

PROGRAM

2025 24th International Symposium on Communications and Information Technologies (ISCIT 2025)

Venue: **VNU Information Technology Institute**, No. 144, Xuan Thuy Road, Cau Giay District, Hanoi, Vietnam

Program at a glance

Day 1: Thursday, 16 October 2025		
8:00 AM	Opening Session	
8:15 AM - 9:30 AM	Plenary session Keynote #1: Low-Complexity Hardware Solutions for Baseband Algorithms in Massive MIMO Systems Mojtaba Mahdavi, Ericsson Research, Sweden Keynote #2: Marvell's Accelerated Infrastructure for AI Data Center Quang-Dam Le, General Director, Marvell, Vietnam Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Xuan-Tu Tran (VNU, Vietnam) & Ke Wang (RMIT, Australia)	
9:30 AM	Tea Break (15 minutes)	
9:45 AM- 11:45 AM	Invited Talk: Bi-static Sensing in 6G Perceptive Mobile Networks Andrew Zhang, University of Technology Sydney, Australia Session #1 Next-Generation Network (NGN) Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Duy-Hieu Bui (VNU-ITI, Vietnam) & Hiroshi Ochi (Kyutech, Japan)	
11:45 AM	Lunch	
1:00 PM - 3:30 PM	Session #2: Security and Privacy Technologies (SPT) Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Duy-Hieu Bui (VNU-ITI, Vietnam) & Manh-Hiep Dao (VNU-ITI, Vietnam)	IEEE CASS Distinguished Talk Venue: Room 505, Building E3, Vietnam National University Hanoi Chairs: Duc-Tho Mai (ACT, Vietnam)
3:30 PM	Tea Break (15 minutes)	
3:45 PM - 5:45 PM	Session #3: Circuits and Systems I (CAS-I) Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Orazio Aiello (UniGE, Italy) & Minh-Thuy Le (HUST, Vietnam)	
5:45 PM	Banquet (<i>a shuttle bus will pick you up at the conference venue</i>) Location: JW Marriott hotel Address: 8 Do Duc Duc, Nam Tu Liem, Hanoi	

Day 2: Friday, 17 October 2025		
8:30 PM - 9:15 PM	Keynote #3: AI with Attentive Intelligence (AI²) – Enabling Physical Monitoring without Physical Boundaries Massimo Alioto, National University of Singapore Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Duy-Hieu Bui (VNU, Vietnam) & Khanh N. Dang (UoA, Japan)	
9:15 AM	Tea Break (15 minutes)	
9:30 AM - 12:00 AM	Session #4: Signal Processing And Machine Learning (SPML) Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Quang-Kien Trinh (LQDTU, Vietnam)	Session #5: AI for Computer Vision (AICV) Venue: Room 505, Building E3, Vietnam National University Hanoi Chairs: Le Hoang Son (VNU-ITI, Vietnam)
12:00 AM	Lunch	
1:00 PM - 2:30 PM	Session #6: Wireless Communication (WiC) Venue: Room Ha Long, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Anh-Tuyen Le (UTS, Australia)	Session #7: Artificial Intelligence for Communications and IT (AI4C-I) Venue: Room 505, Building E3, Vietnam National University Hanoi Chairs: Duc-Tho Mai (ACT, Vietnam)
2:30 PM	Tea Break (15 minutes)	
2:45 PM - 4:00 PM	Session #8: Artificial Intelligence for Communications and IT (AI4C-II) Venue: Room Ha Long, Jonathan KS Choi Center, VNU Hanoi Chairs: Thai-Viet Dang (HUST)	Session #9: Circuits and Systems (CAS-II) Venue: Room 505, Building E3, VNU Hanoi Chairs: Koichiro Ishibashi (UEC, Japan)
4:00 PM	Tea Break (15 minutes)	
4:15 PM - 5:45 PM	Session #10: Artificial Intelligence for Communications and IT (AI4C-III) Venue: Room Ha Long, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Xuan-Tu Tran (VNU, Vietnam)	
5:45 PM	Closing session	
Day 3: Saturday, 18 October 2025		
Social Event: Hanoi Old Quarter guided tours (<i>registration required</i>)		

Technical program

Day 1: Thursday, 16 October 2025				
8:00 AM - 9:45 AM	Planary session Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Xuan-Tu Tran (VNU, Vietnam) & Ke Wang (RMIT, Australia)			
Time		Title	Authors	Type
8:00 AM	-	Opening session		
8:15 AM	Keynote #1	Low-Complexity Hardware Solutions for Baseband Algorithms in Massive MIMO Systems	Mojtaba Mahdavi, Ericsson Research, Sweden	Keynote
9:00 AM	Keynote #2	Marvell's Accelerated Infrastructure for AI Data Center	Quang-Dam Le, General Director, Marvell, Vietnam	Keynote
9:30 AM	Tea break			
9:45 AM- 11:45 AM	Session #1: Next-Generation Network Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Duy-Hieu Bui (VNU-ITI, Vietnam) & Hiroshi Ochi (Kyutech, Japan)			
Time	Paper #	Title	Authors	Type
9:45 AM	Keynote #3	Bi-static Sensing in 6G Perceptive Mobile Networks	Andrew Zhang, University of Technology Sydney	Invited
10:15 AM	1571169336	MetaContrast-GNN: Meta-Contrastive Learning for Cross-City Travel Time Estimation	Thanh Thai Do and Quang Tran Minh (Hochiminh City University of Technology, Vietnam)	Oral
10:30 AM	1571169321	Adaptive Traffic Signal Control for Urban Intersections Using Riccati-Based Linear Quadratic Regulator Enhanced by LSTM-Based Traffic Flow Prediction	Thanh Thai Do and Quang Tran Minh (Hochiminh City University of Technology, Vietnam)	Oral

10:45 AM	1571180927	Hybrid Feature Fused Few-Shot Learning for CSI-Based Adaptive Beam Prediction	Chaiyawut Thiangkate (Kasetsart University, Thailand); Shimpei Nishiyama, Dipanita Chakraborty and Minoru Okada (Nara Institute of Science and Technology, Japan); Kundjanasith Thonglek, Pattara Leelaprute, Arnon Rungsawang and Bundit Manaskasemsak (Kasetsart University, Thailand); Kosin Chamnongthai (King Mongkut's University of Technology Thonburi, Thailand)	Oral
11:00 AM	1571187147	Design and Comparison of Beamforming Algorithms for Integrated Sensing and Communication	Zhequn Mao (China); Sun Songlin and Lingyu Shi (Beijing University of Posts and Telecommunications, China)	Oral
11:15 AM	1571171503	Precoded STBC with Beamforming for Secure Next-Generation Networks	Cong-Hoang Diem (Vietnam National University, Hanoi (VNU), Vietnam); Duc-Tho Mai (Academy of Cryptography Techniques, Vietnam)	Oral
11:30 AM	1571178320	Max-Min Rate Optimization for Reconfigurable Intelligent Surfaces Aided ISAC Systems	Huy T. Nguyen (Van Lang University, Vietnam); Nhan Nguyen (University of Oulu, Finland); Nguyen Cong Luong (Phenikaa University, Vietnam); Tri-Hai Nguyen and Vo Nguyen Quoc Bao (Van Lang University, Vietnam)	Oral
11:45 AM	Lunch			
1:00 PM - 2:30 PM	CASS DL Talk: Boosting Energy Harvesting Efficiency: Innovations in CMOS Rectifier Techniques for Enhanced Power Conversion, Sensitivity, and Dynamic Range Harikrishnan Ramiah, Universiti Malaya, Malaysia Venue: Room 505, Building E3, Vietnam National University Hanoi Chairs: Duc-Tho Mai (ACT, Vietnam)			
1:00 PM - 3:30 PM	Session #2: Security and Privacy Technologies (SPT) Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Pham-Khoi Dong (VRTC, Vietnam)			
Time	Paper #	Title	Authors	Type

1:00 PM	1571167315	Lotus: a Hybrid Cross-Chain Framework for Privacy-Preserving Digital Identity	Tuan-Dung Tran and Huynh Phan Gia Bao (University of Information Technology, VNU-HCM, Vietnam); Tra Minh Trong (University of Information Technology, Vietnam & VNU-HCM, Vietnam); Nguyen Tan Cam (University of Information Technology & Vietnam National University Ho Chi Minh City, Vietnam); Van-Hau Pham (University of Information Technology, Vietnam)	Oral
1:15 PM	1571170382	Vision-Based Learning for Cyberattack Detection in Blockchain Smart Contracts and Transactions	Do Hai Son (Curtin University, Australia); Hieu Vu Le (VNU University of Engineering and Technology, Vietnam); Viet Khoa Tran and Yibeltal Fantahun Alem (University of Canberra, Australia); Trong-Minh Hoang (Posts and Telecommunications Institute of Technology, Vietnam); Tran Thi Thuy Quynh (VNU University of Engineering and Technology, Vietnam); Nguyen Viet Ha (VNU Ha Noi, Vietnam); Nguyen Linh Trung (Vietnam National University, Hanoi, Vietnam)	Oral
1:30 PM	1571170579	Federated Learning for Phishing Detection and Protection in Wearable Health Networks	Mosiur Rahaman (Asia University, Taiwan & International Center for AI and Cyber Security Research and Innovations, Taiwan); Karthik Vanna (Veltech University, Chennai, India); Akshat Gaurav (Asia University, Taiwan); Sunneng Sandino Berutu (Universitas Kristen Immanuel Yogyakarta, Indonesia); Nadia Nedjah (State University of Rio de Janeiro, Brazil); Kwok Tai Chui (Hong Kong Metropolitan University, Hong Kong); Brij Gupta (NIT Kurukshetra, India)	Oral
1:45 PM	1571178625	Blockchain-Enabled Secure Digital Image Ownership and Verification: a Novel Approach to Prevent NFT Fraud and Duplicate Images	Luong Tien Trinh (Institute of Information Technology and Electronics, Vietnam); Thanh Ta Minh (Le Quy Don Technical University, Vietnam)	Oral

2:00 PM	1571179701	Design of Software-Defined Wireless Network for Machine Learning-Driven DDoS Detection and Tiered Response	Aung Myo Htut (King Mongkut's University of Technology Thonburi, Thailand); Sirawich Pongraweewongsa, Sudichai Suktan, Witchayut Tangwongkitsiri, Nisachon Sillapawongsa, Patchapong Kulthumrongkul and Chaodit Aswakul (Chulalongkorn University, Thailand)	Oral
2:15 PM	1571179244	A Multi-Source Feature Fusion-Based Knowledge Graph Construction from Cyber Threat Intelligence to Facilitate APT Attribution in IDS	To Thi My Au (University of Information Technology, Vietnam); Khanh-Khoa Ngo (University of Information Technology, VNU-HCM, Vietnam); Van-Hau Pham (University of Information Technology, Vietnam); Phan The Duy (University of Information Technology, VNU-HCM, Vietnam)	Oral
2:30 PM	1571179922	Multimodal Fusion for Smart Contract Vulnerability Detection: An Experimental Dive	Giang Huynh Le (University of Information Technology, Vietnam & Inseclab, Vietnam); Huu-Han Nguyen and Hung Van Thai (University of Information Technology, Vietnam); Doan Minh Trung and Phan The Duy (University of Information Technology, VNU-HCM, Vietnam)	Oral
2:45 PM	1571179943	VulForge: An Automatic Script Generation Framework for Vulnerability Deployment in Honeypots Using Large Language Models	Le Tuan Anh, Hien Do Hoang and Phan The Duy (University of Information Technology, VNU-HCM, Vietnam); Nguyen Tan Cam (University of Information Technology & Vietnam National University Ho Chi Minh City, Vietnam); Van-Hau Pham (University of Information Technology, Vietnam)	Oral
3:00 PM	1571180909	Brute Force Attack Detection in SDN Using Hybrid Approximate Nearest Neighbors and LSH-Based Attention Model	Akshat Gaurav (Asia University, Taiwan); Varsha Arya (Hong Kong Metropolitan University (HKMU), Hong Kong); Shavi Bansal (Insights2Techinfo, India); Kwok Tai Chui (Hong Kong Metropolitan University, Hong Kong); Brij B. Gupta (Asia University, Taiwan)	Oral
3:15 PM	1571180818	A Novel ASCON ECB with 64-Bit Block Size for Energy-Harvesting Beat Sensors	Anh-Duc Mai (Vietnam National University Hanoi, Vietnam); Xuan-Tu Tran (Vietnam National University, Hanoi, Vietnam); Duy-Hieu Bui (Vietnam National University, Hanoi, Vietnam); Koichiro Ishibashi (The University of Electro-Communications, Japan)	Oral
3:30 PM	Tea break			

3:45 PM - 5:45 PM	Session #3: Circuits and Systems II (CAS-I) Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Orazio Aiello (UniGE, Italy) & Minh-Thuy Le (HUST, Vietnam)			
Time	Paper #	Title	Authors	Type
3:45 PM	1571167534	A 6-14 Gb/s Single-Loop Referenceless CDR Without Separate FD	Tho Huu Nguyen, Hai Thanh Mai and Quang Nguyen-The (Le Quy Don Technical University, Vietnam); Luan Le (Academy of Military Science and Technology, Vietnam); Vu Hoang Yen (Le Quy Don Technical University, Vietnam)	Oral
4:00 PM	1571170213	Dual-SPAD-Based High-Speed Quantum Random Number Generator Utilizing QRFF Architecture	Dinh Quoc Bao Tran (Chungbuk National University, Korea (South) & ChungBuk National University, Korea (South)); Van Truong Nguyen (Chungbuk National University, Korea (South)); Trung-Tien Hoang and Huy-Hoang Nguyen (Hanoi University of Science and Technology, Vietnam); Loan Pham-Nguyen (Hanoi University of Science and Technology & School of Electronics and Telecommunications, Vietnam); Jong-Phil Hong (Chungbuk National University, Korea (South))	Oral
4:15 AM	1571171751	Down-Conversion RF Mixer Utilizing Charge Injection Technique for 5G Application	Tung Thanh Mai and Long Viet Cao (VNU University of Engineering and Technology, Vietnam); An Viet Dang (University of Science and Technology of Hanoi, Vietnam); Tuan Anh Mai (VNU University of Engineering and Technology, Vietnam)	Oral
4:30 PM	1571171771	A 107dB-SNDR and 165dB-FOM Second-Order Noise-Shaping SAR ADC	Viet Nguyen-Thien (Telecom Paris, France); Thao Chau Cao (Asygn, France); Minh Quang Tran and Huy Quang Thai (Hanoi University of Science and Technology, Vietnam); Loan Pham-Nguyen (Hanoi University of Science and Technology & School of Electronics and Telecommunications, Vietnam)	Oral
4:45 AM	1571171749	A Wideband LC-QVCO with Bimodal Oscillation Suppression for s-Band 5G Telecommunications	Minh Quang Vu, Long Viet Cao, Tuan Ba Nguyen and Tuan Anh Mai (VNU University of Engineering and Technology, Vietnam)	Oral

