2024 IEEE Tenth International Conference on Communications and Electronics (ICCE)
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Bay Capital Da Nang Hotel, Da Nang City, Vietnam
July 31 – August 2, 2024

Table of Contents

A. STATISTICS ABOUT SUBMISSION AND ACCEPTACE

Items	#
- Number of submitted papers	271
- Number of full accepted papers	133
- Number of poster papers	30
- Acceptance rate of full papers	49.0%
- Number of submitting countries	31

B. FINAL PROGRAM AT A GLANCE

Wednesday, July 31, 2024	
8:30 – 9:00	**Opening Ceremony:** – **Welcome message by host University** – **Welcome speech of General Co–Chair** – **Welcome speech by President of Samsung R&D Vietnam** – **Conference introduction to IEEE ICCE 2024 by Technical Program Co-chair**
Keynote Sessions **Time: 9:00 – 12:30** **Room: EMBRESS GRAND BALLROOM** **Session Chair: Prof. Serge Fdida (Sorbonne Université, France)**	
9:00 – 9:45	**Keynote 1:** *"Getting started with 6G – Emerging 6G Toolkits and Testbeds for enabling 6G research and development for all"* by Thomas Magedanz, TU Berlin Fraunhofer FOKUS, Germany
9:45 – 10:30	**Keynote 2:** *"Ultrasound-mediated Neuromodulation"* by Hyunjoo Jenny Lee, Korea Advanced Institute of Science and Technology (KAIST), Korea
10:30 – 11:00	**Coffee Break**
11:00 – 11:45	**Keynote 3:** *"Paradigm Shifts in the Design of Human Activity Recognition Systems Using Radar Sensors"* by Matthias Pätzold, University of Agder, Norway
11:45 –	**Keynote 4:** *"Overcoming the Technical Hurdles to $1T Revenue in Semiconductor: from Materials to Systems"*

Time		
12:30	by Bich-Yen. Nguyen and C. Maleville, SOITEC, Parc Technologique des Fontaines – Bernin 38926 – France	
12:30 – 13:30	**Lunch at Cloves Restaurant (4th floor)**	
13:30 – 15:00	**Tutorial** **Room: INSPIRE MEETING ROOM** **Session Chair: Prof. Hiroshi Shirai (Chuo University, Japan)** *"On-Chip Electrochemical Impedance Spectroscopy: theory, design, implementation and application"* by Prof. Dr.-Ing. Moustafa Nawito International University of Applied Sciences, Germany	

Time	BALL ROOM 1	BALL ROOM 2	INSPIRE MEETING ROOM	THINK MEETING ROOM
13:30 – 15:10	**SIGNAL PROCESSING AND APPLICATIONS** **SP-1: Signal processing for healthcare**	**COMMUNICATION NETWORKS AND SYSTEMS** **CNS-1: Coding and Information Theory**	**Tutorial (see above)**	**Special Session on Cognitive Information Processing and Its Applications** **SS1: Cognitive Information Processing and Its Applications**
15:10 – 15:40	**Coffee Break & Poster Session 1 (30 minutes) - Signal Processing and Applications**			
15:40 – 17:20	**SIGNAL PROCESSING AND APPLICATIONS** **SP-2: Speech & Language**	**COMMUNICATION NETWORKS AND SYSTEMS** **CNS-2: MIMO-NOMA and RIS-UAV Communications**	**Special Session on Power Electronics and Electric Drives for Automotive Applications** **SS3-1: Electric Machines and Drives for Automotive Applications**	**ELECTRONIC SYSTEMS** **ES-1: Computing Hardware Architecture for AI, Security Application**
	Thursday, August 1, 2024			
8:30 – 9:50	**SIGNAL PROCESSING AND APPLICATIONS** **SP-3: Deep learning for Agriculture**	**Special Session on Machine Learning and Optimization for Next Generation Communication Technologies** **SS2: Machine Learning and Optimization for Next Generation Communication Technologies**	**Special Session on Power Electronics and Electric Drives for Automotive Applications** **SS3-2: Control of Powertrain System**	**ELECTRONIC SYSTEMS** **ES-2: Mixed Signal, Analog IC Design**
9:50 – 10:20	**Coffee Break & Poster Session 2 (30 minutes) – Communication Networks and Systems**			
10:20 – 12:00	**SIGNAL PROCESSING AND APPLICATIONS** **SP-4: Multimedia Security**	**COMMUNICATION NETWORKS AND SYSTEMS** **CNS-3: Agile network architectures and solutions**	**Special Session on Power Electronics and Electric Drives for Automotive Applications** **SS3-3: Power Converters for Charging Infrastructure**	**ELECTRONIC SYSTEMS** **ES-3: Biomedical Circuits and Systems**
12:00 – 13:30	**Lunch at Cloves Restaurant (4th floor)**			

Time	BALL ROOM 1	BALL ROOM 2	INSPIRE MEETING ROOM	THINK MEETING ROOM
13:30 – 15:10	**SIGNAL PROCESSING AND APPLICATIONS** **SP-5: Signal Processing and Multimedia Analysis Applications**	**COMMUNICATION NETWORKS AND SYSTEMS** **CNS-4: Next-generation network and communication technologies**	**POWER ELECTRONICS** **PE-1: Power Electronics 1**	**MICROWAVE ENGINEERING** **MW-1: Diversity antennas**
15:10 – 15:40	**Coffee Break & Poster Session 3 (30 minutes) – Electronic Systems, Microwave Engineering**			
15:40 – 17:20	**SIGNAL PROCESSING AND APPLICATIONS** **SP-6: Pattern Recognition**	**Special Session on Recent Advances in B5G/6G Networks** **SS4-1: Advanced Communication Technologies**	**POWER ELECTRONICS** **PE-2: Power Electronics- 2**	**MICROWAVE ENGINEERING** **MW-2: Metasurface-inspired antennas**
	GALA DINER **Time: 18:30 – 21:00** **Venue: The view - Yacht Restaurant, Tran Hung Dao Street,** **An Hai Region, Hai Chau Dist., Da Nang City** **(traveling from the conference hotel to the restaurant by private buses)**			

Friday, August 2, 2024

Time	BALL ROOM 1	BALL ROOM 2	INSPIRE MEETING ROOM	THINK MEETING ROOM
8:30 – 9:50	**SIGNAL PROCESSING AND APPLICATIONS** **SP-7: Signal Filtering and Modelling**	**Special Session on Recent Advances in B5G/6G Networks** **SS4-2: Optimization and Resource Management in Next-Generation Networks**	**POWER ELECTRONICS** **PE-3: Power Electronics-3**	**MICROWAVE ENGINEERING** **MW-3: Microwave Engineering**
9:50 – 10:10	**Coffee + Brunch**			
10:10 – 11:50	**SIGNAL PROCESSING AND APPLICATIONS** **SP-8: Sensor Fusion and Signal Processing**		**POWER ELECTRONICS** **PE-4: Power systems**	

C. REGULAR TRACKS

1. TRACK: SIGNAL PROCESSING AND APPLICATIONS

<table>
<tr><td colspan="3" align="center">Wednesday, July 31, 2024</td></tr>
<tr><td colspan="3">SP-1: Signal Processing for Healthcare
Time: 13:30 – 15:10
Room: BALL ROOM 1
Session chair: Prof. Edward Sazonov (The University of Alabama, USA)</td></tr>
<tr><td>Time</td><td>Title</td><td>Authors</td></tr>
<tr><td>13:30 – 13:50</td><td>Food Intake Detection in the Face of Limited Sensor Signal Annotations</td><td>Aqsa Yousaf and Edward Sazonov (The University of Alabama, USA)</td></tr>
<tr><td>13:50 – 14:10</td><td>Integration of Median Filter and K-Means Clustering Technique for Ultrasound Tomography</td><td>Theu Luong Thi (Hoa Binh University, Vietnam); Tran Quang-Huy (Ha Noi Pedagogical University No2, Vietnam); Viet Bac T. Phung (VinUniversity, Vietnam); Duc-Tan Tran (Phenikaa University, Vietnam)</td></tr>
<tr><td>14:10 – 14:30</td><td>Exploiting Machine Learning and Gene Expression Analysis in Amyotrophic Lateral Sclerosis Diagnosis</td><td>Hai-Long Nguyen, Duc-Long Vu and Hai-Chau Le (Posts and Telecommunications Institute of Technology, Vietnam)</td></tr>
<tr><td>14:30 – 14:50</td><td>Pubic Symphysis-Fetal Head Segmentation in Ultrasound Images with Deep Neural Networks</td><td>Luu Duc Lam (Hanoi University of Science and Technology & HUST, Vietnam); Do Tien Dat and Ha Thanh Pham (Hanoi University of Science and Technology, Vietnam); Minh Hoang Luong (Military Institute of Medical Radiology and Oncology, Vietnam); Viet Dung Nguyen (Hanoi University of Science and Technology, Vietnam)</td></tr>
<tr><td>14:50 – 15:10</td><td>Weighted Fusion Architecture for Improved Ovarian Tumor Segmentation from Ultrasound Images</td><td>Nam Anh Ta (Hanoi University of Science and Technology, Vietnam); Van Anh Ngo (Hanoi University of Science and Technology (HUST), Vietnam); Thi-Loan Pham (Hai Duong University, Vietnam); Vu Duy Hai (Hanoi University of Science and Technology, Vietnam); Thi-Lan Le (School of Electrical and Electronic Engineering (SEEE), HUST, Vietnam); Hai Vu (School of Electrical and Electronics Engineering, Hanoi University of Science and Technology, Vietnam); Duy Quang Phạm (Hanoi University of Science and Technology & VNPT Media, Vietnam); Thanh-Hai Tran (Hanoi University of Science and Technology, Vietnam)</td></tr>
<tr><td>15:10 – 15:40</td><td colspan="2" align="center">Coffee Break & Poster Session 1 - Signal Processing and Applications</td></tr>
</table>

