Final Technical Program
2016 IEEE Sixth International Conference on Communications and Electronics
(IEEE ICCE 2016)

SUBMISSION and ACCEPTACE at A GLANCE

–	Number of submitted papers	**252**
–	Number of full accepted papers	**79**
–	Number of poster papers	**23**
–	Acceptance rate of full papers	**31,34%**
–	Number of countries	**More than 30**

PROGRAM AT A GLANCE

Wednesday, 27 July, 2016

Time	Event
08:45 – 09:15	**Opening Ceremony:** – **Welcome speeches of General Co–Chairs:** **Prof. Nguyen Xuan Quynh**, Senior Expert of NCSTP, Chairman of the State Council for Professor Title on Electricity–Electronics and Automation, Vietnam **Prof. Hoang Minh Son**, President of Hanoi University of Science and Technology, Vietnam – Conference introduction: Prof. Alan Marshall, University of Liverpool, UK

Keynote Session
Time: 09:15 – 12:35
Room: Ballroom Yen Tu
Session Chair: Phuoc Tran-Gia (University of Wuerzburg, Germany)

Time	Event
09:15 – 10:00	**Keynote 1:** "*Collection and Mining of Urban Life Signals for the Smart City*" by Alberto Leon– Garcia, Electrical and Computer Engineering at the University of Toronto, Canada
10:00 – 10:45	**Keynote 2:** *"Smart Wearables: Changing Lives"* by Nikhil Jain, Qualcomm Technologies, Inc., USA
10:45 – 11:05	**Coffee Break**
11:05 – 11:50	**Keynote 3:** *"Fighting Cancer Using Swarms of Nanorobots"* by Sylvain Martel, NanoRobotics Laboratory at Polytechnique Montréal, Campus of the University of Montréal, Canada
11:50 – 12:35	**Keynote 4:** *"Evolvability in Future Information Networks: Taking Inspiration From the Brain and Other Biological Networks"* by Kenji Leibnitz, Dr. rer. nat., Senior Researcher, enter for Information and Neural Networks (CiNet); National Institute of Information and Communications Technology (NICT), Japan
12:35 – 14:00	**Lunch at Restaurant The Square**

Time	Room: Yen Tu 1	Room: Yen Tu 2	Room: Hue	Room: Hoi An
14:00 – 15:30	Tutorial 1: *"Controlling I/O Contentions in Computing Clusters for Big Data Applications"* by Do Van Tien, Budapest University of Technology and Economics, Hungary	Tutorial 2: *"Understanding 5G as the Ultimate Software– based Next Generation Network for Integrated Human and Machine type Communications"* by Thomas Magedanz, TU Berlin / Fraunhofer FOKUS, Germany		
15:30 – 16:00	**Coffee Break**			

16:00 – 18:00	Tutorial 1 (cont.)	Tutorial 2 (cont.)	ME– 1: Microwaves and Antennas	SS– 1: Advanced Photonic and Wireless Technologies for Future Access Networks

Thursday, 28 July, 2016

Time	Room: **Yen Tu 1**	Room: **Yen Tu 2**	Room: **Hue**	Room: **Hoi An**
8:45 – 10:05	**CNS– 1: Networking 1**	**Samsung's Special Session on LTE Technologies and Services** *(refer to the Session's detail for time schedule)*	**ES– 1: Basic, low power digital systems**	**SPA– 1: Signal processing: localization**
10:05 – 10:45	Coffee Break & Poster Session 1			
10:45 – 12:05	**CNS– 2: Networking 2**	**Samsung's Special Session on LTE Technologies and Services** *(refer to the Session's detail for time schedule)*	**ES– 1: Basic, low power digital systems (cont.)**	**SPA– 2: Signal processing: applications**
12:05 – 13:35	Lunch at Restaurant The Square			
13:35 – 15:15	**CNS– 3: Communication System design and implementation**	**Samsung's Special Session on LTE Technologies and Services** *(refer to the Session's detail for time schedule)*	**ES– 2: Smart sensing circuits and systems**	**SPA– 3: Signal Processing: Methods**
15:15 – 15:55	Coffee Break & Poster Session 2			
15:55 – 17:35	**CNS– 4: Physical layer signal processing for communications**	**Samsung's Special Session on LTE Technologies and Services** *(refer to the Session's detail for time schedule)*	**ES– 3: High performance digital architectures**	**SPA– 4: Image analysis 1**

