



CSoNet-2025 PROGRAM

Vietnam-Korea University of Information and Communication Technology, Danang, Vietnam, December 14-16, 2025

CONFERENCE DAY 1-DECEMBER 14, 2025 (SUNDAY)

08.00-08.30	Registration & Welcome Coffee	
08.30-09.00	OPENING REMARKS (Main Halls)	
09.00-09.50	KEYNOTE: Sequential Voting and the Reliability of Collective Decisions: From Condorcet to Computational Social Networks (Prof. Bo Chen) - Session Chair: Alexander Semenov (Main Halls)	
09.50-10.10	Coffee break	
10.10-11.50	SESSION ROOM 1 PARALLEL SESSIONS: Computer Vision & Visual Understanding Session Chair: Nguyen Duc Hien, Le Thi Thu Nga	SESSION ROOM 2 PARALLEL SESSIONS: AI-TECH Workshop 1: Forecasting, Diagnosis, and Recommendation Session Chair: Tran Thi Ngan
	A Multistage Action Detection Framework for Customer Behavior Analysis in Retail Surveillance, Bui, V. (59)	A Deep Learning-Driven Advanced Method for Household Electricity Consumption Forecasting, Duong Thi Kim Chi (144)
	Landmark-Guided Jigsaw Puzzle Autoencoders For Facial Expression Recognition, Do, H., Bui, S.(27)	Machine Learning-Based Forecasting of LNG Spot Prices: A Case Study on the JKM Index, Duy-Phuong Pham, Thanh-Hoang Le, Tien-Dzung Vu, Duc-Minh Vu, Ba-Tuan Tran, Van-Tu Nguyen, Van-Nhan Truong, Thanh-Sang Nguyen, Tuyet-Vy Vu (36)
	Real-time Detection of Vegetables in Isolation and in Dishes, Lam, K., La, T., Le, L., Kalita, J. (63)	Generative AI-Augmented SVM for Non-Invasive Breath-Based Diagnosis of Type 2 Diabetes, Lam-Tung Nguyen, Thuy-Dung Phan, Gia-Bao Huynh, Trung-Hieu Le Luong, Hoang-Anh Pham (152)
	Integrating Skeleton Graphs with Transformers for Gloss-Free Indian Sign Language Captioning, Sharma, V., Chakraborty, B., Singh, A., Chauhan, A. (39)	Tag-based Movie Recommendation using Energy Distance, Dao Xuan Thi Nguyen, Khoi Nguyen-Tan, Hiep Xuan Huynh (138)
	Energy-Guided Compressive Motion Detection under Edge Simulation Environments, Dung Ngoc Le Ha, Nghia Duong-Trung, Hiep Xuan Huynh (143)	Improving Rice Yield Prediction via Local Learning with Heterogeneous Features, Thuy-Vi Ha Thi, Thanh-Nghi Do, Bao-An Nguyen (154)
11.50-13.30	Lunch	
13.30-14.05	RISING STAR TALK: Fair Allocation of Indivisible Chores: Beyond Additive Valuations, Prof. Bo Li Session Chair: Pham Quoc Cuong (Main Halls)	
14.10-15.50	SESSION ROOM 1 Parallel sessions: Social Networks & Society Session Chair: Thanh-Nghi Do	SESSION ROOM 2 PARALLEL SESSIONS: AI-TECH Workshop 2: Energy-based Approaches Session Chair: Tran Thi Ngan
	Academic Twitter: Gender-based Differences in Content, Emotion, and Public Response, Panchendrarajan, R., Saxena, H., Saxena, A. (22)	Advancing Item-Based Context-Aware Collaborative Filtering through Energy-Based Modeling and Post-Filtering with Energy Distance, Linh Thuy Thi Nguyen, Lan Phuong Phan, Hiep Xuan Huynh (95)
	Fairness-aware Analysis of Centrality Measures in Social Networks, Mohapatra, K., Singh, H., Singh, R., Saxena, A. (105)	Semantic Image Annotation via Ontology Reasoning and Rule-Based Scene Graph Captioning, Pham Thi Thu Thuy, Doan Vu Thinh (81)
	Infodemic intelligence for 2025 infections: AIV, FMD, MPox, and HMPV, Jarynowski, A., Semenov, A., Łódzki, B., Belik, V. (83)	Unsupervised Panoptic Segmentation: An Energy Distance and PoI Approach, Toan Huynh , Tai Vo , Prof. Hiep Huynh (140)
	Fusing Structured Data with Vision-Language Transformer for Social Media Popularity Prediction, Li, H., Xing, W., Li, C., Lyu, B. (15)	Energy-Based Loss Function for Bounding Box, Dung Thi Dang, Khoi Tan Nguyen, Hiep Xuan Huynh (139)
	Integrating Network-Derived Metrics: A Feature Augmentation Framework for Improved Prediction, Singhal, A., Singh, A. (28)	
15.50-16.10	Coffee break	
16.10-17.30	SESSION ROOM 1 PARALLEL SESSIONS: Cybersecurity, Privacy & Digital Forensics Session Chair: An Dang	SESSION ROOM 2 PARALLEL SESSIONS: AI for IoT, Edge Computing & Domain Applications Session Chairs: Tran The Son, Duong Ngoc Phap
	Enhancing APT Attack Detection Performance Based on a Deep Learning and Transformer-Based Model, Vu, T., Do, X., Nguyen, M., Nguyen, L. (82)	A UAV-Relay and MEC with NOMA-enabled Backscatter Communications in IoT Network: Offloading Analysis and Optimization, Nguyen, A., Le, H., Nguyen, V., Ngo, T., Bui, N., Le, P., Hoang, M., Trinh, T., Hoang, T. (29)