SP-2: Speech & Language
Time: 15:40 – 17:20
Room: BALL ROOM 1
Session chair: Prof. Jia-Ching Wang (National Central University, Taiwan)

Time	Title	Authors
15:40 – 16:00	Improvement of Vietnamese Noun Phrases Chunking in Text-Based Person Image Search	Toan Khanh Luong (Hanoi University of Sciences and Technology, Vietnam); Hoai Thi Phan (People's Security Academy & Hanoi University of Sciences and Technology, Vietnam); Diep T. N. Do (Hanoi University of Science and Technology, Vietnam); Thi-Lan Le (School of Electrical and Electronic Engineering (SEEE), HUST, Vietnam)
16:00 – 16:20	Self-Supervised Learning and Masked Language Model for Code-Switching Automatic Speech Recognition	Po-Kai Chen, Li-Yeh Fu, Cheng-Kai Chen, Yi-Xing Lin and Chih-Ping Chen (National Central University, Taiwan); Chien-Lin Huang (National Cheng Kung University, Taiwan); Jia-Ching Wang (National Central University, Taiwan)
16:20 – 16:40	Sino-Vietnamese Text Transcription Using Word Embedding Approach	Trung-Kien Dao (MICA Institute (HUST - CNRS/UMI 2954 - INP Grenoble), Vietnam); Dinh-Van Nguyen (SEEE - HUST & MICA Institute, Vietnam); Minh-Vu Pham and Nhat-Nam Duong (SEEE, Hanoi University of Science and Technology, Vietnam)
16:40 – 17:00	DConvT: Deep Convolution-Transformer Network Utilizing Multi-Scale Temporal Attention for Speech Enhancement	Quoc Cuong Nguyen (Hanoi University of Science and Technology, Vietnam); Chau Ngoc Hoang and Anh Xuan Thi Tran (Hanoi University of Science and Technology (HUST), Vietnam)
17:00 – 17:20	A Study on Natural Language Processing-Based Method for Windows Malware Detection	Hien Do Thi Thu (University of Information Technology, VNU-HCM, Vietnam); Nguyen Quang Huy (University of Information Technology, Vietnam); Bui Duc Hoang (University of Information and Technology, Vietnam); Nguyen Tan Cam (University of Information Technology & Vietnam National University Ho Chi Minh City, Vietnam); Van-Hau Pham (University of Information Technology, Vietnam)

Thursday, August 1, 2024

SP-3: Deep learning for Agriculture
Time: 8:30 – 9:50
Room: BALL ROOM 1
Session chair: Prof. Tran Hoai Linh (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
8:30 – 8:50	Expanding Vision in Tree Counting: Novel Ground Truth Generation and Deep Learning Model	Minh Nhat Ton-That (Vietnamese German University, Vietnam); Tin Viet Le (Vietnamese-German & VGU, Vietnam); Nhien H Truong (Vietnamese-German University, Vietnam); An Dinh Le (University of California, San Diego, USA); Anh-Duy Pham (University Osnabrueck, Germany); Hien Bich Vo (Vietnamese-German University, Vietnam)
8:50 – 9:10	Resource-Constrained Intelligent Trap: Fruit Flies Surveillance Framework with TinyML Integration	Quan Minh Nguyen (Hanoi University of Science and Technology, Vietnam); Vu Thanh Le (National Economics University, Vietnam); Minh Nhat Lai (Hanoi University of Science and Technology, Vietnam); Hien Bich Vo (Vietnamese-German University, Vietnam)

Time	Title	Authors
9:10 – 9:30	A Unified Framework for Plant Identification from UAV Images	Do Mai Viet Hoang (Ha Noi University of Science and Technology, Vietnam); Doan-Duc Phan (SEEE, HUST, Vietnam); Cong Tuan Minh Le (UTS, Australia); Van-Nam Hoang (MICA, HUST, Vietnam); Hong-Quan Nguyen (Hanoi University of Science and Technology & Viet - Hung Industrial University, Vietnam); Thanh-Hai Tran (Hanoi University of Science and Technology, Vietnam); Hai Vu (School of Electrical and Electronics Engineering, Hanoi University of Science and Technology, Vietnam); Vu Xuan Dinh and Van-Sam Hoang (VNUF, Vietnam); Michiel Vlaminck (Ghent University, Belgium); Wouter Maes (UGent, Belgium); Hiep Q Luong (Ghent University - IMEC, Belgium); Thi-Lan Le (School of Electrical and Electronic Engineering (SEEE), HUST, Vietnam)
9:30 – 9:50	PeanutAD: A Real-World Dataset for Anomaly Detection in Agricultural Product Processing Line	Duc Hai Nguyen (PHENIKAA University, Vietnam); Hiep Trong Do (Phenikaa University, Vietnam); Khanh Quoc Nguyen (Junior Research Assistant & Phenikaa-University, Vietnam); Hoang Linh Phuong Nguyen (Phenikaa University, Vietnam); Nguyen Thi Huong (Hanoi College of High Technology, Vietnam); Duc-Tan Tran and Toi Van Nguyen (Phenikaa University, Vietnam)
9:50 – 10:20	**Coffee Break & Poster Session 2 - Communication Networks and Systems**	

SP-4: Multimedia Security
Time: 10:20 – 12:00
Room: BALL ROOM 1
Session chair: Dr. Ta Kim Hue (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
10:20 – 10:40	Meet-In-The-Middle Attack on the 15-Round Variant of the Lightweight Block Cipher Shakey for Protection of IoT Devices	Kohan Yada and Yasutaka Igarashi (Tokyo University of Science, Japan)
10:40 – 11:00	Stream Cipher Using Chaotic Maps for Secure Multimedia Data	Do Quang Tran, Ung Duc Manh and Nguyen Vu Ha Linh (Hanoi University of Science and Technology, Vietnam); Anh Van Ta (IVI Group, Vietnam); Ta Kim Hue (Hanoi University of Science and Technology, Vietnam); Hoang Manh Thang (Hanoi University of Science and Technology (HUST), Vietnam)
11:00 – 11:20	Meet-In-The-Middle Cryptanalysis of IVLBC	Yuki Uchiyama and Yasutaka Igarashi (Tokyo University of Science, Japan)
11:20 – 11:40	Effective Consensus Computation for Public Blockchain in Small-World Network Environment	Do Quang Tran, Ta Kim Hue and Nguyen Xuan Quyen (Hanoi University of Science and Technology, Vietnam); Tung Anh Nguyen (The University of Sydney, Australia); Manh-Hai Hoang (University of Alberta, Canada); Hoang Manh Thang (Hanoi University of Science and Technology (HUST), Vietnam)
11:40 – 12:00	Higher Order Differential Attack on the Lightweight Block Cipher LBC-3	Naoki Shibayama and Yasutaka Igarashi (Tokyo University of Science, Japan)

SP-5: Signal Processing and Multimedia Analysis Applications
Time: 13:30 – 15:10
Room: BALL ROOM 1
Session chair: Prof. Pham Ngoc Nam (VinUniversity, Vietnam)

Time	Title	Authors
13:30 – 13:50	An Innovative Pipeline for Corrosion Segmentation in Telecommunication Infrastructure	Tung Duy Dao and Viet Hoang Nguyen (Viettel Networks, Vietnam); Hung Xuan Ho (Viettel & Viettel Networks Research, Vietnam)
13:50 – 14:10	A Novel Autorec-Based Architecture for Recommendation System	Tan Nghia Duong, Thi Thu Trang Pham and Hieu Minh Tran (Hanoi University of Science and Technology, Vietnam); Dung Pham Quoc (Tran Dai Nghia Highschool for the Gifted, Vietnam); Dang Nguyen Hai (VNU-HCM High School for the Gifted, Vietnam); Phat Huu Nguyen and Manh Hoang Tran (Hanoi University of Science and Technology, Vietnam)
14:10 – 14:30	An Implementation of IoT System for Collecting Vibration Signals of Ships Engines to Support Engine Failures Detection	Duc-Thanh Nguyen (Hanoi University of Science and Technology Hanoi, Vietnam); Nam Pham Van and Huy Do Ba Quang (Hanoi University of Industry, Vietnam); Linh Hoai Tran (Hanoi University of Science and Technology, Vietnam)
14:30 – 14:50	A Split-Merging K-Means Clustering Algorithm with User Attributes for Collaborative Filtering	Dang Thi Nuong (Hanoi University of Science Technology, Vietnam); Xuan Dung Nguyen (Hanoi University of Science and Technology, Vietnam); Phuong Xuan Quang (Hanoi University of Science Technology, Vietnam); Vinh Tran-Quang (Hanoi University of Science and Technology & School of Electrical and Electronic Engineering, Vietnam)
14:50 – 15:10	A Dataset and Quality Evaluation of AI-Generated Images for Online Learning	Hai Dang Vu (Hanoi University of Science and Technology, Vietnam); Chibuike Onuoha (The University of Aizu, Japan); Duc Nam Nguyen and Huong Thu Truong (Hanoi University of Science and Technology, Vietnam); Nam Pham Ngoc (VinUniversity, Vietnam); Truong Cong Thang (The University of Aizu, Japan)
15:10 – 15:40	**Coffee Break & Poster Session 3 - Electronic Systems, Microwave Engineering**	

SP-6: Pattern Recognition
Time: 15:40 – 17:20
Room: BALL ROOM 1
Session chair: Dr. Vo Le Cuong (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
15:40 – 16:00	Enhancing Continual Semantic Segmentation Through Knowledge Distillation and Adaptive Class Integration	Quynh-Trang Pham Thi (VNU University of Engineering and Technology, Vietnam); Tuan-Nghia Do (VNU University of Engineering and Technology (VNU-UET), Vietnam); Hai-Long Nguyen (VNU University of Engineering and Technology, Vietnam); Thanh Hai Dang (Vietnam National University Hanoi & VNU University of Engineering and Technology, Vietnam)
16:00 – 16:20	A Method for Missing Joint Recovery and Its Application in Skeleton-Based Activity Recognition	Phuong-Dung Nguyen (Thuyloi University, Vietnam); Huu-Linh Nguyen, Van-Thang Tran and Viet-Duc Le (Hanoi University of Science and Technology, Vietnam); Huu-Quynh Nguyen

