


Thursday, October 18 7:30 - 8:40

Registration 

Thursday, October 18 8:40 - 9:00

Opening ceremony 


Thursday, October 18 9:00 - 10:00

Keynote speaker #1: Machine Learning and Cognitive Communications for 5G and IoT 
Dr. Bijan Jabbari, George Mason University, Electrical and Computer Engineering Department, USA
 Chair: Francis C.M. Lau (The Hong Kong Polytechnic University, Hong Kong)

Thursday, October 18 10:00 - 10:30

Coffee break 

Thursday, October 18 10:30 - 11:30

Keynote speaker #2: Visible Light Communications for 5G-and-Beyond Wireless Telecommunications Networks 
Dr. Hoa Le Minh Northumbria University at Newcastle, United Kingdom
 Chair: Ha H Kha (Ho Chi Minh City University of Technology, VNU-HCM, Vietnam)

Thursday, October 18 11:30 - 13:10

Lunch break 


Thursday, October 18 13:10 - 14:50

Communications: 1 
 Room: BALLROOM 2
 Chair: Thi Hong Tran (Nara Institute of Science and Technology (NAIST), Japan)

- 13:10 A Low Inter-Code Interference Walsh-Hadamard Code Division Multiplexing for Helicopter Satellite Communications**
 Toshiharu Kojima and Genta Muto (The University of Electro-Communications, Japan)
 pp. 1-4
- 13:30 Simple UE Transmission Power Control for Bidirectional Full-Duplex Communications in Cellular Networks**
 Hiroto Yamamoto, Sunisa Sanpan, Kazuo Mori and Kosuke Sanada (Mie University, Japan)
 pp. 5-9
- 13:50 Non-Orthogonal Multiple Access with Coordinated Transmission Aided by Buffers in End User and Relay**
Yunsung Choi and Dongwoo Kim (Hanyang University, Korea)
 pp. 10-14
- 14:10 Precoded Dual-Polarized Spatial Modulation Over Correlated Fading Channels**
Mutlu Koca and Negin Kazemipourleilabadi (Bogazici University, Turkey); Hikmet Sari (NJUPT & Sequans, France)
 pp. 15-20
- 14:30 Amplified Backscattering in RFID Communications with Energy Harvesting Tags**
 Denizhan Unalan, Mutlu Koca and Hakan Delic (Bogazici University, Turkey)
 pp. 21-26

Signal Processing: 1 
 Room: BALLROOM 3

- Chair: Ha H Kha (Ho Chi Minh City University of Technology, VNU-HCM, Vietnam)
- 13:10 Conversion of the Vietnamese Grammar into Sign Language Structure using the Example-Based Machine Translation Algorithm**
Luyi-Da Quach (Tay Do University, Vietnam); Chi-Ngon Nguyen (Can Tho University & Dean of the College of Engineering, Vietnam)
 pp. 27-31
- 13:30 forest height estimation from PolInSAR image using coherence set and cancellation of scattering mechanisms**
 Ky Dinh, Pham Nghia, An Hung and Hang Minh (Le Qui Don Technical University, Vietnam)
 pp. 32-36
- 13:50 Modified Three-stage algorithm for forest height estimation using Polarimetric SAR Interferometry Image**
Minh Xuan and Pham Nghia (Le Qui Don Technical University, Vietnam); Yen Hoang Thi (Le Quy Don Technical University, Vietnam); Thanh Nguyen (Le Qui Don Technical University, Vietnam)
 pp. 37-41
- 14:10 Deep Learning for Human Visual Attention Recognition Using Transfer Learning**
 Nam Vu (Posts and Telecommunications Institute of Technology, Vietnam); Cuong Pham (Post & Telecom. Institute of Technology, Vietnam); Huong M. Nguyen (Posts and Telecommunications Institute of Technology, Vietnam)
 pp. 42-46
- 14:30 On Moderately Significant Bit Data Hiding Techniques for High-Definition Images**
Dang Ninh Tran, Hans-Juergen Zepernick and Thi My Chinh Chu (Blekinge Institute of Technology, Sweden)
 pp. 47-52