5:00 PM	1571178441	An Efficient Hardware Compression Technique for Low-Power Spiking Neural Networks	The-Anh Nguyen (Vietnam National University, Hanoi, Vietnam); Thao-Nguyen Tran-Ha (VNU-ITI, Vietnam); Ngo-Doanh Nguyen (Universiyt of Genoa, Italy); Khanh N. Dang (University of Aizu, Japan); Duy-Hieu Bui (Vietnam National University, Hanoi, Vietnam); Xuan-Tu Tran (Vietnam National University, Hanoi, Vietnam)	Oral
5:15 AM	1571179878	A Maintenance-Free Energy-Harvesting Sensor Platform with Seamless Plug-and-Play Sigfox Connectivity for Scalable IoT Deployments	The-Anh Nguyen (Vietnam National University, Hanoi, Vietnam); Xuan-Tu Tran (Vietnam National University, Hanoi, Vietnam); Orazio Aiello (University of Genova, Italy); Roberto La Rosa (STMicroelectronics, Italy)	Oral
5:30 PM	1571178405	Development of Drifting Data Logger with Solar Power for Long-Term Observation	Shonosuke Ishida (Ritsumeikan University, Japan); Takeshi Kumaki (Ritsumeikan University & Dept. of VLSI System Design, Japan); Yuta Kusunoki (Japan)	Oral
5:45 PM	Banquet (a shuttle bus will pick you up at the conference venue) Location: Address: 36 Le Duc Tho Road, Nam Tu Liem District, Hanoi, Vietnam			
Day 2: Friday, 17 October 2025				
8:30 AM - 9:15 AM	Session: Keynotes 2 Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Duy-Hieu Bui (VNU, Vietnam) & Khanh N. Dang (UoA, Japan)			
Time	Paper #	Title	Authors	Type
8:30 AM	Keynote #4	AI with Attentive Intelligence (AI2) – Enabling Physical Monitoring without Physical Boundaries	Massimo Alioto, National University of Singapore	Keynote
9:15 AM	Tea break			
9:30 AM - 12:00 PM	Session #4: Signal Processing And Machine Learning (SPML) Venue: Room Hanoi, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Quang-Kien Trinh (LQDTU, Vietnam)			
Time		Title	Authors	Type

9:30 AM	1571168745	Proposal of Pulse Wave Extraction Method Based on Pulse Wave Selection Method Using Adaptively Computed Higher-Order Statistics	Yamato Imai and Haruto Sakurai (Maebashi Institute of Technology, Japan); Minoru Komatsu (Suwa University of Science & Maebashi Institute of Technology, Japan); Hiroki Matsumoto (Maebashi Institute of Technology, Japan)	Oral
9:45 AM	1571169446	Data Augmentation Methods for Music Removal from Environmental Sounds Based on Machine Learning	Hyuga Hagiwara and Yuka Saito (Maebashi Institute of Technology, Japan); Tomomi Ogawa (Tokyo Denki University, Japan); Hiroki Matsumoto (Maebashi Institute of Technology, Japan)	Oral
10:00 AM	1571171606	Fault Diagnosis of Fan Motors Using Multi-Domain Feature Extraction and Kolmogorov-Arnold Networks (KAN)	Tuan Minh Le and Ke Wang (RMIT University, Australia); Hung Viet Pham (RMIT University, Vietnam); Duy Tan Le (International University VNU-HCM, Vietnam); Hieu Minh Tran (RMIT University, Australia & International University, VNU-HCMC, Vietnam); Son Vu Truong Dao (RMIT University Vietnam, Vietnam)	Oral
10:15 AM	1571170355	Robust Sparse Subspace Tracking from Corrupted Data Observations	Thuy Loan Giang Ta, Hoang-Lan Nguyen and Lan Ngoc Nguyen (VNU University of Engineering and Technology, Vietnam); Do Hai Son (Curtin University, Australia); Tran Thi Thuy Quynh (VNU University of Engineering and Technology, Vietnam); Nguyen Linh Trung (Vietnam National University, Hanoi, Vietnam); Karim Abed-Meraim (University of Orleans & PRISME Lab., France); Thanh Trung LE (Vietnam National University, Hanoi, Vietnam)	Oral
10:30 AM	1571168737	The Generation Method of Two-Scale Sequence Generating Arbitrary Mother Wavelet with High Accuracy Using Machine Learning for Discrete Wavelet Transform	Yamato Imai (Maebashi Institute of Technology, Japan); Minoru Komatsu (Suwa University of Science & Maebashi Institute of Technology, Japan); Hiroki Matsumoto (Maebashi Institute of Technology, Japan)	Oral
10:45 AM	1571168820	Compressive Sensing for Inter-Frame Video Compression	Hien Thu Nguyen (Vietnam National University Hanoi, Vietnam); An Thanh Nguyen and Hung Duy Nguyen (Vietnam National University, Hanoi, Vietnam); Quang Duc Pham (University of Engineering and Technology & Hanoi Vietnam National University, Vietnam)	Oral

11:00 AM	1571169326	Compressive Sensing Based Single Pixel Camera Using Mask-Shifting Method	Minh Nhat Phu (VNU University of Engineering and Technology, Vietnam); Quang Duc Pham (University of Engineering and Technology & Hanoi Vietnam National University, Vietnam)	Oral
11:15 AM	1571176824	Leverage Sub-Band and Cross-Band Information in Real-Time Speech Signal Improvement	Nhat Linh Nguyen Thi and Quoc Cuong Nguyen (Hanoi University of Science and Technology, Vietnam)	Oral
11:30 AM	1571175090	Machine Learning and Spectral Fusion Based Person Verification Using Intra-Palm Propagation Signal	Isao Nakanishi and Kenshi Watanabe (Tottori University, Japan)	Oral
11:45 AM	1571175016	Novel Triple Band Bandpass Filter Designed for WiMAX Communication Systems	Cuong Quoc Vuong (Vietnam National University, Vietnam); Tuan Anh Mai (VNU University of Engineering and Technology, Vietnam); Duong Nguyen (International University, Vietnam); Linh Mai (University of Engineering and Technology, VNU-Hanoi & UET, Vietnam)	Oral
9:30 AM - 12:00 PM	Session #5: AI for Computer Vision (AICV) Venue: Room 505, Building E3, Vietnam National University Hanoi Chairs: Le Hoang Son (VNU-ITI, Vietnam)			
Time	Paper #	Title	Authors	Type
9:30 AM	1571166699	YOLO-Pest: a Robust Model for Golden Apple Snail Detection	Quoc-Viet Hoang and Trung-Hieu Le (Hung Yen University of Technology and Education, Vietnam)	Oral
9:45 AM	1571179027	Replacing YOLOv8n with YOLOv12n in Greenhouse Automation: a Post-Thesis Evaluation Using the Unified Detection Score (UDS)	Oleg Shovkovyy (CMKL University, Thailand & Burapha University, Thailand); Hossein Miri (Chulalongkorn University, Thailand)	Oral
10:00 AM	1571161683	Deep Learning-Enhanced Push-Broom Hyperspectral Imaging System for Non-Destructive Subsurface Defect Detection	Keh-moh Lin, Ming-Hsien Shih and Ya-Xiu Liang (Southern Taiwan University of Science and Technology, Taiwan); Wen-Tse Hsiao (Taiwan Instrument Research Institute, NarLabs, Taiwan)	Oral
10:15 AM	1571170214	Robust Anomaly Detection in Human Actions via Pose, Interaction, and Motion Cues	Duc-Tho Mai (Academy of Cryptography Techniques, Vietnam); Thuan Bui (Swinburne Vietnam, FPT University, Vietnam)	Oral