GALA DINER
Time: 18:30 – 21:00
Venue: Pool Side

Friday, 29 July, 2016

Time	Room: **Yen Tu 1**	Room: **Yen Tu 2**	Room: **Hue**	Room: **Hoi An**
8:45 – 10:05	**CNS– 5:IoT**	**SS– 2: QoE in Networking**	**SS– 3: Advances on Physical Layer Security for Wireless Communication Networks**	**SPA– 5: Image analysis 2**
10:05 – 10:45	Coffee Break			
10:45 – 12:05		**SS– 2: QoE in Networking (cont.)**	**SS– 4: System, Synchronization and Security: The Trends with Chaos and Complexity**	**SPA– 6: Image analysis 3**
12:05 – 13:35	Lunch at Restaurant The Square			

DETAILED TECHNICAL PROGRAM

NOTE:

- The speakers in oral sessions should prepare for 15 minutes presentation and 5 minutes discussion
- The presenters in poster sessions should prepare a poster in size of A0 or A1
- The time for all social activities (coffee breaks, lunches, and Gala dinner) is shown **PROGRAM AT A GLANCE**

Wednesday, 27 July, 2016	
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Keynote Session

Time: 09:15 – 12:35

Room: Ballroom Yen Tu

Session Chair: Phuoc Tran-Gia (University of Wuerzburg, Germany)

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12:35 – 14:00	**Lunch at Restaurant The Square**

Tutorial Session

Time: 14:00 – 18:00

Room: Ballroom Yen Tu

	Room: **Yen Tu 1**	Room: **Yen Tu 2**	Room: **Hue**	Room: **Hoi An**
14:00 – 15:30	Tutorial 1: *"Controlling I/O Contentions in Computing Clusters for Big Data Applications"* by Do Van Tien, Budapest University of Technology and Economics, Hungary	Tutorial 2: *"Understanding 5G as the Ultimate Software– based Next Generation Network for Integrated Human and Machine type Communications"* by Thomas Magedanz, TU Berlin / Fraunhofer FOKUS, Germany		
15:30 – 16:00	**Coffee Break**			
16:00 – 18:00	**Tutorial 1 (cont.)**	**Tutorial 2 (cont.)**		

ORAL SESSIONS:

TRACK: COMMUNICATION NETWORKS AND SYSTEMS

Thursday, 28 July, 2016

CNS– 1: Networking 1

Time: 8:45 – 10:05

Room: Yen Tu 1

Session chair: Tobias Hossfeld (University of Duisburg-Essen, Germany)

Time	Title	Presenter
8:45 – 9:05	DSMAV: An Improved Solution for Multi-Attribute Search Based on Load Capacities	ThanhDat NGUYEN, Claudiu Vasile KIFOR (Lucian Blaga University, Romania)
9:05 – 9:25	OpenFlowSIA: An Optimized Protection Scheme for Software-Defined Networks from Flooding	Trung V. Phan (Hanoi University of Science and Technology, Vietnam)
9:25 – 9:45	Behaviour Similarity Based to Cluster Automated HTTP Communication	Manh Cong Tran (National Defense Academy, Japan)
9:45 – 10:05	A Probability-based Adaption Method for Server-pushed Streaming over HTTP 2.0	Pham Ngoc Nam (Hanoi University of Science and Technology, Vietnam)
10:05 – 10:45	**Coffee Break & Poster Session 1** (see below for detailed poster program)	

CNS– 2: Networking 2

Time: 10:45 – 12:05

Room: Yen Tu 1

Session chair: Markus Fiedler (Blekinge Institute of Technology, Sweden)

Time	Title	Presenter
10:45 – 11:05	Dynamic End-to-End Service-Level Negotiation Over Multi-Domain Software Defined Networks	A. Murat Tekalp (Koç University, Turkey)
11:05 – 11:25	Performance Evaluation Mechanisms for FlowMod Message Processing in OpenFlow Switches	Anh Nguyen-Ngoc (University of Wurzburg, Germany)
11:25 – 11:45	Dynamic RMSA Algorithm for Multi-domain EONs with Limited Virtualized Elastic Regenerators	Hai-Chau Le (Posts & Telecommunications Institute of Technology, Vietnam)
11:45 – 12:05	Using Docker in High Performance Computing Applications	Minh Thanh Chung (Ho Chi Minh City University of Technology, Vietnam)
12:05 – 13:35	**Lunch at Restaurant The Square**	

CNS– 3: Communication System design and implementation

Time: 13:35 – 15:15

Room: Yen Tu 1

Session chair: Do Hong Tuan (HCMC University of Technology, Vietnam)