	Federated Learning with Homomorphic Encryption and Adversarial Robustness for Privacy-Preserving Anomaly Detection in Digital Forensics, Xuan Hung Truong, The Dung Luong, Anh Tu Tran, Minh Nhat Vo (125)	From Local to National: Agent-Based Modeling of Integrated Indicators for Maternal and Child Health Project Expansion, Nguyen-Ngoc, D., Le Mai Thanh, S., Tran Le, H, Truong Khanh, L., Do Bui Khanh, L., Vu Huang, N., T Nguyen, L. (41)
	From Layoff to Reemployment, Gupta, Y., Sukhija, S., Bavana, S., Chegus, S., Kalakonda, S., Mathur, Y., Polsani, M. (30)	A Scalable Federated Learning Framework for Medical Image Classification Using Hadoop, Spark, Kafka, and PyTorch, Le, D., Huynh, T., Huynh, D. (47)
	Local Core Centric Walk for Influence Maximization, Gupta, Y., Sukhija, S., Aute, S., Iyengar, SRS., Mittal, K., Narayanan, D. (37)	

CONFERENCE DAY 2-DECEMBER 15, 2025 (MONDAY)

08.30-09.00	Registration & Welcome Coffee	
09.00-09.50	KEYNOTE: Safe, Transparent, and Private: The Next Frontier for LLMs, Prof. My T. Thai Session Chair: Anurag Singh (Main Halls)	
09.50-10.10	Coffee break	
10.10-11.50	SESSION ROOM 1 PARALLEL SESSIONS: Multimodal Signal Processing and Pattern Analysis Session Chairs: Tran The Son, Nguyen Vu Anh Quang	SESSION ROOM 2 PARALLEL SESSIONS: AI-TECH Workshop 3: AI/LLM Framework Session Chair: Thanh-Nghi Do
	Analyzing Sleep Disorders and Stages with Power Spectral and Multifractal Features from EEG Signals, Nuyor, K., Suwanna, S., Jaroenchokanan, N. (23)	Open-Source Multimodal Large Language Model Application for Automated Advertising Banner Generation and Quality Validation, H.-A.-Khoi Ngo, Gia-Minh Pham, Dinh-Khoa Dang, H.-A.-Khoa Ngo (115)
	EEG-STGNN: Unified Spatial–Temporal Modeling for Alzheimer’s and FTD Detection, Ujjain, S., Kagathara, V., Singh, P., Srivastava, E., Kumar, S., Gandhi, T. (118)	A Framework for LLM-Powered Database Construction: Design, Implementation, and Case Studies, Ngoc-Thanh-Xuan Nguyen, Gia-Phat Le, Hoang-Nhat-Khang Vo, Ngoc-Sang Vo, Lu-Quynh-Nhu Ho, Hoang-Anh Pham (42)
	Shrimp Feeding Sound Recognition Using Spectrogram Images and EfficientNet Deep Learning, Viet Hung, H., The Kiet, T., Minh Dat, M., Quoc Danh, L. (119)	An Automatic Business Process Evaluation Framework: Focusing on Quality, Flexibility, Transparency, and Exception Handling, Thai-Minh Truong, Hoang Nguyen, Hien Nguyen, Anh Nguyen (46)
	Optimization Evaluation of Urban Park Vitality Based on Dynamic Fuzzy Cognitive Map, Liu, Z., Li, X. (34)	A web-based framework for automated insect image collection and recognition using YOLO11n - 2, Thanh-Thi Doan, Phuc Huynh (150)
	Sheet2Music: A Deep Learning Pipeline for Automated Conversion of Sheet Music to Digital Audio, Le, T., Manh, X. (25)	Federated Learning with Trust-aware Blockchain Fingerprinting: A Secure and Verifiable Framework for Edge AI, Phuc Tran-Vinh, Thai-Minh Truong, Cuong Pham-Quoc (49)
11.50-13.30	Lunch	
13.30-14.20	KEYNOTE: Rethinking Heterogeneous Network Learning: Label Distributions and Scalability, Prof. Xingquan Zhu Session Chair: Sabrina Gaito (Main Halls)	
