CONFERENCE PROGRAM
(PHYSICAL PART)

PARIS
ICECET'25

3 July 2025
Time zone: Paris (GMT+2)

TABLE CONTENT

MESSAGE FROM THE ICECET'25 CONFERENCE CHAIRS

Dear Esteemed Delegates, Representatives, and Participants,

On behalf of the Organizing Committee, it is our great pleasure to warmly welcome you to the 5th International Conference on Electrical, Computer and Energy Technologies (ICECET 2025), to be held in the vibrant and historic city of Paris, France, from July 3-6, 2025.

ICECET has established itself as a distinguished multidisciplinary platform for researchers, academics, and industry professionals to share groundbreaking ideas, present innovative research, and discuss the latest advancements in electrical, computer, and energy technologies. This year's conference aims to foster high-quality research, encourage interdisciplinary collaboration, and drive technological innovations that will shape the future of these dynamic fields.

ICECET 2025 will feature an enriching program, including high-quality technical sessions, keynote addresses from world-renowned experts, workshops, and special sessions focusing on emerging trends and challenges. The conference will be held in a hybrid format, offering both in-person and online participation to ensure global accessibility. All submissions will undergo a rigorous peer-review process, with accepted papers submitted for inclusion in IEEE Xplore, subject to meeting IEEE's scope and quality requirements, and indexed by Scopus.

We encourage you to seize this opportunity to network with leading experts, engage in thought-provoking discussions, and forge collaborations that will spark innovation. For young researchers and professionals, ICECET 2025 offers a unique platform to connect with peers and established scholars, fostering professional growth and new opportunities.

Beyond the technical program, Paris—the "City of Lights"—offers a captivating backdrop with its rich cultural heritage, iconic landmarks such as the Eiffel Tower and the Louvre Museum, and its charming blend of history and modernity. We invite you to explore the city's beauty, from the scenic River Seine to its world-class cuisine and vibrant atmosphere, which together create an ideal setting for both professional and social interactions.

We look forward to your active participation in making ICECET 2025 a memorable and impactful event. Let us come together to exchange ideas, inspire innovation, and contribute to the advancement of electrical, computer, and energy technologies.

Some statistical details for ICECET 2025
Submitted papers: 2078
Accepted papers: 771
Acceptance ratio: 37%

Total registered papers: 712 from 79 different countries
Physical Poster presentation: 28
Physical Oral presentation: 230
Online presentation: 454
Total physical participants: 300+ from 55 different countries.

Warm regards,
ICECET 2025 Organizing Committee

Paris, France

CONFERENCE PROGRAM

July 3th, 2025								
TIME	**HALL-A**	**HALL-B**	**HALL-C**	**HALL-D**	**HALL-E**	**HALL-F**	**HALL-G**	**HALL-H**
08:15-08:30	Welcome Speech ***Camel Tanougast*** **ICECET 2025 Conference Chair** (University of Lorraine, France)							
08:30-09:00	Keynote Speech ***Prof. Dr. Hee-Cheol Kim*** (Inje University, South Korea) **Title**: Revolutionizing Healthcare with AI: Innovations in Medical Imaging and Clinical Decision-Making							
09:00-09:30	**WELCOME BREAK**							
09:30-11:30	**Session A-I:** Artificial Intelligence - I	**Session B-I:** Energy - I	**Session C-I:** Big Data & Data Science	**Session D-I:** Internet of Things	**Session E-I:** Communications - I	**Session F-I:** Power Electronics & Smart Grid	**Session G-I:** Computer Eng. & Communications	**Session H-I:** Deep Learning
11:30-11:45	**COFFEE BREAK**							
11:45-13:30	**Session A-II:** Artificial Intelligence - II	**Session B-II:** Energy - II	**Session C-II:** Energy - V	**Session D-II:** Mechatronics & Microelectronics	**Session E-II:** Communications - II	**Session F-II:** Robotics	**Session G-II:** Mechatronics & Control Sys.	**Session H-II:** Big Data & Cryptography
13:30-14:30	**GROUP PHOTO & LUNCH**							
14:30-15:00	**POSTER SESSION**							
15:00-16:45	**Session A-III:** Artificial Intelligence - III	**Session B-III:** Energy - III	**Session C-III:** Cryptography & Blockchain	**Session D-III:** Machine Learning - I	**Session E-III:** Electric Machines	**Session F-III:** Software Eng.	**Session G-III:** IoT & Deep Learning	**Session H-III:** Mixed - II
16:45-17:00	**COFFEE BREAK**							
17:00-18:45	**Session A-IV:** Artificial Intelligence - IV	**Session B-IV:** Energy - IV	**Session C-IV:** Control Systems & Automation	**Session D-IV:** Machine Learning - II	**Session E-IV:** El. Machines & Embedded Sys.	**Session F-IV:** Mathematical Modelling	**Session G-IV:** Mixed - I	**Session H-IV:** Mixed - III

Opening Speech

General Chair

Camel Tanougast

University of Lorraine, France

08:15 - 08:30

Keynote Speech

Keynote Speech

Prof. Dr. Hee-Cheol Kim

(Inje University, South Korea)

Title: Revolutionizing Healthcare with AI: Innovations in Medical Imaging and Clinical Decision-Making

08:30-09:00

HALL - A

Session A-I: Artificial Intelligence - I
09:30-11:30

Coffee Break 11:30-11:45

Session A-II: Artificial Intelligence - II
11:45-13:30

Lunch 13:30-14:30

Poster Session 14:30-15:00

Session A-III: Artificial Intelligence - III
15:00-16:45

Coffee Break 16:45-17:00

Session A-IV: Artificial Intelligence - IV
17:00-18:45

09:30-11:30	Session A-I: Artificial Intelligence - I Session Chair: Stefan Florczyk

P. ID	TITLE	AUTHORS
248	An Expert System-Supported Software Engineering Robot with Machine Learning Capabilities	**Stefan Florczyk**
298	WDSN: A wood defect segmentation approach	**Mohammad Jaber Hossain**, Geir Isak Vestøl, Linus Olofsson
429	Deployment of an agricultural mobile robot for the detection of damaged areas in bean crops using artificial intelligence	Rafael Reveles-Martínez, **Edgar R. Ruvalcaba-Castro**, Luis E. Escareño-Fernández, Israel Herrera-Álvarez,
456	Spatio-Temporal Multimodal Large Language Model for Air Quality Index Prediction	**Seungwoo Lee**, Sunghyun Sim
457	Multi-Dimensional Interdependency Network for Long-Term Forecasting of Pollutant Emissions from Arctic Ocean Ships	**Younghwi Kim**, Sunghyun Sim
508	development of an algorithm for strength training with use haptic feedback and artificial intelligence (AI) based enhancement	**Ernesto A. Villegas-Jiménez**,Ariel H. Bello-Guerrero,Michelle D. Padilla Torres,Leslie N. Villagómez-Venegas,Camila S. Chávez-Ramírez
534	RSKP: A Hybrid Ontology-Rules and Deep Learning Model for Named Entities Recognition and Relations Extraction Application to a French Corpus on Intellectual Disabilities	Lili Lei, **Ammar Kheirbek**
614	Developing a Grammatical Error Correction System for French Second Language Written Texts	**Adel Jebali**

COFFEE BREAK

11:45-13:30	Session A-II: Artificial Intelligence - II Session Chair: Fady Saad Said Ghatas

P. ID	TITLE	AUTHORS
772	Drone Detection Approach Based on Acoustic Propellers Sound Using Convolutional Neural Network	**Rangsan Tongta** , Panya Hantula, Chanisara Kaewphoklang
781	Dynamic Privacy Budget Allocation Mechanism Based on Multi-Dimensional Query Management	**Yi-Chen Wu**
791	LLaMa-BiLoRA: Enhancing Named Entity Recognition for Resume Data Extraction Using Quantized LoRA modified LLaMA with Bidirectional Attention	**Fady Saad Said Ghatas**, Mervat Mustafa Fahmy Abu-Elkheir
844	Small Models Can Make Themselves Smarter!	**Salvatore Vella**, Salah Sharieh, Fatima Hussain, Alex Ferworn
881	Impact of Face Detection Algorithms on UAV-Based Real-Time Face Recognition Systems	**Julio Diez-Tomillo**, Javier Saez-Perez, Pablo Benlloch-Caballero, Pablo Salva-Garcia, Jose M. Alcaraz-Calero, Qi Wang
761	Genetic Algorithm Optimisation for Building Retrofits: A Comprehensive Analysis of Research Gaps and Future Directions	Konstantinos Alexakis, Vasilis Benekis, Vasilis Benekis, **Panagiotis Kokkinakos**, Dimitris Askounis