Time	Title	Presenter
13:35 – 13:55	Implementation Aspects of Joint Angle and Delay Estimation for Road Traffic Applications	Timo Patelczyk (Technische Universität München, Germany)
13:55 – 14:15	125Mbit/s 3 Transmitter for Short-Distance Optical Link Using Low-Cost RGB-LED	N. T. Hung (Hanoi University of Science and Technology, Vietnam)
14:15 – 14:35	Demonstration of Using Camera Communication Based Infrared LED for Uplink in Indoor Visible Light Communication	Thai-Chien Bui (Naresuan University, Thailand)
14:35 – 14:55	Joint Source-Channel Coding with Adaptation	Minh-Quang Nguyen (Universit´e Paris-Saclay Hanoi University of Science and Technology, France, Vietnam)
14:55 – 15:15	Initial Code Acquisition in Self-Encoded Spread Spectrum Systems using Chip-Offset Correlation	Lim Nguyen (University of Nebraska-Lincoln, USA)
15:15 – 15:55	**Coffee Break & Poster Session 2** (see below for detailed poster program)	

CNS– 4: Physical layer signal processing for communications

Time: 15:55 – 17:35

Room: Yen Tu 1

Session chair: Hans-Jürgen Zepernick (Blekinge Institute of Technology, Sweden)

Time	Title	Presenter
15:55 – 16:15	Effectively Inserted Training for Channel State Estimation of Spatially Correlated MIMO-OFDM	H. H. Kha (Ho Chi Minh City University of Technology, Vietnam)
16:15 – 16:35	OFDM Receiver Design in the Presence of Both Tx and Rx IQ Imbalance Over Frequency Selective Channels	Muhammad Asim Ali (Sukkur Institute of Business Administration, Pakistan)
16:35 – 16:55	Numerical Calculation of Information Rates and Capacity of Quadrature Gaussian Mixture Channels	Nghi H. Tran (University of Akron, USA)
16:55 – 17:15	Underlay Cognitive Networks: Opportunistic Relay Selection and Maximum Ratio Combining	Khuong Ho-Van (Ho Chi Minh city University of Technology, Vietnam)
17:15 – 17:35	Two-hop Power-Relaying for Linear Wireless Sensor Networks	Ha H. Kha (Ho Chi Minh City University of Technology, Vietnam)

GALA DINER

From 18:30 – 21:00

Venue: Pool Side

Friday, 29 July, 2016

CNS– 5: IoT

Time: 8:45 – 11:25

Room: Yen Tu 1

Session chair: Truong Thu Huong (Hanoi University of Science and Technology, Vietnam)

Time	Title	Presenter
8:45 – 9:15	<u>Invited talk</u>: High Performance Computing and Virtualization	Nam Thoai (HCMC University of Technology, VNU-HCM)
9:15 – 9:35	Performance Management of IoT/M2M Platforms	Fuchun Joseph Lin (National Chiao Tung University, Taiwan)
9:35 – 9:55	Energy balancing RPL-based routing for Internet of Things	Mai Banh (Hanoi University of Science and Technology, Vrije Universiteit Brussel, Vietnam, Belgium)
10:05 – 10:45	**Coffee Break**	
10:45 – 11:05	Performance Evaluation of Missing-Tag Algorithms in CDMA-based RFID Systems	Chuyen T. Nguyen (Hanoi University of Science and Technology, Vietnam)
11:05 – 11:25	Transfer IPv6 Packets Over Bluetooth Low Energy with Ensuring Emergency Data Transmission	Wondeuk Yoon (Korea Advanced Institute of Science and Technology (KAIST), Korea)
12:05 – 13:35	**Lunch at Restaurant The Square**	

TRACK: ELECTRONICS SYSTEMS

Thursday, 28 July, 2016

ES– 1: Basic, low power digital systems

Time: 8:45 – 11:05

Room: Hue

Session chair: Minh D. Nguyen (Hanoi University of Science and Technology, Vietnam)

Time	Title	Presenter
8:45 – 9:15	<u>Invited Talk</u>: Prototype or Golden Model – what if Formal Methods took the lead in ESL- based design flows?	Wolfgang Kunz (TU Kaiserslautern, Germany)
9:15 – 9:35	Buffer-Controlled Cache for Low-Power Multicore Systems	Yul Chu (University of Texas Rio Grande Valley, USA)
9:35 – 9:55	An Optimized Implementation of Logarithm Hardware Generator for Digital Signal Processing	Van-Thuan Sai (Le Quy Don Technical University, Vietnam)
10:05 – 10:45	**Coffee Break & Poster Session 1** (see below for detailed poster program)	
10:45 – 11:05	Fixed-point implementation and validation of multichannel Wiener filter-based noise canceling algorithm	Le Ngoc Tuan (Hanoi University of Science and Technology, Vietnam)

12:05 – 13:35	Lunch at Restaurant The Square

ES– 2: Smart sensing circuits and systems

Time: 13:35 – 15:15

Room: Hue

Session chair: Loan Pham Nguyen (Hanoi University of Science and Technology, Vietnam)