Time	Title	Authors
		(Thuyloi University, Vietnam); Thi-Lan Le (School of Electrical and Electronic Engineering (SEEE), HUST, Vietnam)
16:20 – 16:40	Improving Human-Object Interaction Detection via Streamlining Matching Procedure and Enhancing Interaction Query	Pham T. Tai, Vu L Bui and Le Viet Thinh (University of Information Technology - VNUHCM, Vietnam); Doanh Cao Bui (University of Information Technology & Vietnam National University, Vietnam); Khang Nguyen (University of Information Technology, VNU-HCM, Vietnam)
16:40 – 17:00	Optical-Flow and Human-Segmentation Based Method for High Accuracy Detection of Golf Swing Key Events	Cuong Vo-Le (Hanoi University of Science and Technology, Vietnam); Dat Tien Doan and Hoang Doan Tran (Hanoi University of Science and Technology, Vietnam)
17:00 – 17:20	WiLHPE: WiFi-Enabled Lightweight Channel Frequency Dynamic Convolution for HPE Tasks	Toan D. Gian (VinUniversity, Vietnam); Nguyen Tien Hoa (Hanoi University of Science and Technology, Vietnam); Nhan Nguyen (University of Oulu, Finland); Van-Dinh Nguyen (VinUniversity, Vietnam)

Friday, August 2, 2024

SP-7: Signal Filtering and Modelling
Time: 8:30 – 10:10
Room: BALL ROOM 1
Session chair: Dr. Quang Duc Pham (University of Engineering and Technology & Hanoi Vietnam National University, Vietnam)

Time	Title	Authors
8:30 – 8:50	Block Based Focus Volume Pyramid for Shape from Focus	Khurram Ashfaq and Muhammad Tariq Mahmood (Korea University of Technology and Education, South Korea)
8:50 – 9:10	Inspecting the Optical Properties of Light Transmitting Concrete for Applications in Smart Traffic	Quang Duc Pham (University of Engineering and Technology & Hanoi Vietnam National University, Vietnam); Hai Nguyen Minh, Nam Phương Huynh and Nam Hoang Phan (University of Danang, Vietnam); Thu Thuy Thi Mai (PEDI Civil Solutions JSC, Vietnam); Vinh Ngoc Tran (University of Engineering and Technology VNU, Vietnam)
9:10 – 9:30	Impulsive Noise Resilient Mean Shift Filtering for Effective Color Image Enhancement	Damian Kusnik (Silesian University of Technology, Poland); Milena Smolka (AGH University of Science and Technology, Poland); Bogdan Smolka (Silesian University of Technology, Poland)
9:30 – 9:50	A Flexible Residual Neural Network for Rician Noise Removal in MR Images	Nguyen Phuong Tu (University of Science and Technology, Vietnam); Tran Dang Khoa Phan (Danang University of Science and Technology, Vietnam); Tu Dac Ho (Norwegian University of Science and Technology, Norway & The Arctic University of Norway, Norway); Hanh T. M. Tran (Danang University of Science and Technology, Vietnam)
9:50 – 10:10	Coffee + Brunch	

SP-8: Sensor Fusion and Signal Processing
Time: 10:10 –11:50

Room: BALL ROOM 1		
Session chair: Prof. Trung-Kien Dao (Hanoi University of Science and Technology, Vietnam)		
Time	**Title**	**Authors**
10:10 – 10:30	Enhanced Bit-Rate Performance for Visible Light Communication Systems Between LED and Mobile Camera	Nam Nguyen Hoang and Dinh-Quan Nguyen (Hanoi University of Science and Technology, Vietnam)
10:30 – 10:50	Accuracy and Speed Improvement of Lidar Inertial Odometry and Mapping by Using Gravity Estimation and Incremental Voxels	Giang Truong Dao and Duong Hai Tran (Hanoi University of Science and Technology, Vietnam); Ngoc Phong Dao (Posts and Telecommunications Institute of Technology, Vietnam); Dinh Tuan Tran (Ritsumeikan University, Japan); Anh Quang Nguyen (Hanoi University of Science and Technology, Vietnam)
10:50 – 11:10	PBDM: Peak-Based Differential Method for Improve Leg Detection Performance with Laser Range Finder	Tan Van Duong (VNU University of Engineering and Technology, Vietnam); Huu Quoc Dong Tran (Tokyo Institute of Technology, Japan); Hieu Dang Van (VNU-University of Engineering and Technology, Vietnam); Hoang-Anh Phan (VNU University of Engineering and Technology, Hanoi, Vietnam); Van Nguyen Thi Thanh (Vietnam National University, Hanoi, Vietnam); Tung Thanh Bui (VNU University of Engineering and Technology, Vietnam)
11:10 – 11:30	A Wearable BTE-EEG Embedded Device for Emotion Monitoring with Quantum Machine Learning	Dau Ngoc Mai, Hika Barki and Wan Young Chung (Pukyong National University, South Korea)

2. TRACK: COMMUNICATION NETWORKS AND SYSTEMS

Wednesday, July 31, 2024		
CNS–1: Coding and Information Theory		
Time: 13:30 – 15:10		
Room: BALL ROOM 2		
Session chair: Prof. Matthias Pätzold (University of Agder, Norway)		
Time	**Title**	**Authors**
13:30 – 13:50	QoD Aware Energy Efficient Active RIS-Assisted Multi-User Multi-Stream Precoding by Scalable Complex Iterations	Yufeng Chen (Shanghai University, China); Hoang D. Tuan (University of Technology, Sydney, Australia); Hongwen Yu (Shanghai University, China)
13:50 – 14:10	Human Activity Recognition Using Wireless Signals and Low-Cost Embedded Devices	Phuoc Nguyen T. H., Thuan Vo Anh Tong and Binh Bui-Thanh (University of Information Technology, VNU-HCM, Vietnam)
14:10 – 14:30	A Novel True Wireless Stereo Communication Technique	Jiajun Zhu and Francis C. M. Lau (The Hong Kong Polytechnic University, Hong Kong)

Time	Title	Authors
14:30 – 14:50	Joint Optimization of Precoding and Probabilistic Constellation Shaping for Physical Layer Security in Visible Light Communications	Duc Trong Minh Hoang (Ha Noi, Viet Nam & Ha Noi University of Science and Technol, Vietnam); Chuyen T. Nguyen and Xuan Vu Phan (Hanoi University of Science and Technology, Vietnam); Thanh Pham (Shizuoka University, Japan)
14:50 – 15:10	Maximizing Mutual Information for Covert Sensing in Joint Radar-Communication Systems	Nguyen Thi Tam (Hanoi University of Science and Technology, Vietnam); Huynh Cuong Huy (Academy of Military Science and Technology, Vietnam); Hien Ta (International University, Vietnam); Toan-Van Nguyen (San Diego State University, USA); Nguyen Tien Hoa (Hanoi University of Science and Technology, Vietnam)
15:10 – 15:40	**Coffee Break & Poster Session 1 - Signal Processing and Applications**	

CNS–2: MIMO-NOMA and RIS-UAV Communications
Time: 15:40 – 17:40
Room: BALL ROOM 2
Session chair: Prof. Anh Pham (The University of Aizu, Japan)

Time	Title	Authors
15:40 – 16:00	BER Performance of Downlink MIMO-NOMA with Combination of SFBC and Joint Maximum-Likelihood Detector	Ngo Thanh Hai (VNUHCM-University of Science, Vietnam); Vu Thao Vi (VNU-HCM, University of Science, Vietnam); Nguyen Thi Xuan Uyen and Doan Bui Cong Khanh (University of Science, Vietnam); Dang Le Khoa (University of Science, VNU-HCM, Vietnam)
16:00 – 16:20	NOMA and IRS-Assisted Secure UAV Communications	Shuzhen Liu, Zhiyu Huang and GuoQiang He (Shanghai University, China); Ali A Nasir (KFUPM, Saudi Arabia); Hongwen Yu and Zhichao Sheng (Shanghai University, China)
16:20 – 16:40	Maximizing the Multi-User Downlink Transmission Rate in RIS-Assisted UAV System	Yang Gu, Zhiyu Huang, Hongwen Yu, Zhichao Sheng and Yong Fang (Shanghai University, China)
16:40 – 17:00	Digital Baseband Self-Interference Cancellation Using Fractionally-Spaced Finite-Impulse-Response Structure for Full-Duplex MIMO	Geng Shao (McGill University, Canada); Robert Morawski (McGill, Canada); Tho Le-Ngoc (McGill University, Canada)
17:00 – 17:20	Hybrid Orthogonal-Nonorthogonal Multiple Access for CR-Assisted Cooperative UAV Systems	Thi My Chinh Chu and Hans-Juergen Zepernick (Blekinge Institute of Technology, Sweden)
17:20 – 17:40	Energy Efficiency Optimization for Federated Learning in Cell-Free Massive MIMO Systems	Xuan-Toan Dang and Oh-Soon Shin (Soongsil University, South Korea)

Thursday, August 1, 2024

9:50 –	**Coffee Break & Poster Session 2 - Communication Networks and Systems**

10:20		

CNS–3: Agile network architectures and solutions
Time: 10:20 – 12:10
Room: BALL ROOM 2
Session chair: Prof. Florian Wamser (Lucerne University of Applied Sciences and Arts, Switzerland)