13:30-14:30

POSTER SESSION

14:30-15:00

15:00-16:45	Session A-III: Artificial Intelligence - III Session Chair: Yixin Nie

P. ID	TITLE	AUTHORS
991	Protection of sensitive personal information contained in digital files held by individuals with homomorphic encryption and AI assistance	Ernesto A. Villegas-Jiménez,Araceli Romo-Cabrera ,Manuel A. Manzano-Calixto ,Lilly M. Tello-Aguilera,Armando K. Sánchez- Mata, **Paula M. Hernández Ruiz**
1409	Seafood Quality Assessment with Explainable Artificial Intelligence	Francesca Maries P. Buguis, Marie Ashley C. Ordoñez, Geraldine Audrey V. Uganiza, Jonalyn S. Villanueva, Ma. Sheila A. Magboo, **Vincent Peter C. Magboo**
1413	CLASP: Cost-Optimized LLM-based Agentic System for Phishing Detection	**Fouad Trad**, Ali Chehab
1462	Are AI Agents interacting with Online Ads?	Andreas Stockl, **Joel Nitu**
1790	SemantIC++: Enhancing Semantic Accuracy and Signal Fidelity for 6G Communications	**Bora Yoon**, **Junghyun Kim**
275	Optimising Machine Learning Based Landslide Susceptibility Mapping witth Application of Bias-Variance Tradeoff	**Vivek Saxena**, Aaditva Vijay Vats, Upasna Singh

COFFEE BREAK (16:45-17:00)

17:00-18:45	Session A-IV: Artificial Intelligence - IV Session Chair: Mkhutazi Mditshwa

P. ID	TITLE	AUTHORS
81	Extractive Text Summarization Using K-Medoid Clustering on BERT	Fazlullah Khan,Ryan Alturki,**Bandar Alshawi**,Muhammad Umair,Taj Malook
358	AI-Driven Performance Prediction of Centrifugal Pumps Operating in Parallel Using an Artificial Neural Network Model	**Miniyenkosi Ngcukayitobi**
360	Enhancing the Performance of Centrifugal Pumps in Series Using Artificial Neural Networks and Particle Swarm Optimization	**Miniyenkosi Ngcukayitobi**
1792	Upgrading Camshaft Analysis Labs: AI-Assisted Coding, Automation and Digital Logging Integration	**Nicolaas Luwes**
965	Image Blur as an Informative Parameter in Solving Object Recognition Problems	**Daniil Loktev**, Alexey Loktev
1962	Design of Bi-Directional DC/ DC Converter System With Adjustable Current And Voltage Profile	Ndivhuho Muronga, **Oluwafemi Oni**, Best Khoza
1867	Enhancing Power System Primary Frequency Response Using Fast Frequency Support from Battery Energy Storage Systems	**Mkhutazi Mditshwa**, Komla Folly, David Oyedokun

NOTE :

HALL - B

Session B-I: Energy - I
09:30-11:30

Coffee Break 11:30-11:45

Session B-II: Energy - II
11:45-13:30

Lunch 13:30-14:30

Poster Session 14:30-15:00

Session B-III: Energy - III
15:00-16:45

Coffee Break 16:45-17:00

Session B-IV: Energy - IV
17:00-18:45

09:30-11:30	Session B-I: Energy - I Session Chair: Danya Al-Hindawi

P. ID	TITLE	AUTHORS
131	Industrial Battery Energy Storage Unit Investigations for Time-Dependent Experimental Characterization	**Sahin Gungor**, Sabri Can Baytemir,Berkay Bezkoktu,M. Can Kandamar
239	Air-cathodes based on papyrus-derived carbons in neutral quasi-solid-state Al-air batteries	**Maria F. Gaele**, Pasquale Gargiulo, Meenal Gupta, Valeria Califano, Aniello Costantini, Maria A. Rao, Veronica De Micco, Davide Savy, Mara Gherardelli, Chiara Amitrano, Tonia M. Di Palma
249	Eco-sustainable batteries to power disposable sensors	Maria F. Gaele,Pasquale Gargiulo,Meenal Gupta,Vanessa Esposito,Daniele Bellisario,Luca Francioso,**Tonia M. Di Palma**
286	Dynamic Energy Management System of a Microgrid Cluster under Operational Intermittency	**Pablo Horrillo-Quintero**, Pablo García-Triviño, David Carrasco-González, Raúl Sarrias-Mena, Carlos A. García-Vázquez, Luis M. Fernández-Ramírez
289	Technical Economic Tool Development for Offshore HVAC Transmission System Analysis	**Gustavo Catusso Balbinot**, Leonardo Pedroche Folgoso, Muhammad Zubair, Renato Machado Monaro
303	Event-driven Tariffs and Enhanced Smart Meter Infrastructure – a Use Case for Flexibility in Energy Communities in Multi-Apartment Buildings in Germany	**Matthias Grandel**, Claudius Kübler, Jiayin Fu, Yannick Ennulat, Julien Essers, Eike Niehs
309	Dynamically Optimizing the Allocation of Electric Vehicles to Charging Sites	**Hermann Kaindl**, Christian Sallinger, Michael Kammerhofer, Ralph Hoch, Sven Dominka
325	Dynamic Analysis of a Tri-stable Nonlinear Energy Sink with Nonlinear Damping for Enhanced Piezoelectric Energy Harvesting in Structural Health Monitoring Applications	**Amin Moslemi**, Maria Rashidi

COFFEE BREAK (11:30-11:45)

11:45-13:30	Session B-II: Energy - II Session Chair: Sreenu Sreekumar

P. ID	TITLE	AUTHORS
412	Comparison of Reservoir Output Flow Forecasting Methods for Participation of Water Distribution Networks in Ancillary Services	**Kyriaki-Nefeli Malamaki**, Stelios Dimoulias, Georgios Kryonidis, Charis S. Demoulias
435	A Multi-Stage Battery Degradation Prediction Model Based on Knee Point Analysis and Feature Transfer	**Yixin Nie**, Anqi Wang, Zhiyu Zhang, Liqin Yan, Jingying Xie, Fan Yang
437	A Study on the Establishment Model for Digital Twin-based ESS Performance Evaluation System	**Youna Kim**, Hye-Ryeon Jeon,Dong-Hyun Tae,Young-Kyu Mo,Min Hwang,Pil-Sung Woo, Young-Seok Kim
510	Upper and Lower Bounds for the Correspondence Among the Power Inputs and Outputs in a Battery with Two or More Inputs and Two or More Outputs	**Alejandro Comitre Bueno**, Sebastian Martin, Jose A. Aguado
544	Novel Interval Multi-objective Optimization Approach for Allocation and Sizing of Distributed Generation	**Augusto C. Rueda-Medina**, Rafael S. F. Ferraz, Renato S. F. Ferraz, José Antonio Domínguez Navarro, José María Yusta Loyo
639	Detection and Classification of Transmission Line Faults Using a Hybrid Model	Bitopan Nath, Manashjyoti Das, Biswaraj Dey, **Sreenu Sreekumar**
650	Dynamic Synthesis of Heat Exchanger Networks Using Genetic Algorithms: A Techno-Economic Framework for Non-Steady-State Processes	**Soroush Entezari**, Hossein Faramarzpour, Mikhail Sorin

13:30-14:30

POSTER SESSION

14:30-15:00

15:00-16:45

Session B-III: Energy - III
Session Chair: José Manuel Ribeiro Baptista

P. ID	TITLE	AUTHORS
663	A GCN-GAT Based Approach for Oscillatory Mode Identification using Degraded PMU Measurements in Power System	Subhalaxmi Satapathy, Mani Shankar Kumar, **Shekha Rai**
674	Mitigation of Critical Resonance Cyberattacks in Renewable Energy Integrated Power Grids	**Mostafa Ansari**, Mohsen Ghafouri, Amir Ameli
689	Enhanced Electrical Fault Prediction Using Feature Engineering and Image Transform-Based Analysis	**Abigail Copiaco**, Ghulam Amjad Hussain, Kiyan Afsari, And Haris M. Khalid
704	Enhanced Dynamic Optimization for CO2 Reduction and Cost Savings through Load Shifting in Smart Factories	**Seyed Davood Mousavi**, Thomas Schulte
780	Microgrid Cluster Energy Management with a PLC	**David Carrasco-González**, Raúl Sarrias-Mena, Pablo Horrillo-Quintero, Francisco Llorens-Iborra, Iván De La Cruz-Loredo, Carlos E. Ugalde-Loo, Luis M. Fernández-Ramírez
794	Cost Modeling for Offshore Transmission Systems: Updating Historical Data Using CPI and PPI for HVAC, HVDC, and LFAC Components	**Muhammad Zubair**, Leonardo Pedroche Folgoso, Gustavo Catusso Balbinot, Vin´ Icius Soares De Mello Cerqueira, Renato Machado Monaro, Maur´ Icio B. C. Salles
841	Deep learning single model uncertainties in probabilistic PV forecasting for energy management	**Sarah Reisenbauer**, Michael Spiegel

COFFEE BREAK (16:45-17:00)

17:00-18:45	Session B-IV: Energy - IV Session Chair: Mattia Secchi

P. ID	TITLE	AUTHORS
848	Maiden Integration and Performance Analysis of a Solar Power Plant under Automatic Generation Control in the Indian Power System	**Anmol Sharma**, Phanisankar Chilukuri, Sunil Kumar Meena, Vivek Pandey
887	Consumption-aware optimization of multi-string photovoltaic systems based on economic metrics	**Tamas Miseta**, Agnes Vathy-Fogarassy, Zsofia Zavodi-Fodor, Attila Fodor
929	Enhanced Modeling of Renewable-Based Sector-Coupled Energy Systems Using SysML v2	**Christoph Klaassen**,Gernot Steindl,Rene Hofmann
933	SOC Profile Reconstruction from Residential EV Charging Data: An Optimisation-based Approach	**Mattia Secchi**, Ghaffar Yousefi
1246	Real-Time Energy Management of RAN Networks: A Multi-Horizon MPC Approach with PV-Battery Systems	**Othmane Hamzaoui**, Brian Françoise, Stéphane Le Masson, Hamid Gualous
1259	Development of a Hybrid Wind-Solar System for Power Energy Generation	**Diego L. Jiménez J.**, Roberto Salazar-Achig, David Quishpe, Jefferson Sánchez
1281	Optimizing The Photovoltaic and Battery Storage Sizing by Minimizing Curtailment Using Binder Decomposition	**Mohammed M Alhaider**

NOTE :

HALL - C

Session C-I: Big Data & Data Science
09:30-11:30

Coffee Break 11:30-11:45

Session C-II: Energy - V
11:45-13:30

Lunch 13:30-14:30

Poster Session 14:30-15:00

Session C-III: Cryptography & Blockchain
15:00-16:45

Coffee Break 16:45-17:00

Session C-IV: Control Systems & Automation
17:00-18:45

09:30-11:30	Session C-I: Big Data & Data Science Session Chair: Soňa Karkošková & Azadeh Esfandyari

P. ID	TITLE	AUTHORS
572	Integration of Process Mining and Business Intelligence A Systematic Review	**Jasim Alnahas**, Shahbaz Khan, Ayed Saleh Alqahtani, Naif Jabr Alshammari, Khaled Thowab Alsobey, Mohammed Naser Alrasheedy, Muhammad Saeed O Alatawi
727	Improving the High Value Datasets for creating added value Digital Services for smart cities and communities	**Antonio Filograna**, Francesca D'Agresti, Luca Alessandro Remotti, Francesco Mureddu, Carolina Viceto, Ana Pereira, João Bastos, Miguel Almeida,César Carpinteiro, Mariana Dias
955	Uncovering Insights in mMedical Apps: A Text Analytics and Topic Modeling Approach	**Azadeh Esfandyari**
969	Energy-Aware Production Planning and Scheduling in a Two-Parallel-Machine System	**Roshani Abdolreza**
1553	Customer Experience in E-commerce: A Framework for Measurement and Optimization	**Varun Dogra**, Srinivas Kumar M
1882	Redefining Data Governance: Methodology for Data Product Design in a Data Mesh Framework	**Soňa Karkošková**

COFFEE BREAK (11:30-11:45)

11:45-13:30	Session C-II: Energy - V Session Chair: Adam S. Burn

P. ID	TITLE	AUTHORS
1405	Comparative Analysis of Emissions and Fuel Costs in Methanol Retrofitted Crew Transfer Vessels	**Adam S Burn**, Maher Al-Greer, Atma Prakash, Michael Short, Murat Duran, Rukshan Navaratne
1855	Machine learning-based multi-criteria framework for renewable energy microgrid design	**Abba Lawan Bukar**, Ahmed S. Menesy, Mahmoud Kassas, Mohamed A. Abido
1997	Development of efficient third generation PV materials and devices to enhance the competitiveness of enterprises to the green energy production	**Polycarpos Falaras**, Elias Stathatos, Emmanuel Kymakis
1998	Data-driven prediction model for formation pressure and dynamic inventory of underground gas storage	**Gulei Sui**, Xiaolin Wang, Hongxiang Zhu, Bo Chen, Xue Li, Hongyong Du, Peixian Wang, Zunzhao Li
1979	2-dimensional and Layered Materials for Applications in Energy, Water, and Healthcare	**David Estrada**
301	From Linear to Circular: Transforming Waste Management in Island Communities	**Flouri Maria**, Efstathios Karvelis, Panagiotis Kokkinakos, Alexakis Konstantinos, Dimitris Askounis
205	Harmonic Emission Modeling in DC/AC Microgrids: Simulation and Analysis	Antonio Sousa, Bernhard Grasel, **Jose Baptista**

13:30-14:30

POSTER SESSION

14:30-15:00

15:00-16:45

Session C-III: Cryptography & Blockchain
Session Chair: Abdelrahman Abdelgader

P. ID	TITLE	AUTHORS
208	The Implementation of a Symmetric Lightweight Cryptographic Algorithm called SECURE-BEE Applicable in Communicating Embedded Systems	**Tobias Glocker**,Timo Mantere
379	Key Distribution in Dynamically Reconfigurable and Self-Organizing Aero-Physical Cyber Systems	**Yeghisabet Alaverdyan**, Vahagn Poghosyan, Suren Poghosyan, Grigor Alaverdyan
444	Application of Physical-Layer Security System to Musical Sound	**Yuki Yamamoto**, Masao Hirokawa
866	Residue Number System Comparison revisited, a software perspective	Laurent-Stéphane Didier, Léa Glandus, **Jean-Marc Robert**, Nadia El Mrabet
971	Decentralized N-1 Contingency Analysis for Cascading Failure Prediction in Multi-Region Power Systems using Consortium Blockchain	Md. Mainul Islam, Muhammad Ismail, Rachad Atat, Hasan Kurban, Katherine R. Davis, **Erchin Serpedin**
1294	Understanding Identity Theft: Potential Harms and Effective Prevention Strategies	Faisal Almedeth, Hatim Alotebi, Naif Alsahabi, Ali Alshehri, Abdulaziz Alamodi, **Abdelrahman Abdelgader**
1303	Modeling Adaptation Strategies in the Confrontation of Cryptocurrency Resilience and Quantum Computers	**Volodymyr Khilenko**, Valerii Lakhno

COFFEE BREAK (16:45-17:00)

17:00-18:45	Session C-IV: Control Systems & Automation Session Chair: Issam Boukabou

P. ID	TITLE	AUTHORS
345	Multi-objective optimization for minimizing battery charge/discharge cycles and economic cost in microgrid energy management systems	**Juana López Redondo**, Luis O. Polanco, Víctor M. Ramírez, José Luis Torres, José Domingo Álvarez
425	Implementation and Testing of a Proposed Micro Wind Turbine Control System with Monitoring Capability	Jorge Cardé Santiago, Nathalia Cotto Figueroa, Derek Vargas Figueroa, Ian Delgado Ayala, Sebasthian Sullivan Sánchez, **Diego Aponte-Roa**
443	The link between programmable logic controllers and Industry 4.0 digital twins	**Nico Braunisch**, Santiago Soler Perez Olaya, Tom Gneuß, Uwe Schmidt, Marko Ristin, Marcin Sadurski, Hans Wernher Van De Venn, Martin Wollschlaeger
501	Robust sliding modes control of permanent magnet synchronous generator	**Hector Huerta**,Manuel Hernández
1295	Implementation of cluster architecture and dynamic management of distributed user assets in energy networks	**Volodymyr Khilenko**, Halina Bielokha, Sergii Denysiuk, Oleksii Stepanov
1903	Impact of Multipath and Shadowing on GPS Uncertainty for UAV-Based Package Delivery	**Issam Boukabou**, Naima Kaabouch, Selma Benouadah
1182	“Test, Build, Deploy” - A CI/CD Framework for Open-Source Hardware Designs	Calvin Deutschbein, **Aristotle Stassinopoulos**