Time	Title	Presenter
13:35 – 13:55	A Topology of Charging Mode Control Circuit Suitable for Long-Life Li-Ion Battery Charger	Hao Nguyen-Van (Hanoi University of Science and Technology, Vietnam)
13:55 – 14:15	Tilt Sensor Based on Three Electrodes Dielectric Liquid Capacitive Sensor	Pham Quoc Thinh (University of Engineering and Technology, Vietnam National University, Vietnam)
14:15 – 14:35	Crosstalk Analysis of an Image Sensor Operating At 1 Gfps	Anh Quang Nguyen (Ritsumeikan University, Japan)
14:35 – 14:55	Design an Event Detection System for 16-Mfps Extremely-High-Sensitivity Video Camera	Nguyen, H. D (Hanoi University of Science and Technology, Vietnam)
14:55 – 15:15	A Smart Meeting Room Scheduling and Management System with Utilization Control and Ad-hoc Support Based on Real-Time Occupancy Detection	Linh Duc Tran (RMIT University Vietnam, Vietnam)
15:15 – 15:55	**Coffee Break & Poster Session 2** (see below for detailed poster program)	

ES– 3: High performance digital architectures

Time: 15:55 – 17:35

Room: Hue

Session chair: Phuc Hoang (Le Qui Don University, Vietnam)

Time	Title	Presenter
15:55 – 16:15	High Speed SAD Architecture for Variable Block Size Motion Estimation in HEVC Encoder	Vu Nam Dinh (Hanoi University of Science and Technology, Vietnam)
16:15 – 16:35	High-performance DCT Architecture Based on Angle Recoding CORDIC and Scale-free Factor	Trong-Thuc Hoang (The University of Science, Vietnam)
16:35 – 16:55	FPGA Design and Implementation of the Detector for the MIMO-SDM System Using PNC	Doan-Thien Le (Hanoi University of Science and Technology, Mobifone R&D Center, Vietnam)
16:55 – 17:15	High Throughput Modified MMSE Hardware Detector for High-Rate Spatial Modulation Systems	Xuan-Nghia Nguyen (Hanoi University of Science and Technology, Mobifone R&D Center, Vietnam)
17:15 – 17:35	Bit-Level Matrix Transpose for Bitmap-Index-Based Data Analytics	Xuan-Thuan Nguyen (The University of Electro-Communications, Japan)

GALA DINER

From 18:30 – 21:00

Venue: Pool Side

TRACK: MICROWAVE ENGINEERING

Wednesday, 27 July, 2016

ME– 1: Microwaves and Antennas

Time: 16:00 – 17:40

Room: Hue

Session chair: Vu Van Yem (Hanoi University of Science and Technology, Vietnam)

Time	Title	Presenter
16:00 – 16:20	High Dynamic Range X-Band MMIC VGLNA for Transmit/Receive Module	Binh L. Pham (ViMMICS Co. Ltd., Vietnam)
16:20 – 16:40	Non-equidistant Antenna Array with Low Level of Side Lobes	S. N. Shabunin (Ural Federal University, Russia) Chechetkin V.A. (Ural Federal University, Russia)
16:40 – 17:00	Design of Miniature Antennas for IoT Applications	F. Ferrero (University Nice Sophia Antipolis, France)
17:00 – 17:20	Design and Analysis of Reflectarray Antennas Printed on Curved Surfaces	Paola Pirinoli (Politecnico di Torino, Italy)

| 17:20 – 17:40 | Compact MIMO Antenna with Low Mutual Coupling Using Defected Ground Structure | Duong Thi Thanh Tu (Post and Telecommunications Institute of Technology, Hanoi University of Science and Technology, Vietnam) |

Please join all Coffee Breaks & Poster Sessions, Lunches at Restaurant The Square and Gala diner
(see Program at Glance)

TRACK: SIGNAL PROCESSING AND APPLICATIONS

Thursday, 28 July, 2016

SPA– 1: Signal processing: localization

Time: 9:05 – 10:05

Room: Hoi An

Session chair: Pavel Zahradnik (Czech Technical University in Prague, Czech Republic)

Time	Title	Presenter
9:05– 9:25	Jitter Mitigation in Radio Direction Finding System	HAN Trong Thanh (Hanoi University of Science and Technology, Vietnam)
9:25 – 9:45	Sparse Targets Detection Based on Threshold Orthogonal Matching Pursuit Algorithm	Jian Pan (Tsinghua University, China)
9:45 – 10:05	Consistent ICP for the Registration of Sparse and Inhomogeneous Point Clouds	Hiep Quang Luong (Ghent University, Belgium)
10:05 – 10:45	**Coffee Break & Poster Session 1** (see below for detailed poster program)	

SPA– 2: Signal processing: applications

Time: 10:45 – 12:05

Room: Hoi An

Session chair: Nguyen Linh Trung (Vietnam National University Hanoi, Vietnam)