Time	Title	Authors
10:20 – 10:50	*Invited Talk:* Increase the efficiency of vulnerability detection and cyber security analysis in container	By Florian Wamser (Lucerne University of Applied Sciences and Arts, Switzerland)
10:50 – 11:10	In-Band Locating High Delay Variance Links with Programmable Data Plane	Nguyen Minh Tri (VNUHCM-University of Science, Vietnam); Nguyen Viet Ha (University of Science, VNU-HCM, Vietnam); Masato Tsuru (Kyushu Institute of Technology, Japan)
11:10 – 11:30	Evaluation of Deployment Models for Microservices in an Edge-Based Serverless Environment	Kien Nguyen and Frank Loh (University of Wuerzburg, Germany); Tobias Hoßfeld (University of Würzburg, Germany); Phuc Lai Le (Hanoi University of Science and Technology, Vietnam); Huong Thu Truong (Hanoi University of Science and Technology, Vietnam); Nam Pham Ngoc (VinUniversity, Vietnam); Nguyen Huu Thanh (Hanoi University of Science and Technology, Vietnam)
11:30 – 11:50	Accelerating Network Slice Embedding with Reinforcement Learning	Minh-Thanh Nguyen and Quang-Trung Luu (Hanoi University of Science and Technology, Vietnam); Nguyen Tai Hung (Hanoi University of Technology, Vietnam); Do-Minh Tran, Tuan-Anh Do and Kim-Hoan Do (Hanoi University of Science and Technology, Vietnam); Van-Hieu Nguyen (Posts and Telecommunications Institute of Technology, Vietnam)
11:50 – 12:10	An Extended OVN Architecture for End-To-End QoS Guarantee in Network Slicing	Hai Thanh Pham, Anh Tuan Nguyen, Dong Van Tran and Trung Thanh Vu (Hanoi University of Science and Technology, Vietnam); Nguyen Tai Hung (Hanoi University of Technology, Vietnam); Nguyen Huu Thanh (Hanoi University of Science and Technology, Vietnam)

CNS–4: Next-generation network and communication technologies
Time: 13:30 – 15:20
Room: BALL ROOM 2
Session chair: Dr. Van-Dinh Nguyen (VinUniversity, Vietnam)

Time	Title	Authors
13:30 – 14:00	*Invited Talk*: Beyond the Hype: Real Talk on Security Vulnerability Sensationalism	By Peter Membrey (ExpressVPN, Hongkong, China)
14:00 – 14:20	Communication Attack Analysis of Multi-Agent System over Wide-Area Network	Thiem V. Pham, Nguyen Thi Thanh Quynh, Tuan-Anh Nguyen and Cuong Chinh Duong (Phenikaa University, Vietnam); Trung Ngoc Dang (TNUT, Vietnam)
14:20 – 14:40	Toward WebTransport Support in HTTP Adaptive Streaming	Minh Nguyen, Philip Nys and Stefan Pham (Fraunhofer FOKUS, Germany); Daniel Silhavy (Fraunhofer Institute FOKUS, Germany); Stefan Arbanowski (Fraunhofer Institut FOKUS, Germany); Stephan Steglich (Fraunhofer FOKUS, Germany)

Time	Title	Authors
14:40 – 15:00	Mobile Subscriber Location Estimation based on Logistic Regression for Enhancement of Paging Procedure in 5G and beyond Networks	Kieu-Ha Phung, Van-Phu Tran and Thom Thi Tran (Hanoi University of Science and Technology, Vietnam)
15:00 – 15:20	Ultra-Wide Range Refractive Index PCF-Based SPR Sensor for Lab-On-Chip Applications	Ruhul Amin (Bangladesh University of Business and Technology, Bangladesh); Nam-Phong Nguyen (Hanoi University of Science and Technology, Vietnam); Md. Anwar Hossain (Bangladesh University of Business and Technology, Bangladesh); Abdullah Saleh (Ahsanullah University of Science and Technology, Bangladesh); Nguyen Hoang Hai (Hanoi University of Science and Technology, Vietnam)
15:10 – 15:40	Coffee Break & Poster Session 3 - Electronic Systems, Microwave Engineering	

3. TRACK: POWER ELECTRONICS

Thursday, August 1, 2024

PE-1: Power Electronics 1
Time: 13:30 – 15:10
Room: INSPIRE MEETING ROOM
Session chair: Prof. Triet Nguyen-Van (University of Tsukuba, Japan)

Time	Title	Authors
13:30 – 13:50	A Comprehensive Analysis of EMI Magnetic Shielding Approaches for Power Module	Chun-Ta Huang (National Taiwan University of Science and Technology, Taiwan); Pin-Tzu Chiu (NTUST, Taiwan); Chih-Ming Tzeng, Hsin-Han Lin and Yu-Hua Cheng (ITRI, Taiwan); Man Hay Pong (NTUST, Taiwan); Huang-Jen Chiu (National Taiwan University of Science and Technology, Taiwan)
13:50 – 14:10	Carrier-Based PWM Method for Output Capacitor Voltage Balancing of Vienna Rectifier	Phong Doan Nguyen (Ho Chi Minh City University of Technology VNU-HCM, Vietnam); Pham Minh Duc and Tuyen Nguyen Dinh (Ho Chi Minh City University of Technology, Vietnam); Truong Phuoc Hoa (Ho Chi Minh City of Technology, Vietnam); Nhuan An Le (University of Technology, Vietnam); Hung Duc Nguyen (Ho Chi Minh City University of Technology, Vietnam)
14:10 – 14:30	A Novel Modeling and Control Design for a 3-Phase Current-Fed Dual Active Bridge Converter in an AC Battery Application	Tuan Anh Do, Duy Phuoc Pham, Ba Manh Nguyen, Van Tung Dau and Dang Tien Hoang (Hanoi University of Science and Technology, Vietnam); Nguyen Quang Dich (Institute for Control Engineering and Automation, Vietnam); Bao Binh Pho (Hanoi University of Civil Engineering, Vietnam); Phuong Vu Hoang (Hanoi University of Science and Technology, Vietnam)
14:30 – 14:50	High Voltage Gain Floating Boost Converter	Chan-Viet Nguyen (Ho Chi Minh City University of Technology, Vietnam); Van-Dai Bui (Kyungpook National University, South Korea & Thuyloi University, Vietnam); Quoc Dung Phan (Ho Chi Minh City University of Technology (HCMUT) & Vietnam National University HCMC (VNU-HCM),

Time	Title	Authors
		Vietnam); Truong Phuoc Hoa (Ho Chi Minh City of Technology, Vietnam); Phuong Thanh Ho (Ho Chi Minh City University of Technology, Vietnam); Nhuan An Le (University of Technology, Vietnam)
14:50 – 15:10	An Active Module to Reduce Output Ripple in Power Converter	Andrew C.S. Liao (National Taiwan University of Science and Technology, Taiwan); Man Hay Pong (NTUST, Taiwan); Huang-Jen Chiu (National Taiwan University of Science and Technology, Taiwan)
15:10 – 15:40	**Coffee Break & Poster Session 3 - Electronic Systems, Microwave Engineering**	

PE-2: Power Electronics 2
Time: 15:40 – 17:20
Room: INSPIRE MEETING ROOM
Session chair: Dr. Chan-Viet Nguyen (Ho Chi Minh City University of Technology, Vietnam)

Time	Title	Authors
15:40 – 16:00	Current Feedback Method - A New Approach of Field-Weakening Control for Surface-Mounted Permanent Magnet Synchronous Motor	Tien Nguyen-Minh (Viettel Aerospace Institute & Viettel Group, Vietnam); Hoai-Linh T. Nguyen and M. h Hoang (Viettel Aerospace Institute - Viettel Group, Vietnam); Van-Hung Bui (Posts and Telecommunications Institute of Technology & Viettel Institute - Viettel Group, Vietnam); Hieu Nguyen (PTIT University, Vietnam)
16:00 – 16:20	Switching Control of Transmitting Lane Sections in Dynamic Wireless Charging System for Electric Vehicles	Kien-Trung Nguyen (Hanoi University of Science and Technology, Vietnam); Tran Duc Hiep (Hanoi University of Industry, Vietnam); Nguyen Thi Diep (Electric Power University, Vietnam); Bui Duc Hieu and Ho Xuan Viet Anh (Hanoi University of Science and Technology, Vietnam)
16:20 – 16:40	Analysis of Input Voltage-Output Frequency Relationship in VCOs Using a Linear Time-Varying Model	Qin Yao, Shin Kawai and Triet Nguyen-Van (University of Tsukuba, Japan)
16:40 – 17:00	A Proposed Power Converter for an AC Battery	Tuan Anh Do, Phu Quang Nguyen, Tien Dat Vu, Trung Nghia Le, Vuong Anh Le, Ta Truong Linh Luu, Xuan Tung Bui, Duy Phuoc Pham and Ba Manh Nguyen (Hanoi University of Science and Technology, Vietnam); Nguyen Quang Dich (Institute for Control Engineering and Automation, Vietnam); Phuong Viet Pham and Phuong Vu Hoang (Hanoi University of Science and Technology, Vietnam)
17:00 – 17:20	Flyback Converter Transformer Design Optimization by AI	Tzu-Hao Huang (National Taiwan University of Science and Technology, Taiwan); Man Hay Pong (NTUST, Taiwan); Huang-Jen Chiu, Tung Tan Nguyen and Kai-En Lu (National Taiwan University of Science and Technology, Taiwan)
	Friday, August 2, 2024	

PE-3: Power Electronics 3
Time: 8:30 – 9:50
Room: INSPIRE MEETING ROOM

Session chair: Prof. Kien-Trung Nguyen (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
8:30 – 8:50	A Simplified Digital Predictive Current Control for T-Type Three-Phase Three-Level Inverters	Duy-Long Nguyen (Hanoi University of Science and Technology, Vietnam); Pham Minh Duc (Ho Chi Minh City University of Technology, Vietnam)
8:50 – 9:10	A Compact Space Vector Pulse Width Modulation Method for General Three-Phase Multilevel Inverters	Do Duy Hiep (Posts and Telecommunications Institute of Technology, Vietnam); Hieu Nguyen (PTIT University, Vietnam)
9:10 – 9:30	Decentralized Multilevel Inverters Based on CPWM for Five-Phase Permanent Magnet Synchronous Motor	Phu Cong Nguyen (HCMC University of Technology (HCMUT), Vietnam); Quoc Dung Phan (Ho Chi Minh City University of Technology (HCMUT) & Vietnam National University HCMC (VNU-HCM), Vietnam); Tuyen Nguyen Dinh (Ho Chi Minh City University of Technology, Vietnam)
9:30 – 9:50	Predictive Power Control for T-Type Nested Neutral Point Clamped Inverter Without Weighting Factor and Reduced	Van Quang Binh Ngo (Hue University of Education, Vietnam); Khanh-Quang Nguyen and Kim-Anh Nguyen (University of Science and Technology, Vietnam); Hieu Le Dinh (School of Engineering and Technology - Hue University, Vietnam)
9:50 – 10:20	**Coffee + Brunch**	