NOTE :

HALL - D

Session D-I: Internet of Things
09:30-11:30

Coffee Break 11:30-11:45

Session D-II: Mechatronics & Microelectronics
11:45-13:30

Lunch 13:30-14:30

Poster Session 14:30-15:00

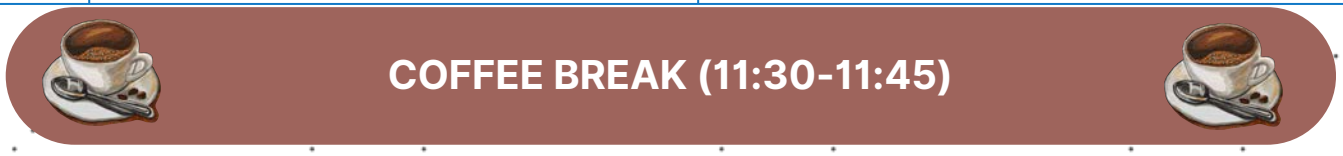
Session D-III: Machine Learning - I
15:00-16:45

Coffee Break 16:45-17:00

Session D-IV: Machine Learning - II
17:00-18:45

09:30-11:30	Session D-I: Internet of Things Session Chair: Van Dai Pham

P. ID	TITLE	AUTHORS
41	Defending Against Distributed Denial of Service (DDoS) Attacks: A Case Study of CrowdStrike's Role in Modern Cyber Warfare	Tarik Eltaeib, **Mccloud Robert**
147	Development of gender recognition system and Optimization of performance by superimposing infrared image and thermal sensor	Youngjun Yoo, **Janghee Choi**
212	Advanced Smart PV System Integrating Internet of things, Artificial intelligence, and cybersecurity approaches	**Nassir Rouibah**, Abdelouahab Bouttout, Sofiane Haddad, Mohamed Benghanem, Soumia Oukaci, Amel Limam, Ammar Boulaiche
606	EcoCharger AI: Smart Energy Management System	**Mahra Alsuwaidi**, Shaikha Alsheebani , Hessa Alkhoori , Mohammad Tubaishat, Ahed Abugabah
771	Enhancing IoT Security: AI-Driven Anomaly Detection Techniques and Their Applications	Thi Hong Hanh Nguyen, Quang Thanh Duong, **Van Dai Pham**
901	Comparative Analysis of Machine Learning Models for Greenhouse Environmental Parameter Prediction	Hanh Nguyen, Hung Tuan Lo, Duc Chi Luong, Hieu Minh Dam, Chi Linh Hau, Thi Nga K. Dao, Binh Gia Nguyen, **Van Dai Pham**
1000	FL-IoT: Integration of Federated Learning and oneM2M-based IoT Platform	**Junghyun Lim**, **Gaoyang Shan**, **Byeong-Hee Roh**
1414	Digital Twin Optimization of Start-Stop Systems for 12V Lead-Acid Batteries	**George Flutur**, Gabriel Chindris, Dan Gota, Ovidiu-Petru Stan



11:45-13:30	Session D-II: Mechatronics & Microelectronics Session Chair: Brinda Bhowmick

P. ID	TITLE	AUTHORS
84	Research on Eddy Current Displacement Sensing Technology of High Temperature and Radiation	Zhaoxiang Jiang, **Chengning Zhou**, Xueying Chen, Caixue Liu, Jianrong Hu
305	Design of a low-cost AGV with robotic loading system	Flabio Mirelez-Delgado, **Umanel Hernández-González**, Carlos Rico-Mandujano, Carlos Huitrón-López, Priapo Chew-Saldaña, Alan García-Quiroz
524	Design and Implementation of an Autonomous Robot Beach Cleaner	Sebastián Burciaga-Sosa, Jorge E. Hernández-Esquivel, **Francisco E. Romo-Castañeda**, Rafael Reveles-Martínez, Ramón Jaramillo-Martínez, Addried Samir Moreno Castro
582	Evaluation of Luffa Fiber-Reinforced Printed Circuit Boards as Sustainable Alternatives to Conventional FR2 PCBs	**Garip Genc**, Ugur Kesen
1161	Stepper Motor Control based on Finite Automata for SCARA Robot Joint Position Control	**Luis Brandon Vega-Martinez**, Juan Manuel Lopez-Tellez, Fernando Martell-Chavez
149	Reliability study of Strained Silicon SOI TFET	Urmila Bag, **Brinda Bhowmick**, Rajesh Saha, P Puspa Devi
216	Design and Sensitivity Optimization of Heterojunction Dual Gate Vertical TFET Sensor for Chemical Gas Detection	Karthik Nasani, Brinda Bhowmick, **Puspa Devi Pukhrambam**

13:30-14:30

POSTER SESSION

14:30-15:00

15:00-16:45

Session D-III: Machine Learning - I
Session Chair: Aftab Hussain

P. ID	TITLE	AUTHORS
128	Forecasting CO2 Emissions in the Agricultural Sector: A Comprehensive Analysis Using Statistical and Machine Learning Models	**Laiali Almazaydeh**, Arar Al Tawil, Khaled Elleithy
211	Evaluating the Efficacy of Various Sampling Strategies on Enhancing Credit Card Fraud Detection Performance	Fan Zhang, Faria Brishti, Sameeruddin Mohammed, **Fan Wu**, Baiyun Chen
312	A Novel Diabetes Predict Framework of Ensemble Learning to Solve Missing and Imbalanced Data	**Chan Soraneat Chanthan**, Goran Soldar, Gulden Uchyigit
953	Investigating the Usage of Machine Learning Techniques for Predicting Building Collapses Damage Grade During Seismic Events: A Case Study in Nepal	**Enas Khalil**, Laila Abdelsalam, May Haggag, Ibrahim Abotaleb
1307	Criticality Assessment of Power Transformer by Using Entropy Weight Method	**Rattanakorn Phadungthin**, Juthathip Haema
1359	A Hybrid Approach to Deepfake Detection Using Vision Transformers with Contrastive Learning	**Ambika Aggarwal**, Khushboo Jain, Ashutosh Bhatt
1387	Data Limitation Problems of Motor Insurance Policyholders Classification Using Machine Learning Model	**Ridha Sefina Samosir**, Jorge Luis Bazan Gusman, Giselle Halim

COFFEE BREAK (16:45-17:00)

17:00-18:45	Session D-IV: Machine Learning - II Session Chair: George Matsopoulos

P. ID	TITLE	AUTHORS
1485	DRA-Net with ISSA: A High-Performance Intrusion Detection Framework for IoT Networks with Enhanced Accuracy and Reduced False Alarms	**P. Mishra**, T.G. Manjunath, A.C. Vikramathithan, P.K. Pareek, K. Sheelavant, A.K. Bhavikatti
1653	Identifying Centralized Exchange (CEX) Addresses on the Blockchain using Machine Learning with Graphs	**Jizhen Cai**
172	Symphy-Ten: A Hybrid Deep Learning Model for Automated Whole Spine Bone Marrow Segmentation in Whole-Body MRI	George G. Botis, Theodoros Panagiotis Vagenas, Nikolas Robotis, Ioannis Kakkos, Vassilis Koutoulidis, Lia Angela Moulopoulos, Dimitris Koutsouris, **George K. Matsopoulos**
124	Enhanced Classification of Static and Dynamic NLOS Sensor Data Using Principal Component Analysis with Support Vector Machine Algorithm	**Ilesanmi B. Oluwafemi**, Enoch A. Jiya
255	Deep Reinforcement Learning with Local Interpretability for Transparent Microgrid Resilience Energy Management	Mohammad Hossein Nejati Amiri, Fawaz Annaz, Mario De Oliveira, **Florimond Gueniat**
730	Machine Learning-Based Environmental Monitoring Application Using Remote Sensing	Sakhile S. Mkhize, **Oluwaseyi P. Babalola**
1422	Deep Learning Approaches for Autonomous Driving: CNNs, Vision Transformers, and Hybrid Models	Ivan Sekeres, David Vodicka, Alvaro Lara, Emmanuel Grenier, **Josip Balen**

NOTE:

HALL - E

Session E-I: Communications - I
09:30-11:30

Coffee Break 11:30-11:45

Session E-II: Communications - II
11:45-13:30

Lunch 13:30-14:30

Poster Session 14:30-15:00

Session E-III: Electric Machines
15:00-16:45

Coffee Break 16:45-17:00

Session E-IV: El. Machines & Embedded Sys.
17:00-18:45

09:30-11:30	Session E-I: Communications - I Session Chair: Ilesanmi B. Oluwafemi

P. ID	TITLE	AUTHORS
62	Transformer-Based Cognitive Radio: Adaptive Modulation Strategies Using Transformer Models	Andrea Melis, **Andrea Piroddi**, Roberto Girau
91	Collaborating with ChatGPT Knowledge to Improve Service Performance	**Edward C. S. Ku**
535	Enhanced Microwave Sensor Using Split Ring Resonator and Defected Ground Structure for Material Characterizations	Rayan A. Ba Amer, **Maizatul Alice Meor Said**, Noor Azwan Shairi, Zahriladha Zakaria, Mohamad Harris Misran, Syah Alam
806	Continuous Electromagnetic Apertures as an Alternative to Antenna Elements in Cell-Free Massive MIMO: A Hardware Perspective	**Ilyas Saleem**, M. Ali Babar Abbasi, Subhas Mukhopadhyay *, Dmitry Zelenchuk, Hazer Inaltekin, Syed Muzahir Abbas *
1913	FNR-IDS: A Fuzzy-Neural Hybrid with Real-Time RSA Encryption for Intelligent Intrusion Detection	**Ahmed Jamal Ibrahim**, Sandor R. Repas

COFFEE BREAK (11:30-11:45)

11:45-13:30	Session E-II: Communications - II Session Chair: Manohara Pai M. M.

P. ID	TITLE	AUTHORS
888	The digital age of the popular music industry: challenges and opportunities for physical CD sales	Chiu-Kuei Yang, Chu-Ying Yen, Chi-Hsiung Chen, **Ching-Yi Wang**
914	Partially Reflected Surface (PRS)-Loaded Graphene-Based Patch Antenna for 6G	Omar Osman, **Abdullah Qayyum**, Maziar Nekovee
915	Power Allocation and RIS Elements Optimisation for Reconfigurable Intelligent Surfaces assisted RSMA	**Abdullah Qayyum**, Maziar Nekovee
1091	Practical limitations of in-vehicle Ethernet for autonomous mobile machine control	**Kalle Hakonen-Milosevic**, Jussi Aaltonen, Kari T. Koskinen
1454	Isolation Enhancement of Ultrawide Bandwidth THz MIMO Antenna Using Hybrid Decoupling Structure	Praveen Kumar, Tanweer Ali, **Manohara Pai M M**
1819	RIS-Aided Wireless Communication With Movable Elements: Geometry Impact on Performance	**Yan Zhang**, Indrakshi Dey, Nicola Marchetti
313	Automated Hybrid Additively Manufactured Doubly-Curved Frequency Selective Surface	**Gilbert T. Carranza**,Cesar L. Valle,Raymond C. Rumpf

13:30-14:30

POSTER SESSION

14:30-15:00

15:00-16:45

Session E-III: Electric Machines
Session Chair: Ambrish Devanshu

P. ID	TITLE	AUTHORS
64	Failure Detection in Industrial Induction Motors using Infrared Thermography	**Waqar Akram**, Waheed Aftab Khan, Manzoor Ellahi, Hamid Gulzar
111	Investigation of Fault Behavior in Scalar-Controlled Induction Motor Drives with Inverter Switch Failures	**Ambrish Devanshu**, Kosha Krishna Dutta, Srikanth Allamsetty, Mustapha Jamma,
259	Improvement of the FC/UC Source and HEV Lifetime by Increasing the Inverter Levels Number	**Hassina Abdellaoui**, Kaci Ghedamsi, Ali Bechouche, Amar Mecharek
1418	Potential of Multi-Material Additive Manufacturing for Rotors of Synchronous Reluctance Machines	**Maximilian Bieber**, Zhixin Du, Bernd Ponick
1419	Potential of Multi-Material Additive Manufacturing for Rotors of Permanent Magnet Synchronous Machines	**Maximilian Bieber**, Dac Toan Le, Bernd Ponick
1808	Vessel Propulsion Power Forecasting Using Variational Mode Decomposition and Convolutional Neural Networks	**Danya Al-Hindawi**, Adam S Burn, Maher Al-Greer, Michael Short, Atma Prakash, Alessandro Di Stefano

COFFEE BREAK (16:45-17:00)

17:00-18:45	Session E-IV: EI. Machines & Embedded Sys. Session Chair: Moni Sankar Saha

P. ID	TITLE	AUTHORS
206	Harmonics consequences on Induction Motors performance	**José Baptista**, Rita Teixeira
709	Substation Bill of Materials: A Novel Approach to Managing Supply Chain Cyber-risks on IEC 61850 Digital Substations	Xabier Yurrebaso, Fernando Ibañez , **Ángel Longueira-Romero**
795	Edge AI Benchmarking: Tools, Methodologies, and Optimization Strategies, a review	**Mustafa Abdulkadhim**, Sandor R. Repas
865	HW-aware Neural Architecture Search Using Genetic Optimisation: In-Memory Compute vs NPU	**Lotte Hendrickx**, Steven Colleman, Toon Goedemé,
983	FPGA Resource Dimensioning from Mathematical Models: An Approach for Convolution IP Exploration	**Philippe Magalhaes**,Virginie Fresse, Benoıt Suffran, Olivier Alata
1032	Investigation of Displacement Effects of Tag on Reader: A Study on Antenna Performance and Power Dynamics	**Moni Sankar Saha**, Moncef Kadi, Sahbi Baccar, Mariem Lefki, Marjorie Grzeskowiak
1192	Boot Time Analyzes of DM-verity with and without Initramfs on NXP RDB2 Board with Wind River Linux LTS23	**Irfan Karazor**

NOTE :

HALL - F

Session F-I: Power Electronics & Smart Grid
09:30-11:30

Coffee Break 11:30-11:45

Session F-II: Robotics
11:45-13:30

Lunch 13:30-14:30

Poster Session 14:30-15:00

Session F-III: Software Eng.
15:00-16:45

Coffee Break 16:45-17:00

Session F-IV: Mathematical Modelling
17:00-18:45

09:30-11:30	Session F-I: Power Electronics & Smart Grid Session Chair: Florimond Gueniat

P. ID	TITLE	AUTHORS
183	Discovery and Stability Analysis of Buck Converter Using Sparse Identification of Nonlinear Dynamics	**Abdullah Alassaf**
661	Optimize Power Module Sintering Methodology for High Thermal Conductivity and Reliability	Jen-Kuang Fang, Jen-Chun Chen, Pai-Sheng Shih, **Kuan-Fu Chen**
668	A Ripple-Free Semi-Controlled Interleaved Current-Fed AC-DC Resonant Converter	**Waqar Uddin**, Kamran Zeb, Muhammad Khalid
852	Performance Analysis of Model Predictive Control and Perturb & Observe MPPT for Solar PV Systems	Rajitha Wattegama, **Michael Short**, Geetika Aggarwal, Raj Naidoo
945	Highly Efficient Soft-Switched Quasi-Single-Stage AC-DC resonant Converter for EV Charging	**Kamran Zeb**, Waqar Uddin, Muhammad Khalid
1041	High Frequency Induction Heating via Double Helical Coil Using IGBTs in Full Bridge Inverter	**Juthathip Haema**, Rattanakorn Phadungthin, Nitikorn Youngsuwan, Tanupat Peamnoree
1630	Study of Fast Charging Profiles for Lithium-ion Battery in Electric Vehicle Applications	**Fahem Kawther**, Azzouz Yacine, Kadi Moncef