10:30 AM	1571177339	CF-YOLO: Cross-Modal Fusion for Weakly Aligned RGB-IR UAV Object Detection	Lan Nguyen, Cao Truong Tran and Vân Thị Hải Nguyễn (Le Quy Don Technical University, Vietnam)	Oral
10:45 AM	1571179897	Systematic Evaluation of YOLO in Student Behavior Detection - a New Dataset	Anh-Tu Tran (Dai Nam University, Vietnam); Nguyen Thai Khanh (Hanoi University of Science and Technology, Vietnam); Trung-Thanh Nguyen, Anh-Ha Tuan and Trung-Hieu Le (Dai Nam University, Vietnam)	Oral
11:00 AM	1571168966	DTF-Net: Dual-Transfer Feature Network for Ship Detection in Inclement Weather Conditions	Trung-Hieu Le and Quoc-Viet Hoang (Hung Yen University of Technology and Education, Vietnam)	Oral
11:15 AM	1571179997	ArborNet: Featherweight Representation Learning for Real-Time Cashew Nut Quality Classification	Nguyen Duc Quang Anh (Vietnam National University, Vietnam); Thai Dinh Kim (International School, Vietnam National University, Hanoi, Vietnam); Minh-Anh Nguyen (Vietnam National University Hanoi, Vietnam); Thao Phuong Pham (International School, Vietnam National University, Hanoi, Vietnam); Ha Phuong Vu (Vietnam National University Hanoi, Vietnam); Minh Duc Pham and Dinh-Truong Kim (Ministry of Defense, Vietnam)	Oral
11:30 AM	1571170668	Transitional Patterns for Tick-Shape Backbones	Chi-Hieu Le (HCMC University of Technology and Education, Vietnam & HCMUTE, Vietnam); Thanh Tuan Nguyen (HCMC University of Technology and Education, Vietnam); Hoang Anh Pham (Post and Telecommunications Institute of Technology, Vietnam); Nam Vu (Posts and Telecommunications Institute of Technology, Vietnam); Thi-Minh-Chau Le (HCMC University of Technology and Education, Vietnam); Thanh Phuong Nguyen (Université Côte d'Azur, France)	Oral
11:45 AM	1571170393	Can Oriented Bounding Box Enhance Small Object Detection?	Lam Thai Nguyen and Tran Hiep Dinh (VNU University of Engineering and Technology, Vietnam)	Oral
12:00 AM	Lunch			

1:00 PM - 2:30 PM	Session #6: Wireless Communication (WiC) Venue: Room Ha Long, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Anh-Tuyen Le (UTS, Australia)			
Time	Paper #	Title	Authors	Type
1:00 PM	1571169561	Antenna-Independent Deep Learning for Self-Interference Cancellation in in-Band Full-Duplex MIMO Systems	Anh Tuyen Le and Xiaojing Huang (University of Technology Sydney, Australia); Le Chung Tran (University of Wollongong, Australia); J. Andrew Zhang, Peiyuan Qin and Y. Jay Guo (University of Technology Sydney, Australia)	Oral
1:15 PM	1571169883	Distributed Non-Coherent Spiral SAR Imaging with Random RF Illumination	Cao Hong Phuc Nguyen (University of Technology Sydney (UTS), Australia); Xiaojing Huang and J. Andrew Zhang (University of Technology Sydney, Australia)	Oral
1:30 PM	1571179408	Two-Stage Visual Feature Learning for RIS-Assisted Beamsteering in Occluded User Scenarios	Shimpei Nishiyama, Dipanita Chakraborty and Minoru Okada (Nara Institute of Science and Technology, Japan)	Oral
1:45 PM	1571179670	A Compact Four-Port MIMO Patch Antenna Array for Internet-of-Things Applications	Nguyen Tran, Hoang Huy Nguyen, Anh Tran-Tuan and Noi Truong-Quang (PHENIKAA University, Vietnam)	Oral
2:00 PM	1571179844	Design of a 2-Bit Unit-Cell for Electronic Beam-Switching Reconfigurable Intelligent Surfaces	Long Nguyen (University of Engineering and Technology & Vietnam National University, Vietnam); Vu Thi Lan Nhi (University of Engineering Technology - VNU, Vietnam); Nguyen Minh Thien (International University, Vietnam); Tuan Anh Mai (VNU University of Engineering and Technology, Vietnam); Linh Mai (University of Engineering and Technology, VNU-Hanoi & UET, Vietnam); Duong Nguyen (International University, Vietnam)	Oral
2:15 PM	1571179867	Heart Rate Detection Using CW Doppler Radar: Adaptive Dual-Algorithm Selection with Quality Assessment Framework	Nguyen Huu Son and Masaki Kurosawa (The University of Electro-Communications, Japan); Hoang Thi Yen (Le Quy Don Technical University, Vietnam & The University of Electro-Communications, Japan); Guanghao Sun (The University of Electro-Communications, Japan)	Oral

1:00 PM - 2:30 PM	Session #7: Artificial Intelligence for Communications and IT (AI4C-I) Venue: Room 505, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Duc-Tho Mai (ACT, Vietnam)			
Time	Paper #	Title	Authors	Type
1:00 PM	1571171012	Long-Term Traffic Forecasting with the Informer Model: Insights from Taiwan's Section	Kuan-Ting Wu and Shinfeng Lin (National Dong Hwa University, Taiwan)	Oral
1:15 PM	1571171580	An Integrated Learning-Based AI Mobile Platform for Autonomous Navigation and Hazardous Fire Intelligence	Thu Doan Minh Le (International University - VNU-HCMC, Vietnam); Boi T. Ho (International University VNU- HCMC, Vietnam); Hieu Minh Tran (RMIT University, Australia & International University, VNU-HCMC, Vietnam); Ke Wang (RMIT University, Australia); Ly Van Tran (International University - VNU HCMC, Vietnam); Quoc Bao Vuong (International University, VNUHCMC, Vietnam); Son Vu Truong Dao (RMIT University Vietnam, Vietnam)	Oral
1:30 PM	1571171624	Integration of IoT and Machine Learning for Monitoring Rubber Latex Stirrer Motor Systems Using PCA and K-Means Techniques	Tanakorn Inthasuth, Theerawat Petdee and Thanwit Naemsai (Rajamangala University of Technology Srivijaya, Thailand); Kritsana Sureeya (Thai-Nichi Institute of Technology, Thailand); Siti Zuraidah Ibrahim (Universiti Malaysia Perlis, Malaysia)	Oral
1:45 PM	1571170109	Synthetic Text Data Generation from LLMs for Knockoff Model Training in Sentiment Analysis	Pham Xuan Cong (Le Quy Don Technical University, Vietnam); Hoang Trung Nguyen (Le Qui Don Techincal University, Vietnam); Binh Do (Military Information Technology Institute, Vietnam); Cao Truong Tran (Le Quy Don Technical University, Vietnam)	Oral
2:00 PM	1571179638	Towards Few-Shot Large Language Models for Vietnamese Spoken Question Answering	Minh Trong Le (VNU University of Engineering and Technology, Vietnam); Thinh Duc Nguyen (Vietnam); Chung Ba Tuan Pham (Hanoi University of Industry, Vietnam); Le Hoang Son (Vietnam National University, Vietnam)	Oral

2:15 PM	1571179759	Efficient and Lightweight Human Activity Recognition Based on Wearable Sensors Using Light Residual Neural Network	Sakorn Mekruksavanich (University of Phayao, Thailand); Datchakorn Tancharoen (Panyapiwat Institute of Management (PIM), Thailand); Anuchit Jitpattanakul (KMUTNB, Thailand)	Oral
2:30 PM		Tea break		
2:45 PM - 4:00 PM	Session #8: Artificial Intelligence for Communications and IT (AI4C-II) Venue: Room Ha Long, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Thai-Viet Dang (HUST)			
Time	Paper #	Title	Authors	Type
3:00 PM	1571170375	Low-Rank Triple Decomposition of Streaming Tensors and Its Application to Video Completion	Thanh Trung LE (Vietnam National University, Hanoi, Vietnam); Hong Thinh Nguyen (University of Engineering and Technology, VNU Hanoi & Signal and System Laboratory, Vietnam); Ha Manh Luu (AVITECH & FET, University of Technology and Engineering, VNU, Hanoi, Vietnam & Erasmus MC, Rotterdam, The Netherlands); Tran Thi Thuy Quynh and Ha Vu Le (VNU University of Engineering and Technology, Vietnam); Vy-Thuy-Lynh Hoang (BRGM French Geological Survey, France); Karim Abed-Meraim (University of Orleans & PRISME Lab., France); Philippe Ravier and Olivier Buttelli (Université d'Orléans, France)	Invited
3:15 PM	1571182934	Explainable AI-Enhanced Fault Diagnosis for Rotating Machinery: A SHAP-Based Framework for Transparent Decision Making	Du Nguyen Trong (Hanoi University of Science and Technology, Vietnam); Thanh-Tung Vu, Thanh Binh Do Danh, Thai Hung Pham and Phong-Dien Nguyen (HUST, Vietnam)	Oral
3:30 PM	1571168756	Blood Glucose Estimation Method Based on Data from Optical Sensors Using Machine Learning	Kazuki Asakura (Maebashi Institute of Technology, Japan); Saki Takaira (Taiyo Yuden, Japan); Hiroki Matsumoto (Maebashi Institute of Technology, Japan)	Oral
3:45 PM	1571171571	Mitigating Class Imbalance in Chest X-Ray Classification with Memory-Augmented Models	Duy Hoang, Duy Huu Nguyen and Ngu Huynh (FPT University, Vietnam)	Oral