PE-4: Power systems
Time: 10:10 –11:10
Room: INSPIRE MEETING ROOM
Session chair: Prof. Phuong Vu Hoang (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
10:10 – 10:30	Forecasting Generating Power of Sun Tracking PV Plant Using Long-Short Term Memory Neural Network Model: A Case Study in Ninh Thuan - Vietnam	Duong Minh Quan (The University of Danang, Vietnam & University of Science and Technology, Vietnam); Binh Nam Nguyen, Emanuele Ogliari and Sonia Leva (Politecnico di Milano, Italy); Emilio Pafumi and Davide Alberti (Progetti Filiera Sustainable Mobility, Italy)
10:30 – 10:50	An Improved Neural Network Algorithm for Efficient Scheduling of Distributed Energy Resources in Microgrid	Truong Hoang Bao Huy (Soonchunhyang University, South Korea); Le Phuong (Hochiminh City University of Technology, Vietnam); Quang An Phan (Ho Chi Minh City University of Technology, Vietnam); Khoa Hoang Truong (Ho Chi Minh City University of Technology (HCMUT), Vietnam); Thanh Dang Bui (Hanoi University of Science and Technology, Vietnam); Dieu Vo (Ho Chi Minh City University of Technology, Vietnam)
10:50 – 11:10	Smart Scheduling Solutions for Home Energy Management in Residential Systems	Truong Hoang Bao Huy (Soonchunhyang University, South Korea); Le Phuong (Hochiminh City University of Technology, Vietnam); Quang An Phan (Ho Chi Minh City University of Technology, Vietnam); Khoa Hoang Truong (Ho Chi Minh City University of Technology (HCMUT), Vietnam); Thanh Dang Bui (Hanoi University of Science and Technology, Vietnam); Dieu Vo (Ho Chi Minh City University of Technology, Vietnam)

4. TRACK: ELECTRONIC SYSTEMS

Wednesday, July 31, 2024

15:10 – 15:40	**Coffee Break & Poster Session 1 - Signal Processing and Applications**

ES-1: Computing Hardware Architecture for AI, Security Application
Time: 15:40 – 17:30
Room: THINK MEETING ROOM
Session chair: Prof. Nguyen Duc Minh (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
15:40 – 16:10	*Invited Talk*: Recent advancement in Processor-Memory Architecture for Large AI Models	By Hyuk-Jae Lee (Seoul National University, South Korea)
16:10 – 16:30	Implementing Convolutional Auto Encoder on FPGA Using High Level Synthesis	Son Xuan Dao (Hanoi University of Science and Technology, Vietnam); Tuan-Khoi Nghiem (SEEE - HUST, Vietnam); Duong Dai Truong, Anh Tung Ong and Chi Hoang (Hanoi University of Science and Technology, Vietnam); Nguyen D. Minh (HUST, Vietnam)
16:30 – 16:50	A Novel NoC-Based SNN Architecture with Optimized Routers	Huong Nguyen-Dinh, Lan Dang-Hoang, Huy Tran-Quang, Linh Nguyen-Phuong and Chi Hoang (Hanoi University of Science and Technology, Vietnam); Nguyen D. Minh (HUST, Vietnam)
16:50 – 17:10	Preserving Power Optimizations Across the High Level Synthesis of Distinct Application-Specific Circuits	Paulo Garcia (Chulalongkorn University, Thailand)
17:10 – 17:30	Advancing Cryptographic Security: A Study on SHA-3 Implementation Within CRYSTAL-KYBER Key-Encapsulation Mechanism Hardware	Hoang Trang (Ho Chi Minh City University of Technology, Vietnam); Mai Hoang Minh (Ho Chi Minh University of Technology, Vietnam)

Thursday, August 1, 2024

ES-2: Mixed Signal, Analog IC Design
Time: 8:30 – 10:10
Room: THINK MEETING ROOM
Session chair: Prof. Loan Pham-Nguyen (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
8:30 –	A Design of 10 - 16 GHz CMOS High Spectral Purity Frequency Quadrupler	Anh Van Tran (Ho Chi Minh City University of Technology, Vietnam); Sanghun Lee (WAVE PIA, South Korea); Cuong Huynh (Ho Chi Minh City University of Technology, Vietnam)

Time	Title	Authors
8:50		
8:50 – 9:10	Design of a Rail-To-Rail 12-Bit 2.5-MSPS SAR ADC with Low-Area on 180nm CMOS Process	Mai-Minh-Kha Nguyen (University of Science, VNUHCM, Vietnam); Duc-Hung Le (University of Science, VNU-HCM, Vietnam)
9:10 – 9:30	A 70dB SNDR Continuous-Time Sigma-Delta Modulator in Sub-GHz Communication System	Phuong Thi Hong Nguyen (Ho Chi Minh University of Technology, Vietnam); Cuong Huynh (Ho Chi Minh City University of Technology, Vietnam)
9:30 – 9:50	A Power-Efficient Transmitter Design for 3D Stacked Memories in 28-nm CMOS Technology	Thinh Nguyen-Viet and Quoc Cuong Bui (Inha University, South Korea); Loan Pham-Nguyen (Hanoi University of Science and Technology, Vietnam); Gyung-Su Byun (Inha University, South Korea)
9:50 – 10:10	Forward Body Biasing Techniques for Low Power Null Convention Logic in SOI	Nguyen L Huy (RMIT University Vietnam, Vietnam); Paul L Beckett (RMIT University, Australia)
9:50 – 10:20	**Coffee Break & Poster Session 2 - Communication Networks and Systems**	

ES-3: Biomedical Circuits and Systems
Time: 10:20 – 12:00
Room: THINK MEETING ROOM
Session chair: Prof. Loan Pham-Nguyen (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
10:20 – 10:40	Immunosensor Based on Printed Circuit Board for Protein Detection	Tuan Quoc Vu (VNU, University of Engineering and Technology (UET), Vietnam); Viet Nguyen Canh (VNU University of Science, Hanoi, Vietnam); Chi Tran Nhu (Vietnam National University, Hanoi, Vietnam)
10:40 – 11:00	Circulating Tumor Cells (CTCs) Separation from Blood Constituents Using a Dielectrophoresis-Based Microdevice	Hang Nguyen Thu, Hoang Trung Nguyen and Mai Chi Nguyen (VNU University of Engineering and Technology, Vietnam); Loc Do Quang (VNU University of Science, Vietnam); Jen Ducrée (Dublin City University, Ireland); Trinh Chu Duc and Tung Thanh Bui (VNU University of Engineering and Technology, Vietnam)
11:00 – 11:20	Toward an AI-Embedded Capsule Endoscopy System for Medical Healthcare	Cuong Manh Hoang, Thi Lan Huong Nguyen and Hong Hoang Si (Hanoi University of Science and Technology, Vietnam); Chang-Sei Kim and Jongoh Park (Chonnam National University, South Korea); Anh Hai Le (Hanoi University of Science and Technology, Vietnam)
11:20 – 11:40	Development of a Compact System Integrating Pre-Concentrator and Electrochemical Measurements for Protein Pre-Concentration and Detection	Chi Tran Nhu (Vietnam National University, Hanoi, Vietnam); Loc Quang Do (VNU University of Science, Hanoi, Vietnam); Tung Thanh Bui (VNU University of Engineering and Technology, Vietnam); Thuy Tran Nguyen (E Hospital, Vietnam); Huu Cong Nguyen and Trung Le Thanh (E Hospital, Vietnam)
11:40 – 12:00	Cooperative Control of Multi-Connected Autonomous Vehicles: Dynamic Event-Triggered Approach	Thiem V. Pham and Nguyen Thi Thanh Quynh (Phenikaa University, Vietnam)

5. TRACK: MICROWAVE ENGINEERING

Thursday, August 1, 2024

MW-1: Diversity antennas
Time: 13:30 –14:50
Room: THINK MEETING ROOM
Session chair: Prof. Minh Thuy Le (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
13:30 – 13: 50	Design of a Cavity Backed Patch Antenna Array for Active Electronically Scanned Array Radar with Wide-Angle Impedance Matching	Khuyen Nguyen-Duy, Thuan Pham-Minh, Tien Le-Ngoc and Truong Le-Huu (Viettel Aerospace, Vietnam)
13: 50 – 14:10	General Coupling Matrix Synthesis for Cruciform Couplers and Its Applications in AFSIW Nolen Matrix Design	Thu Giang Do (Hanoi University of Science and Technology, Vietnam); Nhu Huan Nguyen (CROMA Laboratory, France); Minh Thuy Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam); Tan Phu Vuong (Grenoble INP-MINATEC, France)
14:10 – 14:30	A Pattern-Reconfigurable Antenna with Vertical Polarization for 5G Indoor Access Points	Hien Thu Nguyen (Hanoi University of Science and Technology & SEEE, Vietnam); Dang Quang Anh (SEEE & Ha Noi University of Scient and Technology, Vietnam); Nguyen Khac Kiem and Son Xuat Ta (Hanoi University of Science and Technology, Vietnam)
14:30 – 14:50	A Dual-Band Monopolar Patch Antenna Using Modified Ground Plane for 2.4/5.8-GHz WLAN	Thanh Tung Phung and Hung T. Nghiem (Hanoi University of Science and Technology, Vietnam); N-Thanh Luong (Broadcast Information Development Corporation, Vietnam); Nguyen Khac Kiem and Son Xuat Ta (Hanoi University of Science and Technology, Vietnam)
14:50 – 15:40	Coffee Break & Poster Session 3 - Electronic Systems, Microwave Engineering	