14.20-16.00	SESSION ROOM 1 PARALLEL SESSIONS: Graphs, Language, and Multimodal Learning Session Chairs: Nguyen Huu Nhat Minh, Dang Dai Tho	SESSION ROOM 2 PARALLEL SESSIONS: AI-TECH Workshop 4: Recognition and Classification Session Chair: Vo Thi Kim Anh
	HAMP: A Benchmark Dataset for Recognizing Hospital Interior Items, Huynh, S., Nguyen, H., Nguyen, A., Nguyen, T., Le, V., Nguyen, A., Ngo, D., Tran, D., Truong, T., Le, A., Tran, V., Phan, A. (102)	O3D-Net: A Lightweight Neural ODE-Based Architecture for Efficient Skeleton-Based Human Action Recognition, Duc Minh Pham, Quang-Anh Nguyen Duc, Thi Ngan Tran, Minh-Anh Nguyen, Hai Nam Nguyen (7)
	SentiFuse: Deep Multi-model Fusion Framework for Robust Sentiment Extraction, Duong, H., Ghosh, R., Nguyen, C., Levin, E., Gary, T., Nguyen, L. (86)	Consistency-based Approach for Semi-supervised Learning in Cervical Cells Image Classification, Nga Le-Thi-Thu, Hieu Le-Van, Thang Nguyen-Huu, Vu Nguyen-Tran-Huy, Dr Duc-Hien Nguyen, Phuoc Dat Doan (87)
	VoiceSpoof-VN: A Public Dataset for Anti-Spoofing in Vietnamese Speaker Verification, Dang, A., Pham, A., Vi, D. Q. (32)	Integrating MotionAGFormer and STEP for Emotion Recognition from Human Gait, Hieu Hoang, Minh Nguyen, Tu Tran, Thuc Hoang, Hanh Tran (91)
	Differential Learning for Data of Varying Importance via Selective Label Smoothing, Han, D., Moniz, N., Chawla, N. (84)	LLaMA3-Inspired Autoregressive Visual-Textual Fusion Augmented Stable Diffusion for Emoji Generation, Nguyen Duc Quang Anh, Quang Tiep Tran, Duc Pham Minh, Ngan Tran Thi, Michael Omar (62)
	A Maximum Likelihood Approach to Identify Anomalous Node Subsets with Extreme Structural Influence in Networks, Maulana, A., Husniah, H., Supriatna, A., Emmerich, M. (107)	Multi-branch Self Distillation with Attention Transfer for Facial Expression Recognition, Hong-Quan Do, Thanh-Hung Nguyen (79)
16.00-16.20	Coffee break	

16.20-17.20	SESSION ROOM 1 PARALLEL SESSIONS: Cybersecurity and Privacy Session Chair: Hennie Husniah	SESSION ROOM 2 PARALLEL SESSIONS: Machine Learning Session Chair: Ngo Ho Anh Khoi
	Privacy-Preserving Text Forensics with Homomorphic Encryption and Blockchain-Based Evidence Provenance, Xuan Hung Truong, The Dung Luong, Anh Tu Tran, Minh Nhat Vo (126)	Enhancing LLM for Cross-market Sentiment-driven Stock Prediction, Nguyen, D., Le, T. (100)
	Proposed identity-based authentication key exchange protocol for information security in enterprise network, Nguyen, V., Le, M., Nguyen, V., Nguyen, T., Nguyen, V. (12)	Regularizing Chart-Specialized Vision–Language Models for K–12 Hand-Drawn Math VQA: Performance and Representation Effects, Li, H., Xing, W., Li, C., Liu, Z. (85)
	Sparse Locality-Sensitive Hashing Attention Model for Phishing Detection, Gaurav, A., Pan, V., Arya, V., Chui, K., Gupta, B. (8)	Mitigating False Positives in Robust DWT-SVD Image Watermarking for Secure Content Protection on Online Platforms, Nguyen Minh, L., Ling, H., Dao, V., Dang, T., Kang, J., Han, F. (94)
17.20-18.00	Preparation, Transfer to the Banquet	
18.00-21.00	BANQUET (WYNDHAM SOLEIL)	