Antenna and Propagation 
 Room: BALLROOM 1
 Chair: Dung Trinh (Ho Chi Minh City University of Technology, Vietnam)

- 13:10 A Design of Circularly Polarized Array Antenna for X-Band CubeSat Satellite Communication**
Nguyen Khac Kiem and Phong Nguyen Duy (Hanoi University of Science and Technology, Vietnam); Le Hoang (Soongsil University, Korea); Tuan Anh Le Trong and Linh Ho Manh (Hanoi University of Science and Technology, Vietnam); Bui Thi Thu Hien (HUI, Vietnam); Chien Ngoc Dao (Hanoi University of Science and Technology, Vietnam)
 pp. 53-56
- 13:30 Improved Forward Backward Method with Multiple Correction Vectors for Layered Random Rough Surfaces of Exponential Correlation Functions**
 Vinh Pham (Ho Chi Minh city University of Technology, Vietnam & Technische Universitat Darmstadt, Germany); Dung Trinh and Tuan Do-Hong (Ho Chi Minh City University of Technology, Vietnam); Conor Brennan (Dublin City University, Ireland)
 pp. 57-60
- 13:50 Compact Diversity Multi-band Antennas Using for Low Power Communication Standards**
Le Huy Trinh (University of Information and Technology & Vietnam National University, Vietnam); Minh Hoang Le (Ho Chi Minh University of Technology, Vietnam); Nguyen Vu Truong (Institute of Applied Mechanics and Informatics, Vietnam); Fabien Ferrero (University Nice Sophia Antipolis, CNRS, LEAT & CREMANT, France)
 pp. 61-64
- 14:10 Design of Miniaturized and Tunable Antenna by Integrating BST Thin Film Varactor**

[Hung Viet Nguyen](#) (Post and Telecommunications Institute of Technology & IETR, Université de Rennes 1, Vietnam); [Ala Sharaiha](#) (Université de Rennes 1 & IETR, France)
pp. 65-68

14:30 *Folded Patch Antenna on Paper for RF Energy Harvesting and Sensing Applications*

[Erika Vandelle](#) (Université Grenoble Alpes, France); [Do Hanh Ngan Bui](#) (Université de Grenoble-Alpes, France); [Gustavo Ardila-Rodriguez](#) (Université Grenoble Alpes, France); [Simon Hemour](#) (Université de Bordeaux, France); [Ke Wu](#) (Ecole Polytechnique (University of Montreal) & Center for Radiofrequency Electronics Research of Quebec, Canada); [Tan Phu Vuong](#) (Grenoble INP, France)
pp. 69-71

Thursday, October 18 14:50 - 15:20



Coffee break

Thursday, October 18 15:20 - 17:00



Communications: 2

Room: BALLROOM 2

Chair: [Dung Le The](#) (Chungbuk National University, Korea)

15:20 *Design of automatic irrigation system for greenhouse based on LoRa technology*

[Van Anh Vu](#) (Hanoi University of Science and Technology, Vietnam); [Tuan Christian Truvariant](#) (University of Cergy Pontoise, Vietnam); [Thanh Dang Bui](#) and [Dong Cong Trinh](#) (Hanoi University of Science and Technology, Vietnam)
pp. 72-77

15:40 *FPGA Implementation of Wireless LAN System for Factory Automation*

[Tran Thi Thao Nguyen](#), [Yuhei Nagao](#), [Tatsumi Uwai](#), [Nana Sutisna](#), [Masayuki Kurosaki](#) and [Hiroshi Ochi](#) (Kyushu Institute of Technology, Japan); [Sai Baiko](#) (Daiichi Institute of Technology, Japan)
pp. 78-83

16:00 *Performance Evaluation of 802.11ah Physical Layer Phase Encryption for IoT Applications*

[Dai-Long Hoang](#) (Nara Institute of Science and Technology, Japan); [Thi Hong Tran](#) (Nara Institute of Science and Technology (NAIST), Japan); [Yasuhiko Nakashima](#) (Nara Institute of Science and Technology, Japan)
pp. 84-88

16:20 *An Accurate Time Diversity Combining with a Novel Channel Estimation for Helicopter Satellite Communications*

[Daijiro Sato](#) and [Toshiharu Kojima](#) (The University of Electro-Communications, Japan)
pp. 89-93

16:40 *Parallel Group Detection Approach for Massive MIMO systems*

[Thanh-Binh Nguyen](#) (Le Quy Don Technical University, Vietnam); [Minh-Tuan Le](#) (MobiFone R&D Center, MobiFone Corporation, Vietnam); [Vu-Duc Ngo](#) (Hanoi University of Science and Technology, Vietnam); [Van-Giao Nguyen](#) (Le Quy Don Technical University, Vietnam)
pp. 94-99



Signal Processing: 2

Room: BALLROOM 3

Chair: [Mani V V](#) (National Institute of Technology Warangal, India)

15:20 *Modulation Recognition using Wavelet-assisted Convolutional Neural Network*

[Qianwen Zhang](#), [Zhan Xu](#) and [Peiyue Zhang](#) (Beijing Information Science and Technology University, P.R. China)
pp. 100-104

15:40 *Fixed-Point Implementation of Convolutional Neural Networks for Image Classification*

[Chun Yan Lo](#) (Hong Kong Polytechnic University, Hong Kong); [Francis C.M. Lau](#) (The Hong Kong Polytechnic University, Hong Kong); [Chiu Wing Sham](#) (The University of Auckland, New Zealand)
pp. 105-109

16:00 *Gender Identification of Imperfect Flowers Using Image Classification*

[Rohan de Silva](#) (CQUniversity Sydney, Australia); [Pavithra Senanayake](#) (Ayoma Business Solutions, Sri Lanka)
pp. 110-114

16:20 *A novel blind STO estimation for UW-GFDM systems*

[Siva Prasad](#) (National Institute of Technology Warangal & National Institute of Technology Warangal, India); [Mani V V](#) (National Institute of Technology Warangal, India)
pp. 115-119

16:40 *Artificial Intelligence Based Adaptive GOP Size Selection for Effective Wyner-Ziv Video Coding*

[Huu-Tien Vu](#) (Post and Telecommunications Institute of Technology, Vietnam); [Thao Nguyen Thi Huong](#) and [Huy Phi](#) (Posts and Telecommunications Institute of Technology, Vietnam); [Xiem HoangVan](#) (Vietnam National University & University of Engineering and Technology, Vietnam)
pp. 120-124

Thursday, October 18 15:20 - 15:50



Microwave Engineering

Invited Talk: Millimeter and THz-waves for next generation of fast wireless backhaul links: towards 100 Gbit/s on the air links
Prof. Guillaume Ducournau, IEMN Université Lille 1, Polytech'Lille Graduate School, France

Room: BALLROOM 1

Chair: [Vo Nguyen Quoc Bao](#) (Posts and Telecommunications Institute of Technology, Vietnam)

Thursday, October 18 15:50 - 17:30



Microwave Engineering

Room: BALLROOM 1

Chair: [Guillaume Ducournau](#) (Polytech-lille, France)

15:50 *Wideband Unit-cell for Linearly Polarized X-band Transmitarray Applications*

[Tuyen Nguyen](#) (Ho Chi Minh City International University, Vietnam); [Nguyen Binh Duong](#) (International University, Vietnam); [Van-Su Tran](#) (International University, HCMC VNU, Vietnam); [Linh Mai](#) (International University of Viet Nam, Vietnam); [Le Huy Trinh](#) (University of Information and Technology & Vietnam National University, Vietnam)
pp. 125-128