Time	Title	Presenter
10:45 – 11:05	A Low Cost Mobile ECG Monitoring Device Using Two Active Dry Electrodes	Tai Le (Hanoi University of Science and Technology, Vietnam)
11:05 – 11:25	Signal Processing and System Design for Tinnitus Treatment	Adolf Finger (Institut fur Nachrichtentechnik, Germany)
11:25 – 11:45	Comparative Study on Supervised Learning Methods for Identifying Phytoplankton Species	Thi-Thu-Hong PHAN (Vietnam National University of Agriculture, Vietnam; Univ. Littoral Côte d'Opale, France)
11:45 – 12:05	Chlorophyll-a Concentration Estimation for Seaweed Identification in Kupang Bay Using MODIS Aqua Data	Jullend Gatc (KALBIS Institute, Indonesia)
12:05 – 13:35	**Lunch at Restaurant The Square**	

SPA– 3: Signal Processing: Methods

Time: 13:35 – 14:35

Room: Hoi An

Session chair: Adolf Finger (Institut fur Nachrichtentechnik, Germany)

Time	Title	Presenter
13:35 – 13:55	Adaptive PARAFAC Decomposition for Third-Order Tensor Completion	Truong Minh-Chinh (University of Engineering and Technology, Vietnam)
13:55 – 14:15	Improved Design of Optimal Notch FIR Filters	Pavel Zahradnik (Czech Technical University in Prague, Czech Republic)
14:15 – 14:35	Signal Processing of Brain Activity with Ant Colony Optimization and Wavelet Analysis using Near Infrared Spectroscopy	Keng-Liang Ou (Taipei Medical University, Taiwan)
15:15 – 15:55	**Coffee Break & Poster Session 2** (see below for detailed poster program)	

SPA – 4: Image analysis 1

Time	Title	Presenter
	Time: 15:55 – 16:55	
	Room: Hoi An	
	Session chair: Bogdan Smolka (Politechnika Slaska, Poland)	

Time	Title	Presenter
15:55 – 16:15	Symmetrical-Symbol Pattern Based Structured Light for Accurate Decoding	Thuy Binh Nguyen (Hanoi University of Science and Technology, Univesity of Transport and Communications, Vietnam)
16:15 – 16:35	Using Grayscale Images for Object Recognition with Convolutional-Recursive Neural Network	Hieu Minh Bui (RMIT University, RMIT University Vietnam, Australia)
16:35 – 16:55	Modeling Shapes Using Uniform Cubic B-Splines for Rice Seed Image Analysis	Caroline Natalie M. Peralta (University of the Philippines Los Banos, Philippines)

GALA DINER

From 18:30 – 21:00

Venue: Pool Side

Friday, 29 July, 2016

SPA– 5: Image analysis 2

Time: 8:45 – 10:05

Room: Hoi An

Session chair: Nguyen Tien Dzung (Hanoi University of Science and Technology)

Time	Title	Presenter
8:45 – 9:05	Segmentation of Finger Joint Synovitis in Ultrasound Images	Bogdan Smolka (Silesian University of Technology, Poland)
9:05 – 9:25	Describing Human Finger Flexibility Via Reachable Subspaces	Trieu H. Pham (Deakin University, Australia)
9:25 – 9:45	Analyzing Effects of Variance in Kinematic Parameters on Performance and EMG in Dart Throwing	Tran Nguyen Bao (Tokyo University of Agriculture and Technology, Japan)
9:45 – 10:05	An Efficient Star Skeleton Extraction for Human Action Recognition Using Hidden Markov Models	Pham The Hai (Ho Chi Minh City University of Technology, Vietnam)
10:05 – 10:45	**Coffee Break**	

SPA– 6: Image analysis 3

Time: 10:45 – 12:05

Room: Hoi An

Session chair: Thang Manh Hoang (Hanoi University of Science and Technology)

Time	Title	Presenter
10:45 – 11:05	Low Cost In-Flow Traffic Monitor for South-East Asia	Hoang Minh Phuong (RMIT University Vietnam, Vietnam)
11:05 – 11:25	Vehicle Classification by Estimation of the Direction Angle in a Mixed Traffic Flow	Nguyen Viet Hung (Hanoi University of Science and Technology, Vietnam)
11:25 – 11:45	Convolutional Neural Network for Motorbike Detection in Dense Traffic	Chi-Kien HUYNH (Ho Chi Minh City University of Technology, Vietnam)
11:45 – 12:05	A Traffic Monitoring System for a Mixed Traffic Flow Via Road Estimation and Analysis	Nguyen Viet Hung (Hanoi University of Science and Technology, Vietnam)
12:05 – 13:35	**Lunch at Restaurant The Square**	