11:45-13:30	Session F-II: Robotics Session Chair: Kenji Kimura

P. ID	TITLE	AUTHORS
82	Analysis of Roller Arrangement of Omnidirectional Mobile Robot with Three Rollers	**Kenji Kimura**, Kazuo Ishii
83	Analysis of Sphere Rotational Motion Adapted Three Driven Omni Rollers in Forward Kinematics	**Kenji Kimura**, Takumi Ueda
137	Impression Evaluation of CG images depicting a near-future living space with multiple moving robots (through a comparison of designs that apply beats in Noh and classical music)	**Shinobu Nakagawa**
202	Development and Balancing Control of a Unicycle Robot Using Linear Quadratic Regulator and Deterministic Policy Gradient	Nabeel Ahmad Khan Jadoon, **Manukid Parnichkun**
1348	Attitude Estimation for Cardan-Connected End-Effector of an Underwater Robot by Integrating SAM-based Segmentation and Neural Network	**Ying Qu**, Michael Blom Hermansen, Thomas Ebel
1432	Multi-objective optimization of a Honeycomb Heat Sink Using Thermal Exchange Optimization Algorithm	**L.K. Tartibu**
1433	Cuckoo Search-Based Optimization of a Compact Solar PV-Thermal Water Collector	**L.K. Tartibu**

13:30-14:30

POSTER SESSION

14:30-15:00

15:00-16:45 — **Session F-III: Software Eng.**
Session Chair: Irani de Alwis

P. ID	TITLE	AUTHORS
123	An Application of Incremental Compression on Compressed Files	**Bekir Tevfik Akgün**
380	Introduction to Analytical Software Engineering Design Paradigm	**Tarik Houichime**, Younes El Amrani
416	Development of a Virtual Reality Software for Visualizing Mass Spectrum Fragmentation of Simple Molecules in Organic Chemistry	**Saeid Samadidana**, Anuradha Pathiranage, Cody L. Covington, Kaleb Scott
479	Bridging the Domain Language Divide in Automatic Multiplatform Single Page Application Generation with Knowledge Graph	Le Yen Chi Pham, Duc Minh Le, **Minh Khue Hoang**, Dang Duc Anh Nguyen, Quang Tung Ta
529	A Systematic Review of Photogrammetry for Real-Time 3-Dimensional Object Creation from 2-Dimensional Images or Video using Virtual Reality Head-Mounted Displays	**Johannes Moolman**, Fiona Boyle, Joseph Walsh
860	TOPIC ANALYSIS OF SOFTWARE ENGINEERING RESEARCH IN TURKEY	İremsu Hırık, **Ahmet Coşkunçay**
1408	A Traditional Query-by-Humming Song Recognition System for Underrepresented Languages - A Methodological Critique	**Irani De Alwis**, Lakshan Vithana, K P M K Silva, Pabasara Jayawardhana

COFFEE BREAK (16:45-17:00)

17:00-18:45	Session F-IV: Mathematical Modelling Session Chair: Mohamed Omari

P. ID	TITLE	AUTHORS
187	Semi-discretized Numerical Methods Applied to a Class of Weakly Singular Integro-differential Equations with Nonlinear Variable Time States	**Shihchung Chiang**
892	Numerical Modeling of Oceanic Lightning's Electromagnetic Fields in Coastal Environments	**Mohamed Omari**, Abdenbi Mimouni, Imane Ghlib
1267	Vibration Analysis of Vessel Floating Raft System Based on Multi-body Dynamics Simulation	**Linnan Li**, Zheng Li, Yongqi Sheng
1363	A Novel Approach for Automated Malware Detection Using One-shot NAS and Bayesian Optimization	**Khushboo Jain**, Ambika Aggarwal, Ashutosh Bhatt
1964	Multi-Receiver Wireless Power Transfer	Bandile Mdluli, **Oluwafemi Oni**
1304	Enhanced Cooperative Driving Strategies in CyberPhysical Systems	Jie Zhang, **Taihao Li**, Thomas Vietor, Xiaobo Liu-Henke

NOTE :

HALL - G

Session G-I: Computer Eng. & Communications
09:30-11:30

Coffee Break 11:30-11:45

Session G-II: Mechatronics & Control Sys.
11:45-13:30

Lunch 13:30-14:30

Poster Session 14:30-15:00

Session G-III: IoT & Deep Learning
15:00-16:45

Coffee Break 16:45-17:00

Session G-IV: Mixed - I
17:00-18:45

09:30-11:30	Session G-I: Computer Eng. & Communications Session Chair: Gennadiy Churyumov

P. ID	TITLE	AUTHORS
198	Using a Varactor for Frequency Tuning a Ku-Band Low-Voltage Double-Output Magnetron	**Gennadiy Churyumov**, Lijia Chen, Ihor Kuzmychov
665	Design of Radio Frequency Amplifier for Maximum Gain	**Zephania Philani Khumalo**, Aritha Pillay.
617	Edge-based SDN-enabled In-Network Interval Caching with Extra Blocks for Video Streaming Services	**Wei-Kuo Chiang**, Chih-Chi Hu
678	Security Concerns of South African Home Fibre Users: A Thematic Content Analysis	**Luzuko Tekeni**, Reinhardt A. Botha
833	Prime number factorization with the structured random lights	**Chunhao Liang**, Pujuan Ma
756	Fresh, Stale,Spoiled Egg Detection Device	Rumeysa Yazıcı, Sena Avcu, **Sude Yazıcı**, Hasan Avcu
694	Indigenous Language Pitch Analysis Using Pitch Art and Fuzzy Inferencing	Hari Krishnan Raj Kumar, Nidhi Kumar, **Min Chen**

COFFEE BREAK (11:30-11:45)

11:45-13:30	Session G-II: Mechatronics & Control Sys. Session Chair: Petru Urs

P. ID	TITLE	AUTHORS
819	Green Networking Security in Nuclear Electric Power Plants: Balancing Sustainability and Cybersecurity	**Petru Urs**, Vlad Muresan
913	Sled Dog Optimization Algorithm Based PID/TID Controller for Load Frequency Control in Interconnected Power Systems	**Cenk Andic**, Belgin Turkay, Ali Ozturk
1407	Securing Network Systems in Metallurgical Furnace Operations: Addressing Cyber and Physical Threats	Petru Urs, **Vlad Muresan**
38	Conceptual Design of a Single Rotor Unmanned Aerial Vehicle for Water Health Monitoring	Miguel Juarez Monroy, **Afshin Rahimi**
566	An Ultra-Compact OOK Transmitter and Receiver	**Joseph Demferlee O. Tatel**, Sheng–Lyang Jang
677	Buildup of Conductive Networks in Liquid Silicone Rubber Bioelectrode by Heat Treatment for Microelectronic Devices	Jen-Kuang Fang, **Jen-Chun Chen**, Pai-Sheng Shih, Wen-Kuang Hsu

13:30-14:30

POSTER SESSION

14:30-15:00

15:00-16:45

Session G-III: IoT & Deep Learning
Session Chair: Ryan Alturki

P. ID	TITLE	AUTHORS
95	5G Internet of Things Learning Driven: Performance Analysis of Millimeter Wave Technologies for Communication Space Processing	Salman Khan, **Ryan Alturki**, Amr Munshi, Mohammed J. Alghamdi, Salman A. Alqahtani, Awais Ahmad
900	Smart Lamppost Display System for Microclimate Information in Smart Cities: Enhancing Outdoor Comfort	Gege Qi, **Wenjing Yang**
1364	From Technology to Humanity: A Multidimensional Exploration of Smart Waste Systems in Urban Environmental Management	Yichen Shi, **Wenjing Yang**
1176	EANet: Expert Attention Network for Online Trajectory Prediction	**Pengfei Yao**, Min Shi, Jingkai Sun, Zhaoqi Wang, Tianlu Mao
907	Integration of Lane-Accurate Visual Localization into Test Vehicles for Application in Real and Virtual Environments	**Xiaobo Liu-Henke**, Taihao Li, Tianchen Hang

COFFEE BREAK (16:45-17:00)

17:00-18:45	Session G-IV: Mixed - I Session Chair: Dan Gota

P. ID	TITLE	AUTHORS
207	Dynamic Threshold Adjustment for Fingertip Touch Detection based on RGB-D Imaging	Gege Wang, **Yanyu Lu**, Shan Fu
578	Exploration of Depth Water Trees Detection under AC Voltage	**Madjid Meziani**, Abdoulouahab Mekhaldi
688	Examining the Impact of Social Media on Consumer Purchasing Behavior	Sinan Gökalp, **Duygu Fındık-Coşkunçay**
789	An Alternative Way of Testing Embedded Hardwares Using Operating System	**Umut Toksoy**, Fecir Duran
964	Ionospheric VLF Radio Reflection Analysis System	**George Dan Chita**
302	Repair Index: A Tool for Assessing PCBA Repairability During the Design Phase	Kevin Boissie, **Jean-Baptiste Prono**, Mickael Marzeliere, Primitivo Aznar
1382	The Lower Bound Restriction of an Unrestricted Frequency Changer	**Hendrick Musawenkosi Langa**
1791	Reinforcement Learning-based PID Control of Rössler Oscillator	Devasmito Das, **Ina Taralova**, Tsonyo Slavov, Jean Jacques Loiseau, Manoj Pandey

NOTE :

HALL - H

Session H-I: Deep Learning
09:30-11:30

Coffee Break 11:30-11:45

Session H-II: Big Data & Cryptography
11:45-13:30

Lunch 13:30-14:30

Poster Session 14:30-15:00

Session H-III: Mixed - II
15:00-16:45

Coffee Break 16:45-17:00

Session H-IV: Mixed - III
17:00-18:45

09:30-11:30	Session H-I: Deep Learning Session Chair: Sujata Dash

P. ID	TITLE	AUTHORS
504	Optimized Machine Learning Classification of Type 2 Diabetes Using Weight-Based Feature Selection	K. Rupabanta Singh, **Sujata Dash**, N. Premlata Devi,Ankita Dash
513	Investigating the application of CNN's deep learning models to improve phishing detection.	Mahlogolo Madihlaba, **Stones Dalitso Chindipha**
705	Electric Vehicle Bidirectional Charging Control with Deep Reinforcement Learning	**Chiara Gei**, Jürgen Scherer, Gleb Radchenko
924	AI-Powered Smart Cart: Enhancing Retail Efficiency with Deep Learning and Edge Computing	**Alina Aurica**, Vlad-Cristian Miclea
942	iTBG-Net: Enhancing Short-Term Renewable Energy Forecasting with Incremental Deep Learning	**Aftab Hussain**, Alois Ferscha
1734	Context-Aware Mental Health Diagnostics Using Bi-LSTM in Higher Education: A Survey-Based Study in Sultanate of Oman	**Sarachandran Nair**, Praseeda Manoj, Reshmy Krishnan, Khalid Al Salmani
1782	Learning rPPG without Facial Identity	**Gwanghee Lee**, Sungyoon Jeong, Kyoungson Jhang
1858	A General Framework for Implementing Metaheuristics in Neural Network Training	**Yoqsan Angeles**, Luis Ramos, Hiram Calvo, A´ Lvaro Anzueto

COFFEE BREAK (11:30-11:45)

11:45-13:30	Session H-II: Big Data & Cryptography Session Chair: Babak Ranjgar

P. ID	TITLE	AUTHORS
930	UDACL: Unsupervised Domain Adaptation using Contrastive Learning for Fault Detection	**Heemin Kim**, Yun-Young Hwang, Jiseong Son, Minyoung Lee
497	Electric Vehicles Charging Stations Distribution Equity Assessment Using GIS and Gini Coefficient	**Babak Ranjgar**, Alessandro Niccolai, Sonia Leva
1378	A Comparative Study of Explainable Machine Learning Models for Corporate Credit Scoring	**Lihchyun Shu**, Chiacheng Su, Joseph Shu
1710	Navigating the digital age: challenges and strategies to combat misinformation in South Africa	**Lungisani Ndlovu**
322	VeTARA: A Vessel Environment Threat Analysis and Risk Assessment Framework	**Hyoseok Lim**, Yonghun No, Yonghyun Jo
413	Preventative Exploitation of Computer Systems Using Binary Diversification	**Christpher Stricklan**, Christophe Curtis, Gilbert Carranza, Christopher Blackwell, Luis Abraham, Tj O'Connor

13:30-14:30

POSTER SESSION

14:30-15:00

15:00-16:45

Session H-III: Mixed - II
Session Chair: Blaise Ravelo

P. ID	TITLE	AUTHORS
749	Lightweight LoRa Privacy and Security for Application in Smart Grid	**Philani Khumalo**
1476	Loading Shared Objects on Linux Without the dlopen API: A Fileless Approach	Ward Zahran, Mohammed Atoum, **Mohammad Alnabhan**
293	Technical-Economic tool for electrical CAPEX estimation of LFAC transmission system interconnecting Offshore Wind Farms	Leonardo Pedroche Folgoso, Gustavo Catusso Balbinot, Muhammad Zubair, **Renato Machado Monaro**
540	Electrochemical characteristics based on K-BESS system unit verification data	**Jiyeon Kim**
710	A Novel Series-Parallel DC Collection Topology and Stability Analysis for All-DC Offshore Wind Power System	**Peiqi Zhao**, Yongqing Meng, Jiaao Ma, Shuhao Yan, Tianyi Wang, Xiuli Wang
1731	Stability Analysis of AC Microgrids with Virtual-Oscillator-Controlled Sources and Constant Power Loads	Mathias Mahdavyfakhr, Seyyedmilad Ebrahimi, **Juri Jatskevich**
670	Experimental Study of Magnetic Near-Field Microstrip Electronic Probe for PCB EMC Emission Measurement	Hongchuan Jia, Fayu Wan, Vladimir Mordachev, Jerome Rossignol, Glauco Fontagalland, Nour Mohammad Murad, **Blaise Ravelo**
1658	Integrating the Three Regulations of Learning: A Bibliometric Analysis of Research Trends	**Apichaya Khwankaew**, Jirarat Sitthiworachart

COFFEE BREAK (16:45-17:00)

17:00-18:45	Session H-IV: Mixed - III Session Chair: George Flutur & Abdallah Al Ghazi

P. ID	TITLE	AUTHORS
905	Reinforcement learning for gliding projectile guidance and control	**Cahn Joel**, **Thomas Antonin**, Pastor Phillipe
984	A Smart Grid Ontology Model with Bidirectional Electric Vehicle Chargers for Demand Response	Johannes Koch, **Frank Wawrzik**, Hagen Heermann, Megan Manly, Christoph Grimm
1711	Hardware Implementation of Steganography System Based on FPGA	Liqaa N. Sabeeh, **Mohammed A. Al-Ibadi**
194	Parallel ConvAttention net for Hierarchical Image Classification of Household Images	**Divya Arora Bhayana**, Om Prakash Verma
568	Forecasting the LNG Manufacturing Price Index From a Supply and Demand Perspective: The Case of Peoples Republic of China	Kai Pan, **Xiang Xie**, Tian Zhang, Kejiang Han, Mingfei Wang, Liming Huang, Jiayu Guo, Yuantao Zhang, Haiwei Luo, Zhixuan Lan
244	Development of a Remote-Controlled Boat for Real-Time Water Quality Monitoring, Bathymetry, In-Situ Sampling in Dams and Lakes of Mexico	**Roberto Ivan Villalobos-Martínez**, Jean Francois Más, Azucena Pérez-Vega, Antonio Ruiz Verdú, Rosaura Páez Bistrain, Luis Miguel Morales Manilla, Ivan Ayala Mariscal, Rodolfo Villalobos Martínez
746	Spectral Signature Characterization of Ocean Plastics Using PRISMA L1 Hyperspectral Data	**Tamuka N. Samuriwo**, Innocent E. Davidson, Oluwaseyi P. Babalola, Conrad A.J. Sparks, Lamine Dieng
1724	Adaptive Control and Simulation Framework for Enhanced Piezoelectric Energy Harvesting Using a Transformer-Aided Rectifier	**Abdallah Al Ghazi**

NOTE :

Posters (1/3)