16:10 *Design of An Independently Biased Cascade GaN HEMT Microwave Power Amplifier*

[Luong Duy Manh](#), [Nguyen Huy Hoang](#) and [Ta Chi Hieu](#) (Le Quy Don Technical University, Vietnam); [Duong Bach Gia](#) (VNU University of Engineering and Technology, Vietnam)
pp. 129-132

16:30 *Reflectometer with Complete Error Correction*

[Khoa Huynh](#) and [Gernot Zimmer](#) (Frankfurt University of Applied Sciences, Germany)
pp. 133-136

16:50 *Application of RSSI to ground penetrating radar using ultra wideband technology*

[Nguyen Huyen](#) and [Pham Thanh Hiep](#) (Le Quy Don Technical University, Vietnam)
pp. 137-141

17:10 *An array of antipodal Vivaldi antenna with genetic optimization*

[Vinh Phuong Cam](#) (International University, VNU HCMC, Vietnam); [Van-Su Tran](#) (International University, HCMC VNU, Vietnam); [Nguyen Binh Duong](#) (International University, Vietnam)
pp. 142-145

Thursday, October 18 18:30 - 21:00



Banquet

Friday, October 19 7:30 - 8:30

Registration 

Friday, October 19 8:30 - 9:30


Keynote speaker #3: How to secure a connected device? 
Prof. Sylvain Guilley, Telecom-ParisTech, France

Chair: Hoa Le Minh (Northumbria University, United Kingdom (Great Britain))

Friday, October 19 9:30 - 10:00

Coffee break 

Friday, October 19 10:30 - 12:10

Communications: 3 
Room: BALLROOM 2


Chair: Charles Kabiri (University of Rwanda, Rwanda)

- 10:30 Probabilistic Communication in Car Platoons**
Tam Ninh (National Academy of Education Management, Vietnam); Hung Tran (Malardalen University, Sweden); Nils Henning Müllner (Mälardalen University, Sweden)
pp. 146-151
- 10:50 Outage Analysis in Wireless-Powered CCRN Networks with Ambient Backscattering**
Charles Kabiri and Emmanuel Ntirenganya (University of Rwanda, Rwanda)
pp. 152-156
- 11:10 Performance Analysis of Hybrid Energy Harvesting AF Relaying Networks over Nakagami-m Fading Channels**
Hung Ha Duy (Faculty of Electrical and Electronics Engineering, Ton Duc Thang University, HCMC, Vietnam); Dac-Binh Ha (Duy Tan University, Vietnam); Jaroslav Zdralek (VSB – Technical University of Ostrava, Czech Republic); Miroslav Voznak (VSB - Technical University of Ostrava, Czech Republic)
pp. 157-162
- 11:30 Energy Efficient Full-Duplex Multicell Multi-User MIMO Networks**
Nguyen Xinh (Ho Chi Minh University of Technology, VNU-HCM, Vietnam); Ha H Kha (Ho Chi Minh City University of Technology, VNU-HCM, Vietnam)
pp. 163-167
- 11:50 Demonstration of effect of oversampling on jitter removal for Multitaper GFDM system using SDR**
Siva Prasad (National Institute of Technology Warangal & National Institute of Technology Warangal, India); Mani V.V (National Institute of Technology Warangal, India)
pp. 168-173

Signal Processing: 3 
Room: BALLROOM 3

Chair: Nguyen Thang (HUST, Vietnam)

- 10:30 High Throughput and Low Cost Memory Architecture for Full Search Integer Motion Estimation in HEVC**
Nguyen Thang (HUST, Vietnam); Dinh Vu (KAIST, Vietnam)
pp. 174-178
- 10:50 K-SVD Dictionary Learning Applied in Clinical EEG Compressed Sensing**
Phuong Thi Dao, Xue Jun Li and Anthony Griffin (Auckland University of Technology, New Zealand); Hung Ngoc Do (International University, Vietnam)
pp. 179-183
- 11:10 Iris-based Recognition using Modified Convolutional Neural Network**
Thuong Le-Tien (Hochiminh city University of Technology, Vietnam); Phan Xuan Hanh (HCMUT, Vietnam); Phu Nguyen-Duy (Ho Chi Minh City University of Technology, Vietnam); Le Ba Loc (HCMUT, Vietnam)
pp. 184-188
- 11:30 An Improved Blind Watermarking Technique Against JPEG Compression Attack**
Ngo Tuan Phong (HANU, Vietnam); Hung Quang Ta (Hanoi University & Faculty of Information Technology, Vietnam)
pp. 189-192
- 11:50 Online picture fuzzy clustering: a new approach for real-time fuzzy clustering on picture fuzzy sets**
Pham Thong (VNU University of Science & Vietnam National University Hanoi, Vietnam); Le Hoang Son (VNU University of Science & Vietnam National University, Vietnam)
pp. 193-197

Special Session #2 
Room: BALLROOM 1


Chair: Duc-Phuc Nguyen (Nara Institute of Science and Technology, Japan)

- 10:30 Dualband-wavelength demultiplexer based on the nanoplasmonic MIM waveguides**
Tai Nguyen Van (HUST, Vietnam); Do Tuan (Ha Noi University of Science and Technology, Vietnam); Hung Nguyen Tan (Danang Uni. of Science & Technology, Vietnam); Cao Dung Truong (Posts and Telecommunications Institute of Technology & Faculty of Electronics Engineering, Vietnam); Bac Hoai Dang (PTIT, Vietnam)
pp. 198-202
- 10:50 Performance Improvement of IM-DD Optical OFDM System Using A-law Companding Transform**
Ngoc-Thi-Thu-Trang, Trung Hieu Bui and Nhan Nguyen (Posts and Telecommunications Institute of Technology, Vietnam)
pp. 203-207
- 11:10 Hardware Implementation of A Non-RLL Soft-decoding Beacon-based Visible Light Communication Receiver**
Duc-Phuc Nguyen and Dinh-Dung Le (Nara Institute of Science and Technology, Japan); Thi Hong Tran (Nara Institute of Science and Technology (NAIST), Japan); Huu-Thuan Huynh (Ho Chi Minh City - University of Science, Vietnam); Yasuhiko Nakashima (Nara Institute of Science and Technology, Japan)
pp. 208-213
- 11:30 Demonstration of A Visible Light Receiver Using Rolling-Shutter Smartphone Camera**
Tuan-Kiet Tran (University of Science - Ho Chi Minh City, Vietnam); Duc-Phuc Nguyen and Dinh-Dung Le (Nara Institute of Science and Technology, Japan); Thi Hong Tran (Nara Institute of Science and Technology (NAIST), Japan); Huu-Thuan Huynh (Ho Chi Minh City - University of Science, Vietnam); Yasuhiko Nakashima (Nara Institute of Science and Technology, Japan)
pp. 214-219
- 11:50 Development of a QoS Provisioning Capable Cost-Effective SDN-based Switch for IoT Communication**
Quang Huy Nguyen, Ngoc Ha Do and Hai Chau Le (Posts and Telecommunications Institute of Technology, Vietnam)
pp. 220-225

Friday, October 19 12:10 - 13:30

Lunch break 

Friday, October 19 13:30 - 15:10

Networks: 1 
Room: BALLROOM 2

Chair: Nguyen Dinh Han (Hung Yen University of Technology and Education, Vietnam)

- 13:30 PRP: A High-Performance Routing Protocol for Mobile Ad-Hoc Networks**

Vu Khanh Quy and Nguyen Dinh Han (Hung Yen University of Technology and Education, Vietnam); Nguyen Tien Ban (Posts and Telecommunications Institute of Technology, Vietnam)
pp. 226-231

13:50 A Scheduler for Time Slotted Channel Hopping Networks supporting QoS Differentiated Services

Kieu-Ha Phung and Huong Thu Truong (Hanoi University of Science and Technology, Vietnam); Kris Steenhaut (Vrije Universiteit Brussel & Imec, Belgium); Dung Dao (Hanoi University of Science and Technology, Vietnam); Tuong Vu (Ha Noi University of Science and Technology, Vietnam); Pham Van Tien (HUST, Vietnam); Thang Nguyen (Hanoi University of Science and Technology, Vietnam)
pp. 232-236

14:10 A High Performance and Longer Lasting Network Lifetime Routing Protocol for MANETs

Vu Khanh Quy (Hung Yen University of Technology and Education, Vietnam); Nguyen Tien Ban (Posts and Telecommunications Institute of Technology, Vietnam); Nguyen Dinh Han (Hung Yen University of Technology and Education, Vietnam)
pp. 237-241

14:30 A Comparative Performance Study of RPL with Different Topologies and MAC Protocols

Minh-Thanh Vo (International University, Vietnam); Linh Mai (International University of Viet Nam, Vietnam); Huy Tran (VNU-International University, Vietnam)
pp. 242-247

14:50 Next Hop Node Selection in Private UAV Networks

Rohan de Silva (CQUniversity Sydney, Australia)
pp. 248-252



Special Session #1

Room: BALLROOM 3

Chair: Dung Le The (Chungbuk National University, Korea)

13:30 Security-Reliability Analysis of Cognitive Radio Network using Harvest-to-Jam Protocol with Primary Co-Channel Interference

Pham Minh Quang (Posts and Telecommunications Institute of Technology in Hochiminh City, Vietnam); Tran Trung Duy (Posts and Telecommunications Institute of Technology, Vietnam); Thien Thanh Tran (Ho Chi Minh City University of Transport, Vietnam)
pp. 253-258

13:50 Security versus Reliability Study for Multi-hop Cognitive M2M Networks With Joint Impact of Interference Constraint and Hardware Noises

Nam Pham (Ho Chi Minh City University of Technology and Education & Industrial University of Ho Chi Minh City, Vietnam); Ca V. Phan (Ho Chi Minh City University of Technology and Education, Vietnam); Pham Viet Tuan (University of Ulsan, Korea); Tran Trung Duy and Vo Nguyen Quoc Bao (Posts and Telecommunications Institute of Technology, Vietnam)
pp. 259-264

14:10 Performance Analysis of Energy Harvesting Two-Way Decode-and-Forward Relay Networks with Power Beacon over Nakagami- m Fading Channels

Nguyen Anh Tuan (RFD, Vietnam); Vo Nguyen Quoc Bao (Posts and Telecommunications Institute of Technology, Vietnam); Kien Truong (Posts & Telecommunications Institute of Technology, Vietnam)
pp. 265-269

14:30 Internal Reciprocity Calibration for TDD Massive MIMO: An Algorithm and Experimental Results

Quy Van Dang (Viettel Network Technologies Center, Vietnam); Le Thanh Bang (Viettel, Vietnam); Kien Truong (Posts & Telecommunications Institute of Technology, Vietnam)
pp. 270-275

14:50 Transmit Antenna Selection by Group Combination Precoding In Massive MIMO System

Van-Khoi Dinh (Le Quy Don Technical University, Vietnam); Minh-Tuan Le (MobiFone R&D Center, MobiFone Corporation, Vietnam); Vu-Duc Ngo (Hanoi University of Science and Technology, Vietnam); Ta Chi Hieu (Le Quy Don Technical University, Vietnam)
pp. 276-281



Electronics: 1

Room: BALLROOM 1

Chair: Sang Thi Thanh Nguyen (International University, VNU-HCMC, Vietnam)

13:30 The Merged Clock Gating Architecture For Low Power Digital Clock Application On FPGA

Huan Minh Vo (Ho Chi Minh University of Technology and Education, Vietnam)
pp. 282-286

13:50 Optimized Layer Architecture for Layered LDPC Code Decoder

Longyu Ma and Chiu Wing Sham (The University of Auckland, New Zealand)
pp. 287-291

14:10 Low-complexity Check Node Processing for Trellis Min-max Nonbinary LDPC Decoding

Huyen Pham Thi (National Laboratory of Information Security, Vietnam & Inha University, Korea); Hung Dao Tuan (National Laboratory of Information Security, Ha Noi, Viet Nam, Vietnam); Le Dinh Trang Dang (Le Quy Don Technical University, Vietnam); Hanho Lee (Inha University, Korea); Tho Nguyen Huu (Le Quy Don Technical University, Vietnam)
pp. 292-295

14:30 Calibration of Conductivity Sensor using Combined Algorithm Selection and Hyperparameter Optimization: A Case Study

Tien-Dung Nguyen (International University VNU HCMC, Vietnam); Sang Thi Thanh Nguyen (International University, VNU-HCMC, Vietnam); Nhat-Tan Le (International University VNU HCMC, Vietnam)
pp. 296-300

14:50 An Energy Efficient AES Encryption Core for Hardware Security Implementation in IoT Systems

Dao Hiep, Van-Phuc Hoang and Van-Lan Dao (Le Quy Don Technical University, Vietnam); Xuan-Tu Tran (VNU University of Technology and Engineering, Vietnam)
pp. 301-304

Friday, October 19 15:10 - 15:30



Coffee break

Friday, October 19 15:30 - 17:30



Networks: 2

Room: BALLROOM 2

Chair: Rohan de Silva (CQUniversity Sydney, Australia)

15:30 Regulation of Interpersonal Boundaries and its Effect on Self-Disclosure in Social Networking Sites

Zhang Hao Goh, Hichang Cho and Pengxiang Li (National University of Singapore, Singapore)
pp. 305-309

15:50 Optimal Desired Trajectories of UAVs in Private UAV Networks

Rohan de Silva (CQUniversity Sydney, Australia); Sandaruvan Rajasinghage (CQUniversity, Australia)
pp. 310-314

16:10 A Survey of Webpage Access Prediction

Da Thon Nguyen (University of Economics and Law, VNU-HCM, Vietnam); Hanh Tan and Duy Hoang Pham (PTIT, Vietnam)
pp. 315-320

16:30 Dynamic Threading to Improve Embedded Software Performance in IoT Devices Using MQTT Protocol

Pham Van Huong (Academy of Cryptography Techniques, Vietnam); Phuc Bui Huu (VNU University of Engineering and Technology, Vietnam); Pham Van Quang and Nguyen Quang Linh (Academy of Cryptography Techniques, Vietnam)
pp. 321-325

16:50 An auto-scaling VM game approach for multi-tier application with Particle swarm optimization algorithm in Cloud computing

Khiet Bui (Ho Chi Minh City University of Technology & Thu Dau Mot University, Vietnam); Mai Lam (Posts and Telecoms Institute of Technology Ho Chi Minh City, Vietnam); Nguyen Khac Chien (The People's Police University, Vietnam); Ho Hung (Thu Dau Mot University, Vietnam); Pham Tran Vu (Ho Chi Minh City University of Technology, Vietnam); Cong Hung Tran (Posts and Telecoms Institute of Technology, Vietnam)
pp. 326-331

17:10 Issuing and Verifying Digital Certificates with Blockchain

Trong-Thua Huynh (Posts and Telecommunications Institute of Technology, Vietnam); Trung Tru Huynh and Dang Khoa Pham (Posts & Telecommunications Institute of Technology, Vietnam); Anh Khoa Ngo (Seoul National University, Korea)
pp. 332-336

Friday, October 19 15:30 - 17:10



TOP

Special Session #1

Room: BALLROOM 3

Chair: Tran Trung Duy (Posts and Telecommunications Institute of Technology, Vietnam)

15:30 On Performance Evaluation of Non-Orthogonal Multiple Access schemes in Coordinated Direct with Partial Relay SelectionHuynh Hoa (Posts and Telecommunications Institute of Technology, Vietnam); X. Quynh Nguyen (The State Council for Science and Technology Policy of Vietnam, Vietnam); Vo Nguyen Quoc Bao (Posts and Telecommunications Institute of Technology, Vietnam)
pp. 337-343**15:50 Evaluation of Outage Probability and Harvested Energy for User Selection Methods in Random Wireless Networks**Nguyen Thi Yen Linh (PTITHCM, Vietnam); Tran Trung Duy and Vo Nguyen Quoc Bao (Posts and Telecommunications Institute of Technology, Vietnam)
pp. 344-348**16:10 An Energy Efficiency Cluster-based Multihop Routing Protocol in Wireless Sensor Networks**Thong Nhat Tran (Posts and Telecommunications Institute of Technology, Vietnam); Nguyen Toan Van (Hongik University, Korea); Vo Nguyen Quoc Bao (Posts and Telecommunications Institute of Technology, Vietnam); Beongku An (Hongik University, Korea)
pp. 349-353**16:30 Security-Reliability Analysis of Power Beacon-Assisted Multi-hop Relaying Networks Exploiting Fountain Codes with Hardware Imperfection**Dang The Hung (Le Quy Don Technical University, Vietnam); Tran Trung Duy (Posts and Telecommunications Institute of Technology, Vietnam); Trinh Do Quoc (Military University of Science and Technology, Vietnam); Vo Nguyen Quoc Bao and Tan Hanh (Posts and Telecommunications Institute of Technology, Vietnam)
pp. 354-359**16:50 Full-Duplex Relay System with Energy Harvesting: Outage and Symbol Error Probabilities**Dung Le The (Chungbuk National University, Korea); Ba Cao Nguyen (Le Quy Don Technical University, Vietnam); Hoang Tran Manh (Faculty Telecommunication, Vietnam); Seong Gon Choi (Chungbuk National University, Korea)
pp. 360-365**Friday, October 19 15:30 - 17:30**

TOP

Special Session #4: Invited Papers

Room: BALLROOM 1

Chairs: Tetsuya Iizuka (University of Tokyo, Japan), Nguyen Ngoc Mai-Khanh (The University of Tokyo & VLSI Design and Education Center (VDEC), Japan)

15:30 Mixed-domain analog frontend circuit design for power-efficient multi-channel sensor systemsIppei Akita (Advanced Industrial Science and Technology (AIST), Japan); Takayuki Okazawa (Toyoashi University of Technology, Japan)
pp. 366-371**15:50 Efficient Test Generation Framework for Analog LSI with Behavior Model**Yuichi Miyazawa and Satoshi Komatsu (Tokyo Denki University, Japan)
pp. 372-375**16:10 Time-Domain Approach for Analog Circuits: Fine-Resolution TDC and Quick-Start CDR Circuits**Tetsuya Iizuka and Kunihiro Asada (University of Tokyo, Japan)
pp. 376-381**16:30 How FD-SOI is revolutionizing next-gen microelectronics: IoT, automotive and mobile connectivity applications**Bich-Yen Nguyen (SOITEC, USA); Walter Schwarzenbach, Manuel Sellier, Phillippe Flatrress, Guillaume Besnard, Christophe Girard and Christophe Maleville (Soitec, France)
pp. 382-386**16:50 ASIC Coprocessor for 254-bit Prime-Field Pairing based on General Purpose Arithmetic Unit on Quadratic Extension Field**Hiromitsu Awano (The University of Tokyo, Japan); Makoto Ikeda (University of Tokyo Japan, Japan)
pp. 387-392**17:10 Pulse Leakage Cancellation Technique for Integrated Microwave Wide-band Sensing Applications**Nguyen Ngoc Mai-Khanh (The University of Tokyo & VLSI Design and Education Center (VDEC), Japan); Kunihiro Asada (University of Tokyo, Japan)
pp. 393-397