SPECIAL SESSION – 1: ADVANCED PHOTONIC AND WIRELESS TECHNOLOGIES FOR FUTURE ACCESS NETWORKS

Wednesday, 27 July, 2016

SS – 1: Advanced Photonic and Wireless Technologies for Future Access Networks

Time: 16:00 – 18:10

Room: Hoi An

Session chair: Pham Tien Dat (National Institute of Information and Communications Technology (NICT), Japan)		
Time	**Title**	**Presenter**
16:00 – 16:30	Seamless Access Networks Using Radio-over-Fiber Technology for High-Speed Trains	Tetsuya Kawanishi (Waseda University, Japan)
16:30 – 16:50	Array-Antenna-Electrode Electro-Optic Modulator for Millimeter-Wireless Communication Systems	Hiroshi Murata (Osaka University, Japan)
16:50 – 17:10	High Conversion Gain 30–110 GHz Photoreceivers for High Data-Rate Advanced Photonic Wireless Communications	T. Umezawa (National Institute of Information and Communications Technology (NICT), Japan)
17:10 – 17:30	Optical Feedforward Linearization System for Directly Modulated Laser Transmitter	S. M. Idrus (Universiti Teknologi Malaysia, Malaysia)
17:30 – 17:50	A Broadband Second-Order Mode Synthesizer Based on an 3×1 Multimode Interference Coupler and Phase Shifters Using Silicon Waveguides	Cao Dung Truong (Hanoi University of Science and Technology, Vietnam)
17:50 – 18:10	Terahertz-Wave Signal Synthesizer for Fiber-Wireless Seamless Access Network	Atsushi Kanno (National Institute of Information and Communications Technology (NICT), Japan)
Please join all Coffee Breaks & Poster Sessions, Lunches at Restaurant The Square and Gala diner		
(see Program at Glance)		

SPECIAL SESSION – 2: QoE IN NETWORKING

Friday, 29 July, 2016

SS – 2: QoE in Networking

Time: 8:45 – 12:05

Room: Yen Tu 2

Session chair: Tobias Hoßfeld (University of Duisburg-Essen, Germany) and Markus Fiedler (Blekinge Institute of Technology, Sweden)

Time	**Title**	**Presenter**
8:45 – 9:05	Application-Layer Monitoring of QoE Parameters for Mobile YouTube Video Streaming in the Field	Michael Seufert (University of Wurzburg, Germany)
9:05 – 9:25	A QoE-based Caching Algorithm for HTTP Adaptive Streaming Contents in Radio Access Networks	Phuong L. Vo (International University, Vietnam)
9:25 – 9:45	A Novel Quality Model for HTTP Adaptive Streaming	Huyen T. T. Tran (The University of Aizu, Japan)
9:45 – 10:05	Video QoE Killer and Performance Statistics in WebRTC-based Video Communication	Doreid Ammar (Norwegian University of Science and Technology, Norway)
10:05 – 10:45	**Coffee Break**	
10:45 – 11:05	Quality of Experience of Digital Multimedia Broadcasting Services: An Experimental Study	Hans-Jurgen Zepernick (Blekinge Institute of Technology, Sweden)
11:05 – 11:25	QoE Aware Placement of Content in Edge Networks on the Example of a Photo Album Cloud Service	Lam Dinh-Xuan (University of Wurzburg, Germany)
12:05 – 13:35	**Lunch at Restaurant The Square**	

SPECIAL SESSION – 3: ADVANCES ON PHYSICAL LAYER SECURITY FOR WIRELESS COMMUNICATION NETWORKS

Friday, 29 July, 2016

SS– 3: Advances on Physical Layer Security for Wireless Communication Networks

Time: 8:45 – 10:25

Room: Hue

Session chair: Hans-Jürgen Zepernick (Blekinge Institute of Technology, Sweden)

Time	**Title**	**Presenter**

8:45 – 9:15	<u>Invited talk 1</u>: On Physical Layer Security in massive MIMO Systems	Kien Truong (Posts and Telecommunications Institute of Technology, Vietnam)
9:15 – 9:45	<u>Invited talk 2</u>: Physical Layer Security for Wireless Communication Networks: Past, Present, and Future	Thi My Chinh Chu (Blekinge Institute of Technology, Sweden)
9:45 – 10:05	Physical Layer Secrecy Performance of Energy Harvesting Networks with Power Transfer Station Selection	Dac-Binh Ha (Duy Tan University, Vietnam)
10:05 – 10:25	Proactive Attack: A Strategy for Legitimate Eavesdropping	Hung Tran (Mälardalen University, Sweden)
10:05 – 10:45	**Coffee Break**	
12:05 – 13:35	**Lunch at Restaurant The Square**	

