Converter Performance
539	Carlos Calderon-Cordova , Javier Chavarrea, Ramiro Ramirez-Coronel, Roger Sarango	Technological architecture and testing methodology for an IoT system based on a mobile App for remote monitoring and control of AC Motors
115	Salem Haggag, Khaled Ali	Magnetic Levitation of Permanent Magnet Spheres: Modeling and Simulation
210	Ruiz-Martinez , O.F., Lopez-Cruz, J.M.	Lyapunov Stability Analysis for a Boost Converter with Coupled PV Panel
427	Juan Carlos Muyulema-Allaica , Diliانا Betzabeth Tapias-Molina	Agent-based modeling for the estimation of organizational sustainability indicators in agri-food SMEs
406	Nguyen Thanh Quang	Simulation front crash of SUV car
457	Ngo Quang Tao , Nguyen Thanh Quang	Influence of kinematic parameters on fuel consumption in cars
116	Naouel Talbi , Ismahane Souici, Ahmed Alioua	A Tabu Search and Genetic Algorithm for traffic light scheduling
354	Nehmedo Alamir , Salah Kamel, Sobhy M. Abdelkader, Francisco Jurado	Probabilistic Energy Management of Multi-Microgrid Considering Demand Response and Energy Storage System
499	Grace Ruzive , Karen Garner, Chantelle Van Staden	Optimising Hybrid Energy Solutions for Hydrogen Production in South Africa

14:00-14:30

LUNCH

14:30-16:45

Parallel Session A-III: Big Data & Data Science

Chair: Protik Bose Pranto

ID	Authors	Title
396	Vrushank Mahesh Arur , Aakash Dhananjay Shanbhag	Indian Premier League Cricket Match Winner Predictor 2025 : A Sports Analytics Study
102	Max Schlosser , Michael Walther, Robert Manthey, Richard Vogel, Matthias Baumgart, Christian Roschke, Marc Ritter, Matthias Vodel	Unifying the Data Highway: A Harmonized Telemetry Format for Driver Analytics
175	Mila Lekoska, Ivana Sedmakova, Andreja Naumoski	Population analyse of Children's clothing/toys stores in City of Skopje
453	Emina Salkanović , Dželila Mehanović, Amela Vatreš Mudžet, Dino Kečo	Unsupervised Sentiment Analysis of the “Dune: Part Two” Trailer Comments
489	Christian , Inaya Nabila Putri, Putri Maharani, Yulia Ery Kurniawati, Rhisa Adika Putri	Application of Data Mining to Predict Student Learning Outcomes in Padang Panjang
578	Ietezaz Ul Hassan , Krishna Panduru, Joseph Walsh	Design of a Hybrid Data Structure for Automatic Door Visualisation
445	Tim Maurice Julitz , Nadine Schlüter, Manuel Löwer	Data-Driven Agile Risk Management for Mechatronic Systems via Markov Analysis of Failure Scenarios
514	Baby Boy Benjamin D. Nebres , Lany L. Maceda, Jo-Ann M. Cordovilla, Reina O. Habalo, Anacito E. Dematera	Design and Validation of Survey Instruments Using Mixed-Methods and Data Mining
491	Edward Matthew Dominica, Feylin Wijaya, Andrew Giovanni Winoto , Christian	Identifying Factors that Affects Entrepreneurs to Use Data Mining for Analytics
528	Telma Garção , Joana Sousa, Luis André, João Ferreira	BEE-YOND BUZZ: EXPLORING DEEP LEARNING TECHNIQUES FOR BEEHIVE AUDIO CLASSIFICATION
18	Nina Helander , Anik Bal, Krishna Venkitachalam	Collaborative Strategies for Sustainable Smart City Development

14:30-16:45

Parallel Session B-III: Comm. & Cybersecurity

Chair: Omar Khasro Akram

ID	Authors	Title
15	Per J. Nesse , Anne Jørgensen Nordli	Connected forestry - Proposed method for impact assessment of 5G/IoT enabled solutions
22	Nofriska Krissanya , Dewi Agustin Pratama Sari, Meta Bara Berutu, Maulana Amirul Adha, Titis Fatarina Mahfirah, Ananda Dwi Andini	Unraveling Youth Interaction with E-mail Marketing in Elevating Consumer Engagement
382	Nodar Ugrelidze, Sergo Shavgulidze	New Efficient MIMO Systems Using CSI on the Transmitting Side
54	Nan-Hung Cheng , Sheng-Chung Kuo, Yung-Fang Chen	Simple Iterative Method for Blind Carrier Frequency Estimation in Multi-user OFDMA Systems
111	Denis A. Polikarpov , Vitaly O. Kazachkov, Ilgam R. Letfullin	Bit error rate performance analysis of Star-QAM based SCMA codebooks design for HetNet
245	Christina Sander , Dominik Meyer, Bernd Klauer	A Scalable Agent Architecture
29	Mahmoud Zaki Iskandarani	Communication Analysis of Wireless Sensor Networks with Mobility Function
330	Gennady Khalimov, Yevgen Kotukh , Maksym Kolisnyk, Svitlana Khalimova, Oleksandr Sievierinov, Oleksandr Volkov	SIGNLINE: Digital signature scheme based on linear equations cryptosystem
401	Akshat Gaurav , Brij B. Gupta, Kwok Tai Chui	Edge-Based DDoS Attack Detection in AIoT Using a Hybrid CNN and Logistic Regression Approach
454	Daniel José Franco , Omar Khasro Akram	Enhancing Privacy in Water distribution System SCADA Networks: Development of a ModbusTCP Anonymization Tool
476	Takashi Yoshikawa	Necessity of X(Cross)-Blockchain System for Near Future Artificial Brain Society

14:30-16:45

Parallel Session C - III: Mixed - I

Chair: Ulas Bagci

ID	Authors	Title
517	Samuel Adjei-Frimpong , Mbika Muteba, Member	Effect of Capacitive Auxiliary Winding on a Synchronous Reluctance Motor with a Slitted-Rotor Core
397	Nguyen Thanh Quang	Effect of gear's surfaces roughness and dimensions to friction moment in drive differential of car
490	Sehwan Park, Jaehoon Choi, Minkyoo Yeom, Junhyeong Kim	Application of External Magnetization EM Technique for Diagnosing Residual Prestress in Aged PSC Structures
400	Tai Zhang , Liping Bai, Yuliang Jin	A mathematical model for the cutting path problem aimed at the layout with holes
14	Yalcin Tur, Vedat Cicek, Tufan Cinar, Elif Keles, Bradley Allen, Hatice Savas, Gorkem Durak, Alpaz Medetalibeyoglu, Ulas Bagci	Mortality Prediction of Pulmonary Embolism Patients with Deep Learning and XGBoost
591	Divya Nimma, Rajendar Nimma, Arjun Uddagiri	Real-Time Video Frame Interpolation Using GANs for Enhanced Streaming Service
628	Selim Soylu	Performance Analysis of Fractional-Order Controllers for Blade Pitch Angle Control of a Wind Turbine
470	Veska Gancheva , George Popov, Ognyan Nakov, Kamelia Raynova, Antoaneta Popova	Customs Fraud Detection Method Based on Artificial Intelligence and Data Analytics
383	Jack Mathebula	Uprate by Conversion of HVAC to HVDC: Benefits, Configurations, and Considerations
384	Thandeka Lerato Mbundu	Delphi-Based Framework for Evaluation of Capacity Uprate versus New Line Projects
385	Jack Mathebula	Forecasting the Numbers of Pole-Mounted Transformer Failures via Tripple Exponential Smoothing

16:45-17:00

COFFEE BREAK

17:00-19:00

Parallel Session A-IV: Machine Learning

Chair: Kanika Sood

ID	Authors	Title
61	Priyanka Lee , Kanika Sood	Komorebi: Enhancing Mental Wellness with Sentiment Analysis and Cognitive Behavior Therapy
83	Haolin Feng , Xinfeng Ye, Sathiamoorthy Manoharan	Adopting Deep Reinforcement Learning in Edge Caching Strategy
99	Protik Bose Pranto	Satire or Fake news? Machine Learning-Based Approaches to Resolve the Dilemma
266	Nicholas Cartocci , Antonios E. Gkikakis, Fabio Pera, Maria Teresa Settino, Darwin G. Caldwell, Jesus Ortiz	Fall-KAN: Fall impact time estimation Kolmogorov-Arnold Network
279	Aryan Kumar Singh , Arpit Saikia , Pranita Baro, Malaya Dutta Borah	Transformer-Based Self-Supervised Imputation for Medical Data
344	Hertzschuch Tim , Baumgarten Martin, Lamm Anika, Johne Volker, Koal Johannes, Schmale Hans-Christian	Clamping force prediction of different fastener connections using Machine Learning
392	Siddharth Kannan , Aakash Dhananjay Shanbhag	Classification of Pulsar Candidates using Classical Machine Learning Algorithms
507	Lany L. Maceda , Jo-Ann M. Cordovilla, John Ruel L. Locaba, Arlene A. Satuito, Mideth B. Abisado	Mining Social Media for Data-Driven Analysis of Educational Data with Machine Learning
516	Giselle Halim , Ridha Sefina Samosir	Cervical Cancer Risk Identification with Random Forest Using Web Platform
606	Dirar Sweidan	Accurate, Even at Random: Exploring Multiple Distinct Data Clusterings via Random Projection
120	Anirudh Ganesh	Program Scalability Analysis for LLM endpoints: Ahmdal's law analysis of parallelizability benefits of LLM Completions endpoints

17:00-19:00

Parallel Session B-IV: Comp. Vision & Power El.

Chair: Mohamad Nassereddine

ID	Authors	Title
250	Ziyu Zheng , Xinfeng Ye, Sathiamoorthy Manoharan	Improved Facial Emotion Detection Using Coordinate Attention
157	Robert Azwidowi , Imelda Smit, Motlokwe Thobejane	Factors Contributing to Resistance in Cloud Computing Adoption at a South African Higher Education Institution
166	Ruxandra-Maria Galeş , Cristian-Ştefan Dumitriu, Alina Bărbulescu, Maria Chevereşan	Using Alize Software to Simulate the Forest Roads Resistance in Different Scenarios
80	Muhammet Taha Bektas , Oktay Aytar, Melih Coban, Murat Fidan	Analysis of the Performance of MOSFET, IGBT and GaN FET Power Switches Used as Switching Elements on Buck Type DC-DC Converter
155	Hassan Khalid , Saad Mekhilef, Marizan Mubin, Mehdi Seyedmahmoudian, Mehmet Zahid Erel, Hussain Bassi, Obaid Alshammari	Impact of Foreign Objects on Wireless Power Transfer Efficiency in Magnetic Coupling Systems
172	Claudio Lima , James Cale	A Novel Rotor Position Synchronization Method for Central Converter Multi-Machine Drives
289	Jochem Van Der Meulen, Diego Zuidervliet, Peter Van Duijsen	Designing a Modular ELV Motor Driver for High Current Sensorless Motor Control
511	Akanksha Chaturvedi , Sanjay K. Chaturvedi, Monalisa Sarma	Reliability Prediction of Power Converters at Accelerated High Temperature using Weibull Proportional Hazard Model
475	Emmanuel O. Ijoga , William Mackunis, Emma Lambert, Sandra K.S. Boetcher	Robust Barrier Function-based Control for Cryocoolers with Unmodeled Power Dynamics

17:00-19:00

Parallel Session C - IV: Mixed - II
Chair: Ridha Sefina Samosir

ID	Authors	Title
165	Carmen Maftei , Cristina Serban, Kubra Kucuk, Vahdettin Demir, Radu Muntean	K-means method for clustering groundwater chemical parameters of Konya Closed basin
386	Jack Mathebula	Voltage Uprate of Transmission Lines: Motivation, Benefits, Considerations and Case Studies
387	Thandeka Lerato Mbundu	Impact of Pairwise Choice of Transformer Tap changer Settings in Large Interties on Grid Efficiency
390	Ephraim Nhlanhla Mbuli	Double Exponential Smoothing in Forecasting the Numbers of Pole-Mounted Transformer Failures
551	Thandeka Lerato Mbundu	Planning Process for Uprate Planning and Evaluation of Benefits in Comparison to New Lines: A Case Study
110	Karen Joisten, Tobias Renner	Technological Biases and Human Prejudices: A Technoethical Challenge
199	Biswaranjan Senapati , Awad Bin Naeem, Amol Kulkarni, Shib Shankar Golder, S. Mondallalit, N. Mishrea	A Study on Web User's Attitude and Knowledge towards Data Security and Privacy Issues of Web Browser Extensions
550	Ephraim Nhlanhla Mbuli	A Survey of Applications of Analytic Hierarchy Process (AHP) in Wind Generation Research
256	Anna Presciuttini , Alessandra Cantini, Alberto Portioli-Staudacher	From Explanations to Actions: Leveraging SHAP, LIME, and Counterfactual Analysis for Operational Excellence in Maintenance Decisions
178	Zhuochun Wu , Jidong Kang, Martin Mosteiro-Romero, Andrea Bartolini	Towards Sustainable Energy Communities: Expansion Planning of Photovoltaic Systems Under Uncertainties

Next conference (ICECCME 2025) will be in Zanzibar.

Details can be seen here: <https://www.iceccme.com/2025>