MW-2: Metasurface-inspired antennas
Time: 15:40 – 17:00
Room: THINK MEETING ROOM
Session chair: Prof. Tan Phu Vuong (Grenoble INP-MINATEC, France)

Time	Title	Authors
15:40 – 16:00	A Design of Intelligent Reflecting Surface Using Spidron Structure for 6G Applications	Van-Tung Nguyen (Hanoi University of Science and Technology, Vietnam); Tuan le Quang, Nguyen Khac Kiem and Son Xuat Ta (Hanoi University of Science and Technology, Vietnam)
16:00 – 16:20	A Compact Design of Co-Aperture Dual-Sense Circularly Polarized Antenna	Duc-Nguyen Tran-Viet (Le Quy Don Technical University, Vietnam); Tan Dao-Duc and Dat Nguyen-Tien (Phenikaa University, Vietnam); Nguyen Quoc Dinh (Le Quy Don Technical University, Vietnam); Hung Huy Tran (Phenikaa University, Vietnam)

Time	Title	Authors
16:20 – 16:40	A Dual-Polarized Fabry-Perot Antenna with High Isolation and Wideband RCS Reduction	Hai Dang Le (Hanoi University of Science and Technology, Vietnam); Nguyen Minh Quang (Hanoi University of Science and Technology & School of Electrical and Electronic Engineering, Vietnam); Giang Truong Nguyen (Vietnam Television, Vietnam); Nguyen Khac Kiem and Son Xuat Ta (Hanoi University of Science and Technology, Vietnam)
16:40 – 17:00	Design of A Compact Sequentially-Fed Metasurface-Based Patch Antenna with Wide Bandwidth and Circularly Polarized Operation	Khanh-Dieu Thi Nguyen, Viet-Anh Nguyen, Tan Dao-Duc and Hung Huy Tran (Phenikaa University, Vietnam)

Friday, August 2, 2024

MW-3: Microwave Engineering
Time: 8:30 –9:50
Room: THINK MEETING ROOM
Session chair: Dr. Son Xuat Ta (Hanoi University of Science and Technology, Vietnam)

Time	Title	Authors
8:30 – 8:50	Dual-Purpose Saltwater Structure: EMI Shielding Window and UHF Antenna	Tien Dat Nguyen and Chang Won Jung (Seoul National University of Science and Technology, South Korea)
8:50 – 9:10	An Inverted Approach for Chipless RFID Tag Design Through Parameter Optimization	Le Cong Cuong (Hanoi University of Science and Technology, Vietnam); Thanh Huong Nguyen (Hanoi University of Science and Technology & MICA, Vietnam); Trung-Kien Dao and Ngoc-Yen Pham (MICA Institute (HUST - CNRS/UMI 2954 - INP Grenoble), Vietnam)
9:10 – 9:30	50dB Attenuation Range 3-Bit Low Insertion Loss Ku-Band and Ka-Band 100nm GaAs Digital Step Attenuators	Tien Bui (Ho Chi Minh City University of Technology, Vietnam); Nam Nguyen (University of Technology, Vietnam); Sanghun Lee (WAVE PIA, South Korea); Cuong Huynh (Ho Chi Minh City University of Technology, Vietnam)
9:30 – 9:50	Design of Circularly Polarized 1-Bit Reconfigurable ME-Dipole Reflectarray for C-Band	Binh Nguyen (Viettel Research & Development Institute, Vietnam); Nguyen Tien Thinh and Tien Manh Nguyen (Viettel High Technology Industries Corporation, Vietnam); Ta Kim Hue and Nguyen Xuan Quyen (Hanoi University of Science and Technology, Vietnam)
9:50 – 10:10	**Coffee + Brunch**	

D. SPECIAL SESSIONS

1. SPECIAL SESSION 1: on Cognitive Information Processing and Its Applications

Wednesday, July 31, 2024

SS1: Cognitive Information Processing and Its Applications
Time: 13:30 – 15:15
Room: THINK MEETING ROOM
Session chair: Dr. Montri Phothisonothai (Kasetsart University, Thailand)

Time	Title	Authors
13:30 – 13:45	Classification of Electroencephalography Signals with Auditory Stimuli Using Complex Network	Hoang Manh Thang (Hanoi University of Science and Technology (HUST), Vietnam); Duc Dinh Vu (Hanoi University of Science and Technology, Vietnam); Manh-Hai Hoang (University of Alberta, Canada)
13:45 – 14:00	Towards Integrating Physiological Data in UI/UX Design Learning and Engineering Education	Montri Phothisonothai, Korawit Orkphol and Natthapon Pannurat (Kasetsart University, Thailand); Apirath Limmanee (King Mongkut's Institute of Technology Ladkrabang, Thailand); Chaowat Euafua (Burapha University, Thailand)
14:00 – 14:15	ECG-Based Cardiovascular Disease Classification Using Modified Inception	Viet Dung Nguyen, Thi Thu Hien Hoang, Khac Son Vu and Nhat Lam Nguyen (Hanoi University of Science and Technology, Vietnam)
14:15 – 14:30	CS-TE Abstraction Framework: Ballet Teaching, Training, and Testing Station with Kinect Sensors and EEG Measurement	Apirath Limmanee (King Mongkut's Institute of Technology Ladkrabang, Thailand); Montri Phothisonothai (Kasetsart University, Thailand); Sathit Pairoch (KMITL & King Mongkut's Institute of technology Ladkrabang, Thailand)
14:30 – 14:45	Does the Categorization Difficulty Elicit the Uncanny-Valley-Like Phenomenon Without Animacy?	Kota Sasaki (Chuo University, Japan); Fumiya Yonemitsu (Shibaura Institute of Technology, Japan); Atsunori Ariga (Chuo University, Japan)
14:45 – 15:00	Visual Images of Contaminated Objects and Attentional Shift	Risako Shirai (Waseda University & Japan Society for the Promotion of Science, Japan); Katsumi Watanabe (Waseda University, Japan)
15:00 – 15:15	Effects of Variety of Dynamic Facial Expressions on Attractiveness Judgments with Successive Viewing on Digital Media	Sotaro Taniguchi and Akira Sarodo (Waseda University, Japan); Chihiro Saegusa, Haruko Sugiyama, Yoko Tsuchiya and Misaki Kawashima (Kao Corporation, Japan); Katsumi Watanabe (Waseda University, Japan)
15:10 – 15:40	**Coffee Break & Poster Session 1 - Signal Processing and Applications**	

2. SPECIAL SESSION 2: on Machine Learning and Optimization for Next Generation Communication Technologies

Thursday, August 1, 2024		

SS2: Machine Learning and Optimization for Next Generation Communication Technologies
Time: 8:30 – 9:50
Room: BALL ROOM 2
Session chair: Prof. Hans-Juergen Zepernick and Fatemeh Tavakoli (Blekinge Institute of Technology, Sweden)

Time	Title	Authors
8:30 – 8:50	Deep Reinforcement Learning-Based Sum-Rate Maximization in Hybrid Beamforming Multi-User Massive MIMO Systems	Farhan Bishe, Asil Koc and Tho Le-Ngoc (McGill University, Canada)
8:50 – 9:10	Empowering Federated Learning with DDPG for Energy Efficiency in Communication Networks	Minh Ngoc Luu (VinUniversity, Vietnam); Duong Minh Nguyen (Pusan National University & VinGroup, Vietnam); Nguyen Van Duc (HUST, Vietnam); Viet Quoc Pham (Trinity College Dublin, Ireland)
9:10 – 9:30	DSPI - Dual Semantic Parsing Image: A Robust Person Representation for Person Re-Identification	Dau Anh Dung and Yasuhiro Nakamura (National Defense Academy, Japan)
9:30 – 9:50	Fault Diagnosis for Rotating Machine Utilizing Machine Learning with FFT-Based Feature Extraction	Nhi Hoang Tu Nguyen (International University Vietnam, Vietnam); Phuc Nhu Hong Nguyen (Hanoi University, Vietnam); Minh Tuan Le (VNU-International University, Vietnam); Quang Nhat Truong (International University, Vietnam); Long TonThat (International University HCMC, Vietnam); Vu Truong Son Dao (International University, Vietnam)
9:50 – 10:20	**Coffee Break & Poster Session 2 - Communication Networks and Systems**	

3. SPECIAL SESSION 3: on Power Electronics and Electric Drives for Automotive Applications

Wednesday, July 31, 2024	

15:10 – 15:40	**Coffee Break & Poster Session 1 - Signal Processing and Applications**

SS3-1: Electric Machines and Drives for Automotive Applications
Time: 15:40 – 17:20
Room: INSPIRE MEETING ROOM

Session chair: Dr. Ton-Do (Nazarbayev University, Kazakhstan) and Prof. Dr. Vuong Quoc Dang (HUST, Vietnam)