SPECIAL SESSION – 4: SYSTEM, SYNCHRONIZATION AND SECURITY: THE TRENDS WITH CHAOS AND COMPLEXITY

Friday, 29 July, 2016

SS– 4: System, Synchronization and Security: The Trends with Chaos and Complexity

Time: 10:45 – 12:05

Room: Hue

Session chair: Santo Banerjee (University Putra Malaysia, Malaysia) and Thang Manh Hoang (Hanoi University of Science and Technology, Vietnam)

Time	Title	Presenter
10:45 – 11:05	Security Check for Multi-threaded Programs	Tri Minh Ngo (University of Science and Technology, The University of Danang, Vietnam)
11:05 – 11:25	A Novel Approach to Security Enhancement of Chaotic DSSS Systems	Nguyen Xuan Quyen (Hanoi University of Science and Technology, Vietnam)
11:25 – 11:45	Synchronization between two discrete chaotic systems for secure communications	N.A.A.Fataf (National Defence University of Malaysia, Malaysia)
11:45 – 12:05	Output Feedback Model Predictive Control for Nano-material Distribution System	Bui Trung Thanh (Hung Yen University of Technology and Education, Vietnam)
12:05 – 13:35	**Lunch at Restaurant The Square**	

SAMSUNG'S SPECIAL SESSION: LTE TECHNOLOGIES AND SERVICES

Thursday, 28 July, 2016

10:00 – 10:10	**Session Opening:** Welcome remark from organizer : Prof. Nguyen Tien Dzung, KICS director of Vietnam Section Welcome remark from Mr. ChangWan Huh, Vice-President of Samsung Vietnam

Invited Talks: LTE Everywhere

Time: 10:10 – 11:00

Room: Yen Tu 2

Session Chair: Prof. Nguyen Huu Thanh (Hanoi University of Science and Technology, Vietnam)

10:10 – 10:35	Development of Mobile Communications in Korea, by Mr. *Yong Soo Cho, President of Korean Institute of Communications and Information Sciences (KICS), Korea*
10:35 – 11:00	LTE overview, by *Dr. Ngo Vu Duc, Director of Science and Technology Department, Vice-Director of 4G-Technology Department of Mobifone, Vietnam*

LTE Technologies 1

Time: 11:00 – 11:50

Room: Yen Tu 2

Session Chair: Prof. Dao Ngoc Chien (Dept. of High Technology, Ministry of Science and Technology, Vietnam)

Time	Title	Presenter
11:00 – 11:25	LTE Network New Design Approach from Single RAN to Overlay System	Kiho Cho (Vice President/System Design Lab, Samsung, Korea)
11:25 – 11:50	FD-MIMO Communication in LTE-Advanced Pro	Kien T. Truong (Post and Telecommunications Institute of Technology, Vietnam)
11:50 – 13:40	**Lunch at Restaurant The Square**	

Invited Talks: Mobile Infra Trends

Time: 13:40 – 14:55

Room: Yen Tu 2

Session Chair: Prof. Youze Cho (Executive Vice-President of KICS, Korea)

13:40 – 14:05	Global LTE Technology Development and 5G FWA (Fixed Wireless Access), by Mr. *HanSeok Kim, Master, System Design Lab, Samsung, Korea*	
14:05 – 14:30	Status of Telecom Operators' Network Deployment and Strategy in Vietnam, by *Dr. Nguyen Van Yen, Head of Network Technology Department, VNPT, Vietnam*	
14:30 – 14:55	Getting 5G Ready: Fraunhofer enabling OpenXXX Toolkits for SDN-based Pre-5G Testbeds based on LTE around the Globe, by Prof. *Thomas Magedanz, Fraunhofer FOKUS/TU Berlin, Germany*	
14:55- 15:25	**Coffee Break**	

LTE Technologies 2

Time: 15:25 – 16:25

Room: Yen Tu 2

Session Chair : Prof. Nguyen Linh Trung (University of Technology and Engineering, Vietnam National University, Vietnam)

Time	Title	Presenter
15:25 – 15:45	Challenges in Doppler Compensation for the LTE-R Networks	Nguyen Van Duc (Hanoi University of Science and Technology, Vietnam)
15:45 – 16:05	IoT Multihop Connectivity with LTE	SaeWoong Bahk (Seoul National University, VP of KICS, Korea)
16:05 – 16:25	Design and Implementation of Compact MIMO Antennas for LTE Applications	Vu Van Yem (Hanoi University of Science and Technology, Vietnam)