CONFERENCE DAY 3-DECEMBER 16, 2025 (TUESDAY)

09.00-09.35	RISING STAR TALK: (Distributed) AI for Interdependent Cyberphysical Systems, Dr. Hadi Amini (Main Halls)	
09.35-10.50	SESSION ROOM 1 PARALLEL SESSIONS: AI-Driven Recognition, Interaction, and Content Generation Session Chair: Hiep Xuan Huynh	SESSION ROOM 2 PARALLEL SESSIONS: Trustworthy and Intelligent Systems for Health and Society Session Chair: Nguyen Thanh Binh
	300 Food Ingredients Classification by combining CLIP and YOLO models, Vo Hong, K., Tran Thanh, N. (88)	A Blockchain-Driven Framework for Transparent and Secure Donation Management: The Role of Blockchain, IPFS, and NFTs, Le, B., Nguyen, N. (76)
	Gesture-Based PowerPoint Control: A MediaPipe and Machine Learning Approach, Ngô Giang, T., Vo Hong, K. (92)	Speech Region and Gender Recognition on a Vietnamese Accent Dataset, Ha Viet, T., Le Nhat, T., Huynh Minh, T., Nguyen Vo An, X., Nguyen Hong, N. (112)
	Advancing 3D Reconstruction: Integrating AI-Driven Neural Rendering with Geometric Techniques for High-Fidelity Model Generation from RGB Video, Ngo, H., Nguyen, V., Huynh, K., Ngo, H. (116)	A Binning Approach based on Gaussian Mixture for Disease Diagnosis on Metagenomic data, Ngo, L., Nguyen, H., Dang, D., Pham, L. (50)
	Automatically Generating Multiple-Choice Questions using Text-to-text Transformer, Lam, K., Nguyen, H., Le, L., Kalita, J. (103)	Advancing Explainable AI in Early Screening of Neurodevelopmental Disorders, Vo, T. (10)
	Epileptic Seizure Classification Using Machine Learning, Le, T., Nguyen, T. (43)	
10.50-11.10	Coffee break	
11.10-11.45	RISING STAR TALK: Federated Stochastic Compositional Optimization, Dr. Hongchang Gao (Main Halls)	
11.45-12.30	SESSION ROOM 1 PARALLEL SESSIONS: Robust Computer Vision and Biomedical Image Analysis Session Chair: Khang Lam	SESSION ROOM 2 PARALLEL SESSIONS: Applied AI in Security, Sensing, and Earth Science Session Chair: Duc Phi Do
	An Enhanced Approach for Kidney Pathology Segmentation, Trinh, H., Tran, K., Nguyen, N., Cao, T., Nguyen, B. (117)	Audio-Visual Deepfake Detection via Triple-Branch Cross-Modal Transformers, Le, T., Nguyen, N. (109)
	Applications of Lambert-W Function in Industrial Technology Problems, Maulana, A., Husniah, H., Kusmaya, K., Hasudungan, O., Yuriski, R., Wicaksono, A., Supriatna, A. (110)	Deep Learning Model on Embedded Board for Vehicle Detection and Energy Efficiency, Tra, N. (99)
	Attention-Enhanced YOLO-Nano for Adverse Weather Object Detection, Le, T., Ha, V., Nguyen, V., Huynh, A., Vo, P., Dinh Van, A., Nguyen Dinh, V. (89)	Spatial Point Process Modeling in 2D Polar Coordinates: Application to Probabilistic Seismic Hazard Analysis for the Sumatra Megathrust, Zainuddin, A., Pasaribu, U., Sari, R., Husniah, H. (113)
12.30-12.50	CLOSING REMARKS (Main Halls)	
12.50-17.00	Optional city tour, other activities	