



The 2nd International Conference on the Emerging Industrial Revolution (ICEIR 2025)

PROGRAM SCHEDULE

Nam Can Tho University, October 17th, 2025
Address: No 168, Nguyen Van Cu Ext Street, An Binh Ward, Can Tho City, Vietnam

TIMELINE	ACTIVITIES	MC/CHAIRS	PLACE
	Date: 17 October 2025		
	Opening Session		
7:30 - 8:00	Registration		Building E
8:00 - 9:30	Welcome messages from Nam Can Tho University, Vietnam	MC	Hall E2
	Opening Speech by Dr. NGUYEN Van-Quang - <i>Rector of Nam Can Tho University, Vietnam</i>	MC	
	Introduction Video	MC	
	MOU Signing Ceremony between <i>Nam Can Tho University</i> with <i>Mahatma Gandhi University, India</i> ; <i>VIT Bhopal University, India</i> ; <i>Visvesvaraya National Institute of Technology, India</i> ; <i>Symbiosis Institute of Technology, India</i> .	MC	
	Conference Report by Prof. Sajimon Abraham - <i>On behalf of the ICEIR 2025 General Chairs</i>	MC	
	<i>Group Photo</i>	MC	
	Plenary Session		
9:30 - 10:00	Keynote Talk 1: “Industrial Intelligence: The New Era of AI-DrivenTransformation” by Prof. Ketan Kotecha - <i>Symbiosis Institute of Technology, India</i>	Prof. Kishor Bhurchandi - <i>Visvesvaraya National Institute of Technology, India</i> and Prof. Dais George - <i>Mahatma Gandhi University, India</i>	Hall E2
10:00 - 10:30	Keynote Talk 2: “New Trend of AI Driven Hybrid security coding” by Prof. SiChoon Noh - <i>JSN Researching Center, Korea</i>		
	<i>Morning Tea Break</i>		Room E6.01
11:00 - 11:30	Keynote Talk 3: “Computer Science Research Challenges in the AI Era” by Prof. Sajimon Abraham - <i>Mahatma Gandhi University, India</i>	Prof. Ketan Kotecha - <i>Symbiosis Institute of Technology, India</i> and Assoc. Prof. Do Van Xe - <i>Nam Can Tho University, Viet Nam</i>	Hall E2
11:30 - 12:00	Keynote Talk 4: “Deep Learning for Computer Vision” by Prof. Kishor Bhurchandi - <i>Visvesvaraya National Institute of Technology, India</i>		
12:00 - 13:00	<i>Buffet</i>		Room E6.01

	Parralel Sessions		
13:00 - 16:00	Presentation Panels	<i>Please check the session program sheet</i>	
	Session 01: Data Science & AI 1		Hall E2
	Session 02: Data Science & AI 2		Hall E2
	Session 03: Data Science & AI 3		Room E5.08
	Session 04: Data Science & AI 4		Room E5.08
	Session 05: Software Engineering and Information System		Room E5.09
	Session 06: Network and Communications		Room E5.09
	Session 07: Digital Economy & Digital Transformation		Room E5.10
	Session 08: Hardware, Electrical, Electronics, and Semiconductor Technology		Room E5.10
	Session 09: Image, Signal and Natural Language Processing 1		Room E5.11
	Session 10: Image, Signal and Natural Language Processing 2		Room E5.11
	Session Online		Zoom - Online meeting room
	Closing session		
16:00	Best Paper Awards by Prof. Sajimon Abraham - <i>On behalf of the ICEIR 2025 General Chairs</i>	MC	Hall E2
	Closing Remarks by Assoc. Dr. Dao Duy Huan - <i>Vice-Rector of Nam Can Tho University, Vietnam</i>	MC	
17:00	GALA DINNER	<i>Invited members</i>	DNC Restaurant

For further details: Contact us via email: ttphanh@nctu.edu.vn (Tran Thi Hong Hanh, Secretariat of ICEIR 2025)

Website: www.iceir.nctu.edu.vn

SUPPORTED BY



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ACTIVITIES		AUTHORS	INFORMATION
Session 1: Data Science & AI 1			
13:00 - 14:30	ID46: AI-Driven Trajectory Intelligence and Human-Centric Digital Transformation for Smart Mobility in Industry 5.0	Praveen Kumar V. S. (Mahatma Gandhi University)*; Sajimon Abraham (Mahatma Gandhi University); Sijo Thomas (Mahatma Gandhi University)	Chairs: Prof. Ketan Kotecha - Symbiosis Institute of Technology, India and Dr. Phan Thuong Cang - Can Tho University, Vietnam Place: Hall E2, Building E
	ID48: Robust Lung Nodule Classification on Imbalanced CT Datasets via Transfer Learning and Data Augmentation	Lenh Pham (FPT University Can Tho)*; Nhu Huynh Thi Le (FPT University); Thu Anh Ngoc Le (FPT University); Huan Phong Thai (FPT University)	
	ID85: Customer Churn Prediction in Vietnam’s Enterprise Market Using Machine Learning Methods in a Streaming Data	Nguyen Hoang Anh Tuan (Nam Can Tho University); Tran Binh An (Adhightech Ltd.); Nguyen Duy (Adhightech Ltd)*;	
	ID45: Process Capability Indices - A Tool for Quality Excellence in Medical Industry (ONLINE)	Linto Abraham (Government Medical College, Kottayam)*; Rimsha H (Devaswom Board Pampa College (under Mahatma Gandhi University), Parumala,Thiruvalla); Dais George (Rajagiri College of Social Sciences (under Mahatma Gandhi University), Kalamassery)	
Session 2: Data Science & AI 2			
	ID54: Acceptance Sampling and Reliability Assessment Using the Poisson-Exponentiated Weibull Distribution: A Novel Statistical Framework for Industrial Quality Control	Dais George (Rajagiri College of Social Sciences (Autonomous), Kalamassery)*; Alphonsa George (School of Data Science, Mahatma Gandhi University, Kottayam)	Chairs: Assoc. Prof. Nguyen Thai

ACTIVITIES		AUTHORS	INFORMATION
14:30 - 16:00	ID55: Emotion Recognition in Speech Using CNN-LSTM Networks with Data Augmentation and Optimization Techniques	Nhan Huu Tran (FPT University)*; Thu Anh Ngoc Le (FPT University); Nhu Huynh Thi Le (FPT University); Huan Phong Thai (FPT University); Lenh Cong Phan Pham (FPT University)	Assoc. Prof. Nguyen Thanh Nghe - Can Tho University, Vietnam and Assist. Prof. Abseena Habeeb - Mahatma Gandhi University, India Place: Hall E2, Building E
	ID69: Heart Failure Diagnosis Enhanced by Sliding Window Continuous Learning	Pham Gia Minh (Nam Can Tho University); Nguyen Duy (Adhightech Ltd)*; Vo Khuong Duy (Adhightech Ltd.)	
	ID51: KNN-Based Framework of Machine Learning for Automating Candidate (ONLINE)	Priya Dongare-Jadhav (Symbiosis Pune)*; Kshamata Chimule (SYMBIOSIS Pune)	
Session 3: Data Science & AI 3			
13:00 - 14:30	ID58: Parameter Efficient Finetuning in Large Language Models for Efficient Business Data Summarization	Faizal B (Mahatma Gandhi University)*; Sajimon Abraham (Mahatma Gandhi University); Sijo Thomas (Mahatma Gandhi University)	Chairs: Prof. Sajimon Abraham - Mahatma Gandhi University, India and Assoc. Prof. Doan Thanh Nghi - An Giang University, Vietnam
	ID38: A Novel Automated System for Collecting and Labeling Insect Image Data	Thanh-Nghi Doan, Van-Si Tran, Huynh-Phuc, Tan-Tai Nguyen, Thanh-Loc Pham, Thuy-Trang Bui-Thi (An Giang University)	
	ID39: Artificial Intelligence and Corporate Social Responsibility: Promoting Environmental Sustainability in the Cement Industry	Tran Anh Quang, Le Quang Anh, Bui Manh Hung, Mai Thuy Linh (ULSA)*	
	ID73: Reinforcement Learning (RL) in Training Policy Models for Chess	Huong Pham (Trường Đại học Cần Thơ)*	Place: Room E5-08, Building E

ACTIVITIES		AUTHORS	INFORMATION
Session 4: Data Science & AI 4			
14:30 - 16:00	ID57: Application of convolutional neural networks approaches for early fault transformer detection	Quoc-Bao Truong (CanTho University)*; Hoang-Dau Le (Duyen Hai Power Generation, Tra Vinh ward, Vinh Long province); Ba-Duy Nguyen (Can Tho University of Technology (CTUT), Cai Khe ward, Can Tho province); Thanh-Nhan Dinh (Can Tho University of Technology (CTUT), Cai Khe ward, Can Tho province); Hoang-Dang Le (Can Tho University (CTU), Ninh Kieu ward, Can Tho province); Quoc-Dinh Truong (CanTho University)	Chairs: Prof. Kishor Bhurchandi - Visvesvaraya National Institute of Technology, India and Dr. Duong Van Hieu - Tien Giang University, Vietnam <i>Place: Room E5-08, Building E</i>
	ID59: An Enhanced Custom Convolutional Neural Network Approach for Lung Nodule Classification in the Era of Industry 4.0	Sijo Thomas (Mahatma Gandhi University,Kottayam)*; Praveen Kumar (Mahatma Gandhi University,Kottayam); Faizel Basheer (Mahatma Gandhi University,Kottayam); Dr. Sajimon Abraham (Mahatma Gandhi University,Kottayam)	
	ID70: Evolving Algorithms for Early Diagnosis and Risk Prediction of Kidney Diseases	Nguyen Minh Tuong (Nam Can Tho University); Nguyen Duy (Adhightech Ltd)*; Vo Khuong Duy (Adhightech Ltd)	
	ID87: Optimizing Campus Security through Integrated AI Vision Systems: Insights from Deployment for a Smart Campus Environment in a University (ONLINE)	Le Lanh (Dong Nai Technology University)*; Quach Thi Bich (IFaculty of Information Technology, Dong Nai Technology University, Vietnam); Nguyen Khanh An (Binh Thuan College, Phan Thiet City, Vietnam); Le Thanh Lanh (IFaculty of Information Technology, Dong Nai Technology University, Vietnam)	

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Session 5: Software Engineering and Information System			
13:00 - 14:30	ID32: AI-Integrated Vehicle Management System	Vo Man (Nam Can Tho University)*; Phuc Vo (Nam Can Tho University); Xuyen Dao (Cuu	Chairs: Assoc. Prof. Nguyen Thai Son - Tra Vinh University, Vietnam and Dr. Sijo Thomas - Mahatma Gandhi University, India Place: Room E5-09 , Building E
	ID17: Clean Food Supermarket Management System Integrated Chatbot to Support Online Customers Using RAG Technology	Nguyen Khiem (Nam Can Tho University), Diem Trinh Bui Thi (Nam Can Tho University)	
	ID29: Blockchain-Based Degree and Certificate Management System	Cường Lê (Đại học Nam Cần Thơ)*, Huu Tri Huynh Vo (Nam Can Tho University)	
	ID33: E-Learning System Integrated With A Chatbot Using RAG And Qdrant Technologies	Toan Le (Nam Can Tho University)*; Phuc Vo (Nam Can Tho University); Xuyen Dao (Cuu Long University)	
Session 6: Network and Communications			
14:30 - 16:00	ID9: Simulation of IoT System Management for Intelligent Traffic	Nguyen Chinh (Nam Can Tho University)*; Minh Doan Hoa (Nam Can Tho University)	Chairs: Prof. Vilas R. Kalamkar - Visvesvaraya National Institute of Technology, India and Dr. Nguyen Hong Hanh, Can Tho University of Technology, Vietnam
	ID44: A Statistical Approach for Web Traffic Analysis - A Catalyst for Smart Industry	Leo Abraham (Trellix)*; Dais George (Rajagiri College of Social Sciences (under Mahatma Gandhi University), Kalamassery); Rimsha H (Devaswom Board Pampa College (under Mahatma Gandhi University), Parumala,Thiruvalla)	
	ID43: Indoor Spatial Modeling: An Open API and Data Model Implementation of the OGC IMDF Standard	Vu Nguyen Hoang (Can Tho University); Nghia Nguyen Dai (Can Tho University Software Center, Can Tho University); Tri Ho Dinh (College of Information and Communication Technology, Can Tho University); Tran Nguyen Thi Kim (College of Information and Communication Technology, Can Tho University); Thai Minh Truong (College of Information and Communication Technology, Can Tho University); Viet Truong Xuan (College of Information and Communication Technology, Can Tho University)*	

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	ID61: A Scalable Architecture for Semantic Observations from Camera Streams in IoT Environments	<i>Tuong Nguyen (College of Information and Communication Technology, Can Tho University, Ninh Kieu, Can Tho); Nghia Nguyen Dai (Can Tho University Software Center, Can Tho University, Ninh Kieu, Can Tho); Thien Pham Vo Cong (College of Information and Communication Technology, Can Tho University, Ninh Kieu, Can Tho); My Nguyen Thi Tra (College of Information and Communication Technology, Can Tho University, Ninh Kieu, Can Tho); Loc Cu Vinh (College of Information and Communication Technology, Can Tho University, Ninh Kieu, Can Tho); Viet Truong Xuan (College of Information and Communication Technology, Can Tho University, Ninh Kieu, Can Tho)*</i>	<i>Place: Room E5-09, Building E</i>
Session 7: Digital Economy & Digital Transformation			
13:00 - 14:30	ID34: Excessive Dependence of Vietnamese Students on AI Tools in Academic Tasks: A Systematic Review	<i>Toan Nguyen (Nam Can Tho University); Ngan Hong (Nam Can Tho University)*; Quyen Nguyen (Nam Can Tho University)</i>	Chairs: <i>Prof. Ryu Deok-Ki, University of Suwon, Korea and Assoc.Prof. Nguyen Tri Khiem - Nam Can Tho University, Vietnam</i>
	ID37: An Information System For Surveying Digital Transformation Readiness Of Small and Medium Enterprises In An Giang Province	<i>Thanh-Nghi Doan, Minh-Vi Nguyen, and Hong-Quan Huynh (An Giang University)*</i>	
	ID49: Seizing the opportunity from the emerging industrial revolution: Digital transformation, global standards and the strategic path for sustainable development of Vietnam	<i>Minh Trinh (Tay Do University)*; Lan Ngo Thi (Tay Do University); Van Do Tran Nhu (Tay Do University); Kieu Nguyen Phuong (Trường Đại học Tây Đô)</i>	

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	ID50: Data Driven Learning Path Analytics for Slow Learner Support: Advancing Digital Transformation in E-Learning (ONLINE)	<i>Beena Joseph (Bishop Kurialacherry College for Women, Amalagiri)*; Sajimon Abraham (School of Management and Business Studies, Mahatma Gandhi University, Kottayam); Dais George (Rajagiri College of Social Sciences, Kalamassery, Kochi)</i>	<i>Place: Room E5-10, Building E</i>
Session 8: Hardware, Electrical, Electronics, and Semiconductor Technology			
14:30-16:00	ID42: A Framework for Developing a 3D Plant Model Library for Research and Reference	<i>Dang Ngo (Can Tho University); Minh Doan (Nam Can Tho University); Linh Nguyen (Nam Can Tho University)*; Hung Ngo (Nam Can Tho University)</i>	Chairs: <i>Assoc. Prof. Praveen Kumar V. S. - Mahatma Gandhi University, India and Dr. Luong Vinh Quoc Danh - Can Tho University, Vietnam</i>
	ID63: Evaluating Feature Fusion Techniques for Multimodal Deep Learning in Gas Detection	<i>Van-Thien Tran, Hung-Chen Truong, Hoa-Minh Doan (Nam Can Tho university)*</i>	
	ID81: Exploring the Key Aspects of Smart Cameras: An Overview from Research Literature	<i>Duy Nguyen; Ngo Viet-Thinh (Nam Can Tho University)*</i>	
	ID67: Maximizing Operational Flow in Multi-Component Processing (ONLINE)	<i>Abhijit Gaikwad (Independent Researcher)*</i>	<i>Place: Room E5-10, Building E</i>
Session 9: Image, Signal and Natural Language Processing 1			
13:00 - 14:30	ID84: VSL-Glove: A Low-Cost Smart Glove and Pilot Dataset for Vietnamese Sign Language Recognition	<i>Vu-Lam Nguyen (Industrial University of HoChiMinh City, Vietnam)*; Nhung Chau (Kien Giang University)</i>	Chairs: <i>Assoc. Prof. Pon Harshavardhanan - VIT Bhopal University, India and Dr. Tran Hoang Viet - Nam Can Tho University, Vietnam</i>
	ID62: An AI-Powered Knowledge Graph Framework for Injury Prediction in Professional Sports	<i>Abseena Habeeb (Mahatma Gandhi University)*; Sajimon Abraham (Mahatma Gandhi University)</i>	
	ID52: A Vision Transformer-Based Image Retrieval System for Tourism Information Recommendation	<i>Ngoc Dao Le (FPT University); Diem Trinh Bui Thi (Nam Can Tho University); Dinh Truong (Can Tho University)*</i>	
	ID53: AI-Powered Flood Detection: An Enhanced Superpixel and Erosion Approach under the Industry 5.0 Paradigm (ONLINE)	<i>Jyothish V. R. (Mahatma Gandhi University)*; Sajimon Abraham (Mahatma Gandhi University); Leo Abraham (Trellix)</i>	<i>Place: Room E5-11, Building E</i>

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Session 10: Image, Signal and Natural Language Processing 2			
14:30-16:00	ID16: Detection and Recognition of Vietnamese Traffic Signs	Thua Truong, Hung Chen Truong, Hoa Minh Doan, Manh Huy Dang (Nam Can Tho University)*	Chairs: <i>Assoc. Prof. Sasmita Padhy - VIT Bhopal University, India and Dr. Cu Vinh Loc - Can Tho University, Vietnam</i> <i>Place: Room E5-11, Building E</i>
	ID47: Deep Learning-based Approach for Disease detection on Ornamental Plants	Linh Thi Thuy Pham (Can Tho University of Technology); Thanh-Hai Nguyen (Can Tho University)*; Truong Nhat Tran (Can Tho University of Technology); Binh Kim Tong (Can Tho University of Technology); Khoa Minh Tran (Can Tho University of Technology)	
	ID41: A student support chatbot using NLP and Machine Learning	Ba Duy Nguyen (Can Tho University of Technology); Ngoc Diem Pham Thi (Can Tho University); Dinh Truong (Can Tho University)*	
	ID86: Implementation and Performance Analysis of AI-Based Facial Recognition and Cross-Camera Tracking Systems in University Campus Management: A Case Study at Dong Nai Technology University (DNTU) (ONLINE)	Le Lanh (Dong Nai Technology University)*; Quach Thi Bich Nhuong (Faculty of Information Technology, Dong Nai Technology University, Vietnam); Nguyen Khanh An (Binh Thuan College, Phan Thiet City, Vietnam); Le Thanh Lanh (Faculty of Information Technology, Dong Nai Technology University, Vietnam)	
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