LTE Services

Time: 16:25 – 17:25

Room: Yen Tu 2

Session Chair : Prof. DongKu Kim, Yonsei University, Korea

Time	Title	Presenter
16:25 – 16:45	An Architecture for QoE Assurance for Mobile IPTV in 4G/LTE Networks	Nguyen Tai Hung Hanoi University of Science and Technology, Vietnam
16:45 – 17:05	RAN Sharing for the Co-existence of PS-LTE and LTE-R Networks	KyungHi Chang, Inha University, chair, expert committee of SafeNet Forum, Korea
17:05 – 17:25	Sharing SKT's LTE Experience and Network Evolution	Young Lak Kim, Leader of Access Network Lab, SKTelecom
End Remark Talk by Prof. DongKu Kim, VP of KICS (Vice Chair of 5G Forum Executive Committee, Korea)		

GALA DINER

From 18:30 – 21:00

Venue: Pool Side

POSTER SESSIONS:

Thursday, 28 July, 2016
(During coffee breaks)

Poster Session 1

Time	Title	Presenter
10:05 – 10:45	Propose a Metric to Evaluate Network Quality	Tran Minh Anh (Posts & Telecommunications Institute of Technology, Vietnam)
	Hop-by-hop Routing with Local View of Network State	Tran Minh Anh (Posts & Telecommunications Institute of Technology, Vietnam)
	Directional Reconfigurable Antenna for Efficient Wireless Sensor Networks	T.-N. Le (University Nice Sophia Antipolis, France)
	Extending RS Encoding Scheme for Image Transmission Using Multi-Source Nodes on WSNs	Phat Nguyen Huu (Hanoi University of Science and Technology, Vietnam)
	Increasing the Sensitivity of a Digital Receiver by Time Synchronous Averaging (TSA)	Emil Novakov (University of Grenoble Alps, France)
	CRC Network-Coding Aided Two-way Relaying LTE-based Cooperative Communication Systems	Quy Trong Nguyen (Posts & Telecommunications Institute of Technology, Vietnam)
	Dual-Phase Early Detection of Background and Foreground Traffic	Quang Tran Minh (Ho Chi Minh City University of Technology, Vietnam)
	Orchestrating Service Function Chaining in Cloud Environments	Ahmed M. Medhat (Technical University Berlin, Germany)
	A Curvature-Compensated CMOS Sub-Bandgap Reference with 1V Power Supply Voltage	Nguyen Vu Thang (Hanoi University of Science and Technology, Vietnam)
	Towards 10 Giga-Frame per Second: Evaluation of temporal resolution of the Multi-Collection-Gate Image Sensor Family	V.T.S. Dao (International University, Vietnam National University, Vietnam)
	Design of a Robust Multiple beamformer for GNSS Receiver based-on Minimax Criterion	Minh-Duc Nguyen (Hanoi University of Science and Technology, Vietnam)
	Analysis and Design of a Low Cost Wideband Wilkinson Power Divider	Nguyen Huu Trung (Hanoi University of Science and Technology, Vietnam)

Poster Session 2

Time	Title	Presenter
15:15 – 15:55	Quadri-sectorial Zigbee/LTE Antenna for WSN Applications	L. H. Trinh (University of Information and Technology,Vietnam)
	Bandwidth and Gain Enhancement for Reconfigurable Antenna Array Using Metamaterial Structure	Nguyen Ngoc Lan (Hanoi University of Science and Technology,Vietnam)
	Leadership-Based and Social Network Optimization Comparison for Reflectarray Optimization	Alessandro Niccolai (Politecnico di Milano,Italy)
	Analysis and Design of Antennas for Underwater Communication	Andrea Massaccesi (Politecnico di Torino,Italy)
	A Mouthguard Glucose Sensor for Monitoring of Saliva Sugar with BLE Telemetry System	Yusuke Kuroki (Tokyo Medical and Dental University, Japan)
	Cross-checking Velocity Estimation in SuperDARN HF Radars by the Spectrum Difference Function Technique	Thanh. T. Nguyen (Le Quy Don University,)
	The Dependence of the Scale Factor on Phase and Frequency in the SDF Technique: Roots and Solutions	Thanh. T. Nguyen (Le Quy Don University, Vietnam)
	Geometry-based 3D Object Fitting and Localizing in Grasping Aid for Visually Impaired	Van-Hung Le (International Research Institute MICA - CNRS/UMI-2954 - GRENOBLE INP, College of Statistics, Vietnam)
	Perceptual Encryption Algorithm for GIS Vector Map Using Polyline Object	Ki-Ryong Kwon (Pukyong National University, Korea)
	An Average Technique for Real Time Voice Activity Detection in Time Domain	Dang Thai Son (Hanoi University of Science and Technology, Vinh University, Vietnam)
	Multiple-Access Performance of Chaotic Bit Duration PN-DSSS Communication System	Doan Thi Que (Hanoi National University of Education, Hanoi University of Science and Technology, Vietnam)