Time	Title	Authors
15:40 – 16:00	Winding Function Model for Detecting Demagnetization in Permanent Magnet Synchronous Machines	Thien Phuoc Nguyen, Khang Huynh and Kjell Robbersmyr (University of Agder, Norway)
16:00 – 16:20	Mutual Impacts of Different Dead-Times and Control Sample Times on SiC Inverter Loss in Experimental Motor Drive at High Carrier Frequencies	Thao Nguyen (Shimane University, Japan); Van Long Pham (Yokohama National University, Japan); Kutsukake Asuka (Shimane University, Japan); Keisuke Fujisaki (Toyota Technological Institute, Japan); Ton Do (Nazarbayev University, Kazakhstan)
16:20 – 16:40	Classification of Multiple Incipient Faults in Permanent Magnet Synchronous Motors Under Variable Speed Conditions Using Transfer Learning	Du Nguyen, Khang Huynh and Kjell Robbersmyr (University of Agder, Norway)
16:40 – 17:00	A Novel Skewed Permanent Magnet Technique for Improving Performances of SPMSMs with Outer Rotor Type	Chi-Dung Dang (Hanoi University of Science and Technology, Vietnam); Bao Thanh Doan, Doctor (Quy Nhon University, Vietnam & Technology, Vietnam); Hoang H Bui (Ha Noi University of Science and Technology, Vietnam); Vuong Quoc Dang (School of Electrical and Electronic Engineering, Hanoi University of Science and Technology, Vietnam)
17:00 – 17:20	Optimization of High-Efficiency Region of EV Traction Motor Through Innovative Motor Constant Considering the Current Angle and Iron Loss	Min-Fu Hsieh (National Cheng Kung University, Taiwan); Anh Thanh Huynh (University of Nottingham, United Kingdom (Great Britain)); Nguyen-Yen-Truc Le and Le-Minh-Hoc Duong (National Cheng Kung University, Taiwan)

Thursday, August 1, 2024

SS3-2: Control of Powertrain System
Time: 8:30 – 9:50
Room: INSPIRE MEETING ROOM
Session chair: Dr. Khang Huynh (University of Agder, Norway) and Dr. Dinh D. Nguyen (HUST, Vietnam)

Time	Title	Authors
8:30 – 8:50	A Straightforward Deadbeat Control Scheme for Three-Phase Voltage Source Inverters	Duy-Long Nguyen (Hanoi University of Science and Technology, Vietnam)
8:50 – 9:10	Reach on Fuzzy Logic Control for Electric Power Steering System	Ha Thanh Vo (University of Transport and Communications, Vietnam)
9:10 – 9:30	Enhancing Supervised-Learning Fault Classification of Permanent Magnet Synchronous Motors with Feature Selections	Tanzir Ahamed, Phuoc Nguyen, Du Nguyen and Khang Huynh (University of Agder, Norway); Sampad Ghosh (Chittagong University of Engineering and Technology, Norway)
9:30 –	Improve Performance of Dual-Output Configuration IPOS Structure	Van-Dai Bui (Thuyloi University 175 Tay Son, Dong Da, Hanoi, Vietnam); Chan-Viet Nguyen (Ho Chi Minh City University of Technology, Vietnam); Phuong Vu Hoang (Hanoi University of Science

9:50		and Technology, Vietnam); Honnyong Cha (Kyungpook Nat'l University, South Korea); Dung Thien Tran (Kyungpook National University, South Korea)

	Coffee Break & Poster Session 2 - Communication Networks and Systems
9:50 – 10:20	

SS3-3: Power Converters for Charging Infrastructure
Time: 10:20 – 12:00
Room: INSPIRE MEETING ROOM
Session chair: Prof. Honnyong Cha (Kyungpook National University, South Korea) and Dr. Tuyen Nguyen Dinh (HCMUT, Vietnam)

Time	Title	Authors
10:20 – 10:40	Design of a Planar Transformer for Bidirectional Resonant Type Converters in On-Board Charger Applications: A Methodological Approach	Nguyen Danh-Nam, Pham The-Tiep and Duy-Dinh Nguyen (Hanoi University of Science and Technology, Vietnam)
10:40 – 11:00	New High Boost DC-DC Converter for Renewable Energy Conversion	Truong-Khang Duong (Ho Chi Minh University of Technology, Vietnam); Truong-Duy Duong (Wayne State University, USA); Ton Do (Nazarbayev University, Kazakhstan); Trong Nha Quang, Dr. (Advanced Energy Industries, Inc., USA); Tuyen Nguyen Dinh (Ho Chi Minh City University of Technology, Vietnam)
11:00 – 11:20	High Step-Down Two-Stage DC/DC Converter for Low Voltage Battery Charger	Tuyen Nguyen Dinh (Ho Chi Minh City University of Technology, Vietnam)
11:20 – 11:40	A Study of the Fast Current Protection Method for the Silicon-Carbide (SiC) MOSFETs	Nguyen Khac Tiu (Hanoi University of Science and Technology, Hanoi, Vietnam.); Nguyen Danh-Nam, Pham The-Tiep and Duy-Dinh Nguyen (Hanoi University of Science and Technology, Vietnam)
11:40 – 12:00	Improve Performance of High-Gain Floating Double Series-Capacitor Converter with Common Ground and Low-Side Gate Driving	Van-Dai Bui (Thuyloi University, 175 Tay son, Dong Da, Hanoi, Vietnam); Phuong Vu Hoang (Hanoi University of Science and Technology, Vietnam); Chan-Viet Nguyen (Ho Chi Minh City University of Technology, Vietnam); Honnyong Cha (Kyungpook Nat'l University, South Korea); Dung Thien Tran (Kyungpook National University, South Korea)

4. SPECIAL SESSION 4: on Recent Advances in B5G/6G Networks

Thursday, August 1, 2024

15:10 – 15:40	**Coffee Break & Poster Session 3 - Electronic Systems, Microwave Engineering**

SS4-1: Advanced Communication Technologies
Time: 15:40 – 17:30
Room: BALL ROOM 2
Session chair: Prof. Sunghwan Kim (University of Ulsan, South Korea) and Prof. Nguyen Tien Hoa (HUST, Vietnam)

Time	Title	Authors
15:40 – 16:10	**Invited Talk**: Recent Trends in Error Correction Codes in Next-Generation Communication and Storage Devices	By Sunghwan Kim (University of Ulsan, South Korea)
16:10 – 16:30	3D Hyper-Accurate Localization in Indoor Environment for Mobile Equipment	Vu Viet Thuy, Yevhen Ivanenko and Mats Pettersson (Blekinge Institute of Technology, Sweden); Aman Batra (University of Duisburg-Essen, Germany); Thomas Kaiser (Universität Duisburg-Essen, Germany)
16:30 – 16:50	Prototype Design of Real-Time OFDM Transceiver in 300-GHz Band for Backhaul Networks	Kazuhiko Tamesue, Seiji Nishi, Takuro Sato, Toshio Sato and Kunihisa Jitsuno (Waseda University, Japan); Tetsuya Kawanishi (Waseda University & National Institute of Information and Communications Technology, Japan); Takuya Tsutsumi (NTT Device Technology Labs, Japan); Hiroki Sugiyama (NTT Corporation, Japan); Hiroshi Hamada (Nippon Telegraph and Telephone Corporation, Japan); Hitoshi Wakita and Hiroyuki Takahashi (NTT, Japan); Fumito Nakajima (NTT Corporation, Japan)
16:50 – 17:10	Towards 6G xURLLC with Non-Orthogonal HARQ	Duc-Trung Nguyen and Chuyen T. Nguyen (Hanoi University of Science and Technology, Vietnam); Hoang Le (University of Aizu, Japan); Anh T. Pham (The University of Aizu, Japan)
17:10 – 17:30	A Novel Paradigm Shift for Next-Generation: Symbiotic Backscatter Rate-Splitting Multiple Access Systems	Thai-Hoc Vu (University of Ulsan, South Korea); Daniel Benevides da Costa (King Fahd University of Petroleum & Minerals, Saudi Arabia); Vo Nguyen Quoc Bao (Van Lang University, Vietnam); Sunghwan Kim (University of Ulsan, South Korea)

Friday, August 2, 2024

SS4-2: Optimization and Resource Management in Next-Generation Networks
Time: 8:30 – 10:10
Room: BALL ROOM 2
Session chair: Prof. Le Mai (Da Nang University of Science and Technology, University of Danang) and Dr. Ta Hien (International University – VNU, Vietnam)

Time	Title	Authors
8:30 – 8:50	Enhance Radar Performance Under Truncated Channel Inversion Transmissions	Hien Ta (International University, Vietnam); Thuy Thi Ngoc Nguyen (Ho Chi Minh City International University, Vietnam); Trang Tien Nguyen and Hoon Lawrence Oh (University of Ulsan, South Korea)
8:50 – 9:10	Joint Pilot and Data Power Optimization in Cell-Free Massive MIMO Systems Using Heterogeneous Graph Convolutional Network	Quynh-Suong Nguyen, Xuan-Toan Dang and Oh-Soon Shin (Soongsil University, South Korea)
9:10 – 9:30	Minimizing Energy Consumption in Mobile Robotics with STAR-RIS in Smart Factories	Van Thi Thanh Nguyen and Nguyen Cong Luong (Phenikaa University, Vietnam); Hoang Le Hung (Vietnam); Nguyen Tien Hoa (Hanoi University of Science and Technology, Vietnam); Tien Ngo Manh (INSTITUTE OF PHYSICS & Vietnam Academy of Science and Technology, Vietnam)
9:30 – 9:50	Efficient Resource Allocation Framework for Network Slicing-Enabled Open RAN	Tuan-Vu Truong (VinUniversity, Vietnam); Quang-Trung Luu (Hanoi University of Science and Technology, Vietnam); Van-Dinh Nguyen (VinUniversity, Vietnam)
9:50 – 10:10	Joint Latency Minimization and Power Allocation for MEC-Enabled MU-MISO Networks	Hieu V. Nguyen and Mai T. P. Le (Danang University of Science and Technology, Vietnam); Tu Dac Ho (Norwegian University of Science and Technology, Norway & Th Arctic University of Norway, Norway); Pham Viet Tuan (Hue University & University of Education, Vietnam); Hung Nguyen-Le (The University of Danang, Vietnam)
10:10 – 10:40	**Coffee + Brunch**	