PAPER ID	TITLE	AUTHORS
139	System Modeling of Multi-parameter Measurements by Magnetostrictive Sensors for Preliminary Analysis of IVR Phenomena	**Kil Mo Koo**,Soo Min Park,Chul Hoon Park,Kwang Sik Yoon
171	Continuous Power Management Strategy of Distributed DC Microgrid Based on Detection of FDI Attack and Sensor Fault Using Kalman Filter	Hieu Xuan Nguyen, Dat Thanh Tran, Min Kang, Seung-Yong Yeo, **Kyeong-Hwa Kim**, Myungbok Kim
195	Towards Romanian Smart-Grid Through Demand-Response and Machine Learning Models	Vlad Ungurean, **Mihail-Bogdan Carutasiu**
199	AI-Powered Service-Based ADAS Systems: A Preliminary Systematic Literature Review	Duc Le Minh, **Van Dai Pham**, Abdullateef Oluwagbemiga Balogun, Tom Brijs, Geert Wets, Thi M.D. Tran
203	Sensorless Control of SRM Drives Using Phase-Locked Loop Based Newton-Raphson Method	Dexu Lv, **Wen Ding**, Zhanyuan Su, Da Wang, Jiaxing Wang, Jun Yang
229	Design and Development of Low Cost Electrospinning System for Biomedical Application	N.Nasri, **M.Kihel**, R.Soudous, H.Bousba, S.Sahli
260	Design and Experimental Validation of a Hybrid DC Power System for Small Ships	**Dong-Wook Kim**, Duck-Shick Shin, Hyun-Chang Cho, Sian Yoo
320	Implementation and Analysis of Hybrid Transformer-Based Techniques for Crosslanguage Code Conversion and Acceleration of Hardware SoC Development	Yevhenii Holopotyliuk, **Vladyslav Romashchenko**, Michael Brutscheck, Ingo Chmielewski
364	Understanding Anomaly Detection in Industrial Robots: SHAP and ICE Analysis	Ji-Yeon Kim, Ki-Hwan Kim, Young-Jin Kang, **Seok Chan Jeong**

Posters (2/3)

PAPER ID	TITLE	AUTHORS
748	Robustness Improvement of Predictive Current Control using Inductance Calibration for PMSM Drives	**Minggang Sheng**, Anwen Shen, Xin Luo And Qipeng Tang
752	Intelligent Lighting Space Design with 3D Modeling and Adaptive Control for Optimizing Circadian Rhythm Based on WELL Standards	**Yusen Lin**, Lung Hsien Lin, Jing Yao Chen, Pao Ni Yang
759	Improved Open-loop Control for Rapid Power Flow Redistribution in Meshed MVDC Grids in Response to Ground Faults	**Tuan-Minh Nguyen**, José-Luis Marqués-Lopez, Claus Hillermeier
760	Application of PMV/PPD in Naturally Ventilated Buildings in Taiwan: A Case Study of a Passive House in Anping, Tainan	**Pao-Ni Yang**,Yu-Sen Lin
766	An Efficient Homomorphic Encryption Technique for Privacy-Preserving Machine Learning Inference	**Sumin Lee**, Jaeky Oh, Byoungwoo Yoon, Min-Wook Jeong, Jongho Shin
767	Novel Triple-metal Gate on Gate all around Tunnel FET	**Yu-Hsien Lin**, Jian-Jun Chen, Chih-Cheng Chin
805	ElGamal Digital Signature Scheme in a Matrix Finite Field	Alimzhan Baikenov, **Emil Faure**, Anatoly Shcherba, Artem Lavdanskyi, Sakhybay Tynymbayev, Viktor Khaliavka, Olga Abramkina
870	A Study on AI-Based Media Art Creation methodology for Solving Environmental Ecosystem Sustainability Issues	**Jungin Lee**, Chankeu Park, Sooyeon Lim
939	Examining the Drivers of Electricity Consumption in East Africa: A Panel Data Analysis of Rwanda, Tanzania, Kenya, and Uganda	**Daniel Mburamatare**, Joseph Akumuntu, Andre Rukeratabaro

Posters (3/3)

PAPER ID	TITLE	AUTHORS
1046	Enhancing Energy Trading in Saudi Smart Cities via Evolutionary Deep Learning	**Abdulaziz Almalaq**
1188	Autism Diagnostics: Analyzing Eye-Tracking Data with Neural Networks	**Yunqi Le**, Xue-Jun Kong, Mikhail Y. Shalaginov, Anna Leonenko, Tingying Helen Zeng
1237	Thermal Performance Analysis of Different PCM-Based Thermal Storage Systems for Passive Heating and Cooling	Muhammad Dail, Syed Murawat Abbas Naqvi, **Young Won Kim**
1313	Simulation of CIGS and Perovskite Solar Cells and Analysis of Their Tandem Combination with Integration of Nanorods	Kosar Mohammadi, **Farhad A. Boroumand**
1377	Driving Style Classification with Explainable Boosting Machine	**Gye-Seong Lee**, Hyun-Chang Cho, Hak-Jun Kim
1443	Predicting Marine Microplastic Density via Spatiotemporal Deep Learning	**Kayla Peng**, Tingying Helen Zeng, Elizaveta Tremsina, Mikhail Y. Shalaginov
1549	Modulation Algorithm of DC/DC Converter for Series Arc Fault Detection and Extinguishing	Mina Kim, **Hwa-Pyeong Park**
1674	An Energy-Saving Study on Enhancing Building Envelope Insulation Performance in Subtropical Countries under Climate Change	**Pei-Ting Wu**, Yu-Sen Lin
197	Hate Crimes in America: Statistical and Geographical Analysis using Python	Sowkya Kammampati, Keerthi Reddy Nagireddy, **Samah Senbel**
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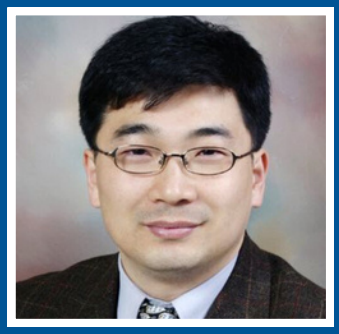
KEYNOTE



Prof. Dr. Hee-Cheol Kim
Inje University, South Korea

Dr. Hee-Cheol Kim Ph.D. in Numerical Analysis and Computing Science from Stockholm University, Sweden. He is a senior professor in the Department of Computer Engineering and as the Head of the Institute of Digital Anti-Aging Healthcare at Inje University, South Korea. He is the President of the Korea Institute of Information and Communication Engineering (KIICE) research society and the Co-Chair of the IEEE International Conference on Advanced Communication Technology (ICACT). He also leads the Smart Computing Research Laboratory. His research interests encompass medical image processing, pathology image analysis, natural language processing, computer vision, text mining, bioinformatics, the metaverse, blockchain, and federated learning.

Title: Revolutionizing Healthcare with AI: Innovations in Medical Imaging and Clinical Decision-Making

Abstract: Artificial Intelligence (AI) is revolutionizing healthcare by enhancing diagnostic accuracy, optimizing treatment strategies, and improving patient outcomes. This keynote will explore cutting-edge AI techniques applied in medical imaging and clinical decision-making, focusing on deep learning, computer vision, natural language processing (NLP), and federated learning. Convolutional Neural Networks (CNNs) and Vision Transformers (ViTs) have significantly advanced automated disease detection and segmentation in radiology and digital pathology, improving efficiency and consistency. Generative AI techniques, such as diffusion models and generative adversarial networks (GANs), enable data augmentation and synthetic image generation, addressing challenges like data scarcity and bias. Large language models (LLMs) and NLP techniques play a crucial role in clinical text analysis, aiding in automated medical report generation and disease prediction from electronic health records (EHRs). Additionally, federated learning ensures privacy-preserving AI model training across multiple institutions, fostering collaboration while maintaining data security. This keynote will discuss these AI-driven advancements, explore challenges such as interpretability, bias, and regulatory compliance, and highlight future directions for AI-powered healthcare.

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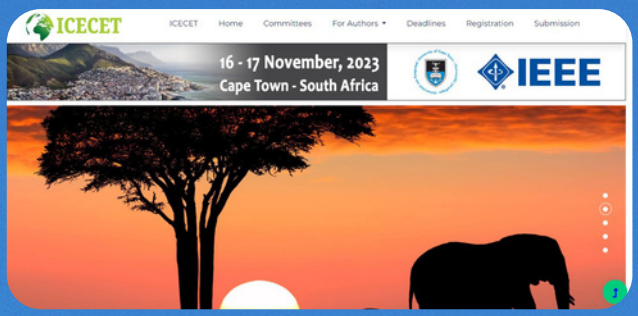

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