4:00 PM	1571171772	TBI-TTM: Traumatic Brain Injury Prognosis with Textual Data Under Missing Tabular Conditions	Duc-Khiem Doan, Nguyen Thai Khanh and Minh Trang Duong (Hanoi University of Science and Technology, Vietnam); Thanh-Bac Nguyen (Military Hospital, Vietnam); Thanh-Hai Tran (Hanoi University of Science and Technology, Vietnam)	Oral
2:45 PM - 4:00 PM	Session #9: Circuits and Systems (CAS-II) Venue: Room 505, Building E3, Vietnam National University Hanoi Chairs: Koichiro Ishibashi (UEC, Japan)			
Time	Paper #	Title	Authors	Type
2:45 PM	1571179567	A Study on the Effect of Sunlight Spectrum LED for Saffron Growth	Ryosuke Matsui (Ritsumeikan University, Japan); Takeshi Kumaki (Ritsumeikan University & Dept. of VLSI System Design, Japan)	Oral
3:00 PM	1571171690	Pulse Rate Estimation and Power Consumption for Human-Recorder	Daiki Nomura and Tsubasa Kinoshita (Kindai University, Japan); Takeshi Kumaki (Ritsumeikan University & Dept. of VLSI System Design, Japan); Kyosuke Kageyama (Kindai University, Japan)	Oral
3:15 PM	1571171687	Proposal of Noncontact Fish-Pulse Estimation Camera for Flatfish	Kento Ohno and Daishi Kobayashi (Kindai University, Japan); Keiya Kumaki (Kochi University, Japan); Takeshi Kumaki (Ritsumeikan University & Dept. of VLSI System Design, Japan); Kyosuke Kageyama (Kindai University, Japan)	Oral
3:30 PM	1571169609	MPU Circuit Generation from Programs with Meta-Instructions	Tomoyuki Morimoto (Meiji University, Japan & VIAX, Japan); Hiroto Iwata, Kiyoto Goto and Toshiyuki Tsutsumi (Meiji University, Japan)	Oral
3:45 PM	1571179689	CSI-Based Human Activity Recognition Using Low-Cost Wi-Fi Modules and Deep Neural Networks	Cong Van Do, Duc Minh Luong and Khanh Tien Luong (Hanoi University of Science and Technology, Vietnam); Hai Van Phan (Hanoi Open University, Vietnam); Quoc Cuong Nguyen (Hanoi University of Science and Technology, Vietnam); Thuy Minh Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam)	Oral

4:00 PM	Tea break			
4:15 PM- 5:45 PM	Session #10: Artificial Intelligence for Communications and IT (AI4C-III) Venue: Room Ha Long, Jonathan KS Choi Center, Vietnam National University Hanoi Chairs: Xuan-Tu Tran (VNU, Vietnam)			
4:15 PM	1571179508	A GAN-Based Knowledge Distillation Framework for Robust Defect Detection on PCBs in Low-Light Conditions	Hằng Hoàng, Trung-Hieu Le and Quoc-Viet Hoang (Hung Yen University of Technology and Education, Vietnam); Pham Ngoc Thang (University & Hung Yen University of Technology and Education, Vietnam)	Oral
4:30 PM	1571165834	Graph Attention Networks for Channel-Aware User Clustering in mmWave-NOMA Systems	Ayman Rabee and Imad Barhumi (United Arab Emirates University, United Arab Emirates)	Oral
4:45 PM	1571179467	Multi-Level Feature Absorption Network for Fault Detection in Power Lines Under Low-Illumination Conditions	Van Anh Nguyen, Trung-Hieu Le and Quoc-Viet Hoang (Hung Yen University of Technology and Education, Vietnam); Pham Ngoc Thang (University & Hung Yen University of Technology and Education, Vietnam)	Oral
5:00 PM	1571171650	Solving at-Least Sequence Constraints in Nurse Rostering Problem Using SAT	Hieu Truong Xuan, Quan Nguyen Hong, Nghia Dao Xuan and Tuyen Kieu Van (VNU University of Engineering and Technology, Vietnam); Khanh Van To (VNU University of Engineering and Technology)	Oral
5:15 PM	1571181306	Imitation Learning-Based Mobile Robot Navigation Using Semantic Segmentation and Depth Estimation	Thai-Viet Dang (Hanoi University of Science and Technology & School of Mechanical Engineering, Vietnam); Nhu-Nghia Bui (Hanoi University of Science and Technology, Vietnam); Phan Xuan Tan (Shibaura Institute of Technology, Japan)	Oral
5:30 PM	1571171753	A Distributed Peer-to-Peer Framework for Online Services: Protocol Design and Validation	Asif Mahmood (Independent University, Bangladesh, Bangladesh); Razib Hayat Khan (Independent University Bangladesh, Bangladesh); Jahid Hasan Rony (Independent University Bangladesh & Dhaka University of Engineering & Technology (DUET), Bangladesh); M M Mahbulul Syeed and Mohammad Faisal Uddin (Independent University Bangladesh, Bangladesh)	Oral
5:45 PM	Closing session			

Day 3: Saturday, 18 October 2025

Social Event: Hanoi Old Quarter guided tours (registration required)