E. POSTER SESSIONS

1. POSTER SESSION 1: Signal Processing and Applications

Wednesday, July 31, 2024 Afternoon		
PS-1: Signal Processing and Applications **Time: 15:10 – 15:40** **Location: Pre-function** **Poster chairs:** Prof. Duc-Tan Tran (Phenikaa University, Vietnam)		
Time	**Title**	**Authors**
1	Cumulative Learning in Dynamic Environments Through Dataset Distillation	Hai Tung Luu and Szemenyei Márton (Budapest University of Technology and Economics, Hungary)
2	Text-Driven Diffusion Model for Enhancing Image Generation	Van-Nhan Tran, Piljoo Choi and Sun-Ja Lim (Pukyong National University, South Korea); Suk-Hwan Lee (Dong-A University, South Korea); Hoanh-Su Le (Faculty of Information Systems, University of Economics and Law Vietnam National University Ho Chi Minh, Vietnam); Ki-Ryong Kwon (Pukyong National University, South Korea)
3	Variational Autoencoder for Anomaly Detection: A Comparative Study	Nguyen Huy Hoang (FPT University & Swinburne University of Technology, Vietnam); Cuong Nhat Nguyen (Swinburne University of Technology & FPT University, Vietnam); Tung Xuan Dao (FPT University & Swinburne University, Vietnam); Trung Quoc Duong (FPT University & Swinburne Vietnam, Vietnam); Pham Thi Kim Dzung (FPT University, Swinburne Vietnam, Vietnam); Minh-Tan Pham (Université Bretagne Sud & IRISA, France)
4	A Directional Finding Estimation Algorithm of Passive Sonar in Multipaths Cases Based on the Combination of Quadratic Time Frequency Distribution and DEMON Spectrum Selection	Chinh Thanh Nguyen, Nguyen Ngoc Dong and Pham Khac Hoan (Le Quy Don Technical University, Vietnam)
5	Incompletely Recorded Human Activity Classification Using Micro-Doppler Signatures by Double Extractor Convolutional Neural Network	Deyu Meng, Qiyu Tu, Yechao Peng, GuoQiang He, Hongwen Yu and Zhichao Sheng (Shanghai University, China)
6	Sea Surface Target Detection Using Bistatic Passive Radar with Ku-Band Satellite Illumination	Jianyu He, Hongwen Yu and Yong Fang (Shanghai University, China)
7	Subjective Quality Assessment of Upscaling Methods for Low-Resolution Images	Thi My Chinh Chu, Siamak Khatibi, Hans-Juergen Zepernick and Fatemeh Tavakoli (Blekinge Institute of Technology, Sweden); Yong Yao (DozeroTech AB, Sweden); Momin Jamil (Harman/Becker Automotive Systems GmbH, Germany); Rolf Esslinger (Harman Becker Automotive Systems GmbH, Sweden)

8	Imputation and Action Recognition of Incomplete Human Skeletons Based on Graph Convolutional Neural Network	Wen-Nung Lie and You-Yang Lin (National Chung Cheng University, Taiwan); Jui -Chiu Chiang (National Chung Cheng University, Taiwan)
9	Accelerated and Automated Cell Counting Application Using Hough Transform and YOLOv5	Minh Quang Nhat Le, Minh Tri Ho, Suu Cuu Nguyen, Minh Nguyen Le, Linh Huynh Thi Thuy (School of Engineering and Technology - Hue University, Vietnam), Minh Thien Le (INSA Centre Val De Loire, France), Chun-Ping Jen (National Chung Cheng University, Taiwan), Dat Dang Tran (Quoc Hoc Hue Gifted High School, Vietnam)
10	Gray Areas Between Persuasion and Manipulation in UX Design: An Exploratory Study in Japan	Naomi V Panjaitan and Katsumi Watanabe (Waseda University, Japan)
11	Making an Eye Contact Possible on the Video Call: The Assessment of the Eye Contact and Its Effects on the Conversation	Hakudai Makino (Chuo University, Japan); Yu Kasagi (Rissho University, Japan); Atsunori Ariga (Chuo University, Japan)
12	How the Ambiguity of Facial Expression is Perceived and Attended	Takahige Hamano (Chuo University, Japan); Atsunori Ariga (Chuo University, Japan)
13	EEG-Based Emotion Recognition Using Heterogeneous Graph Transformer	Cang Chen and Katsumi Watanabe (Waseda University, Japan)

2. POSTER SESSION 2: Communication Networks and Systems

Thursday, August 1, 2024 Morning		
PS-2: Communication Networks and Systems Time: 9:50 – 10:20 Location: Pre-function Poster chair: Dr. Quang-Trung Luu (Hanoi University of Science and Technology, Vietnam)		
Time	**Title**	**Authors**
1	Advanced Unsupervised Anomaly Detection for IoT Security Using Generative Adversarial Networks	Philippe Ea (Université Paris Cité, France); Osman Salem (University of Paris Cité, France); Ahmed Mehaoua (Universite Paris Cite, France)
2	Comparative Analysis and State of the Art on Energy Efficient Technologies for 5G	Hang Nguyen and Julien Vankrinkelen (SAMOVAR, Télécom SudParis, Institut Polytechnique de Paris, France); Haga Randrianaly (Telecom SudParis & Institut Polytechnique de Paris, France)
3	Designing a Wireless Sensor Network Solution for Varroa Control in Bee Colonies	Venkat Sai Akhil Dasyam, Shahryar Eivazzadeh, Saketh Pokuri and Siamak Khatibi (Blekinge Institute of Technology, Sweden); Jie Zhao (Nanjing Institute of Industry Technology, China)

4	An Improvement of K-Means++ Clustering Algorithm Enabling the Next Generation IoT Networks: Analysis, Evaluation, and Simulation	Lieu Thi Thu Vo and Vinh Truong Hoang (Ho Chi Minh City Open University, Vietnam); Thanh-Nam Tran (Ton Duc Thang University, Vietnam)
5	Performance Comparison of LED and Laser Underwater Li-Fi Communication System	Mifat Ahmed (Bangladesh University of Business and Technology, Bangladesh); mahim alam (Bangladesh University of Business and Technology (BUBT), Bangladesh); Md. Anwar Hossain (Bangladesh University of Business and Technology, Bangladesh); Nguyen Hoang Hai (Hanoi University of Science and Technology, Vietnam); Sezan shaphique (Bangladesh University of Business and Technology, Bangladesh)

3. POSTER SESSION 3: Electronic Systems, Microwave Engineering

Thursday, August 1, 2024 **Afternoon**		
PS-3: Electronic Systems, Microwave Engineering **Time: 15:10 – 15: 40** **Location: Pre-function** **Poster chair:** Dr. Cuong Manh Hoang (Hanoi University of Science and Technology, Vietnam)		
Time	**Title**	**Authors**
1	Transparent Metal Mesh Antenna for Wi-Fi 7 Applications	Tien Dat Nguyen and Chang Won Jung (Seoul National University of Science and Technology, South Korea)
2	Ports Consistency in Semiconductor IP Design: Methodology and Utilities	Qing Zhu (International Technological University, USA)
3	Application of Cuckoo Research Optimization to Speed Control PMSM for Electric Vehicle	Hieu Le Dinh (School of Engineering and Technology – Hue University); Van Quang Binh Ngo (Hue University of Education, Vietnam); Xuan Cuong Ngo (Hue University & School of Engineering and Technology, Vietnam); Linh Huynh Thi Thuy (School of Engineering and Technology - Hue University, Vietnam); Le Tuan (Vietnam Maritime University, Vietnam); Nha Quang Vo and Nhat Dang Nguyen (School of Engineering and Technology - Hue University, Vietnam); Vuong Le Dai (Lecture, Vietnam); Lien Le Thi (Lecture & An Tay Primary School, Vietnam); Song Viet Ngo (Hue Industrial College, Vietnam); Thang Kim Nguyen and Quyen Phuong Le (Duy Tan University, Vietnam)
4	Biodegradable Electronic Devices for Precision Medical Diagnostics and Therapy	Jae-Young Bae and Seung-Kyun Kang (Seoul National University, South Korea)
5	Soft Pneumatic Glove System for Rehabilitation	Hsiang-Lung Huang, Ya-Hsin Hsueh, Ming-Ta Ke and Chia-Chu Tsang (National Yunlin University of Science and Technology, Taiwan)

6	Autonomous Robot Using Computer Vision with CNN and OpenCV: An Experimental Comparison	Dinh Tu Duong (Vinh University, Vietnam); Ho Sy Phuong (Vietnam Academy of Science and Technology, Vietnam & Graduate University of Sciences and Technology, Vietnam); Dang Son (HUST and VU, Vietnam); The Anh Mai (Vinh University, Vietnam); Hung Xuan Nguyen (Vinh University, Vietnam); Huy Hoang Tran (Vinh University, Vietnam)
7	Design of 5G High Gain Ultra-Wideband Antipodal Vivaldi Antenna Employing Combined Approach	Thanh Huong Nguyen (Hanoi University of Science and Technology & MICA, Vietnam); Quoc Hung Le and Dinh Trung Le (Hanoi University of Science and Technology, Vietnam)
8	A Microwave Filter-Based Sensor for Glucose Concentration Monitoring Using CSRR Structure	Thanh Huong Nguyen (Hanoi University of Science and Technology & MICA, Vietnam); Minh-Hoang Le and Viet Tung Nguyen (Hanoi University of Science and Technology, Vietnam)
9	Enhancing MIMO Antenna Performance Using SIW/SRR Structure for Internet of Vehicles Applications	Thanh Tu Duong, Hai Yen Nguyen and Phuc Huu Phan (Posts and Telecommunications Institute of Technology, Vietnam); Hoa Nguyen Van (Posts and Telecommunication Institute of Technology, Vietnam)
10	Towards a More Realistic Simulator for CPU Scheduling Algorithms	Binh Nguyen (Hanoi University of Science and Technology, Vietnam); Hung Quang Ta (Posts and Telecommunications Institute of Technology, Vietnam & Torrens University, Australia)
11	Conical-Beam Planar Antenna for Drone Jamming	Thi Them Truong (VIP Protection Command - Ministry of Public Security, Vietnam); Cong Truong Giang Dao and Minh Hoang Pham (Hanoi University of Science & Technology, Vietnam); Quoc Cuong Nguyen (Hanoi University of Science and Technology, Vietnam); Minh Thuy Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam)