

July 5(Tue.) ~ July 8(Fri.), 2016

Technische Universität (TU) Wien, Vienna, Austria

The Eighth International Conference on Ubiquitous and Future Networks

<http://www.icufn.org>

Final Program



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Message from Organizing Chairs

It is our great honour and pleasure to invite you to attend ICUFN 2016, the Eighth International Conference on Ubiquitous and Future Networks, organized by the Korean Institute of Communications and Information Sciences (KICS) and technically co-sponsored by IEEE Communications Society (ComSoC) and IEICE-CS. We would like to welcome you to Vienna, and welcome to ICUFN 2016. We are honored and privileged to host this prestigious conference in the field. To provide a great opportunity for the exchange of the state-of-the-art research advances in ubiquitous technologies and to expand the research community, we have decided to hold the eighth ICUFN in Vienna.

Vienna (German: Wien) is the capital and largest city of Austria, and one of the nine states of Austria. Vienna is Austria's primary city, with a population of about 1.8 million, and its cultural, economic, and political center. Until the beginning of the 20th century, it was the largest German-speaking city in the world. Today it has the second largest number of German speakers after Berlin. Apart from being regarded as the City of Music because of its musical legacy, Vienna is also said to be "The City of Dreams". It is well known for having played an essential role as a leading European music center, from the great age of Viennese Classicism through the early part of the 20th century. The historic center of Vienna is rich in architectural ensembles, including Baroque castles and gardens, and the late-19th-century Ringstraße lined with grand buildings, monuments, and parks. Vienna is known for its high quality of life. The UN-Habitat has classified Vienna as being the most prosperous city in the world in 2012/2013. Between 2005 and 2010, Vienna was the world's number-one destination for international congresses and conventions.

ICUFN is a truly international annual conference! Our TPC team consists of members from many countries around the world. Thanks to the tireless efforts of the technical program committee co-chairs, professors Sungrae Cho, Xin WANG, Takeo Fujii, Kun Yang, and Jaime Lloret Mauri. ICUFN 2016 is packed with an excellent mix of technical sessions. On behalf of the ICUFN steering committee and on behalf of all attendees, we thank the workshops co-chairs, professors Joel Rodrigues and Sangwhan Lee, all members of ICUFN 2016, and workshop organizing committees for producing such an excellent program. We do hope you will take this good opportunity to attend the workshop sessions and technical sessions, meet the authors, and foster greater collaboration ties with other researchers. In addition, if you have extra time, please do not miss the chance to tour around Vienna. The Organizing Committee has been working diligently to make this conference a great success and most enjoyable. We have prepared an exciting and comprehensive program for you. We look forward to your active participation and support in the future.

Thank you very much.

Enjoy ICUFN 2016 in Vienna!

Sincerely yours,

Yeong Min Jang

Kookmin Univ., Korea

C. K. Toh

National Tsing Hua Univ.,
Taiwan

Zary Segall

KTH, Sweden

Gabriele Anderst-Kotsis

Johannes Kepler Universitt
Linz, Austria

Message from TPC Chairs

*I*t is our great pleasure to welcome all of you to Vienna, Austria from July 5 to 8, 2016, for the Eighth International Conference on Ubiquitous and Future Networks (ICUFN). ICUFN has been covered a large variety of aspects in computing, networking, and communications since the founding year 2009. ICUFN 2016 will be also a successful and exciting event including broad topics on ubiquitous and future network technologies. We have received 552 paper submissions electronically from 40 countries in the world. Many of the papers were submitted from the Asia/Pacific region, however also the increasing number of submissions was made from Europe and USA. A rigorous review process has followed where all papers received three or more independent reviews. From the review process, we have selected 240 technical papers for presentation at the conference with the acceptance ratio of about 43%. The accepted papers were organized into 55 technical sessions. In particular, the oral sessions will be presented by about more than 50% authors who are outside Korea. The program covers a variety of topics on wireless and wired communication networking technologies including cognitive radios, wireless sensor networks, Internet of Things (IoT), software defined network, 5G network, vehicular network, Big data, machine learning, and other important technologies. In addition to the contribution of prominent authors from all over the world, we believe that this year's prestigious and interesting program was made possible by the commitment of technical program committee members. We are indebted to all of the TPC members for their active participation and precious time. We also would like to thank our sponsors, KICS, IEEE ComSoC, and IEICE-CS, for their kind support of this successful event. Furthermore, we thank our session chairs for the fantastic organization for each technical session. We extend our sincere thanks to the Organizing Committee Chairs, Prof. Yeong Min Jang, Prof. C. K. Toh, Prof. Zary Segall and Prof. Gabriele Anderst-Kotsis, their continued support and guidance. Especially, warm host, Prof. Gabriele Anderst-Kotsis for fantastic venue. We hope that all of you will enjoy the excellent program of ICUFN 2016 as well as the beautiful scenery and attractions of Vienna.

Sincerely,

Sungrae Cho

Chung-Ang Univ.,
Korea

Xin Wang

Fudan Univ., China

Takeo Fujii

Univ. of Electro-
Comms, Japan

Kun Yang

Univ. of Essex, UK

Jaime Lloret Mauri

Universidad Politecnica
de Valencia, Spain



ICUFN 2016 Program at a Glance

Room	Lecture Hall 6	Lecture Hall 2	Lecture Hall 3	Lecture Hall 4	Lecture Hall 7
July 5, 2016 (Tuesday)					
14:00 ~ 14:45	Registration				
14:45 ~ 16:15	1A: 5G/6G Mobile Communications I (5)	1B: Cognitive Radio Communication and Network (5)	1C: Optical-Wireless LED I (4)	1D: Intelligent Vehicles (5)	1E: DroneCAN (5)
16:15 ~ 16:30	Coffee Break				
16:30 ~ 18:00	2A: 5G/6G Mobile Communications II (5)	2B: Big Data (5)	2C: Optical-Wireless LED II (4)	2D: Intelligent Vehicles & DroneCAN (5)	2E: Special Invited Session (5)
July 6, 2016 (Wednesday)					
09:40 ~ 11:00	3A: Wireless Sensor Network I (3)	3B: Security I (3)	3C: Visible Light Communications (4)	3D: Cognitive Radio I (4)	3E: Wireless Communications I (4)
11:00 ~ 11:10	Session Break				
11:10 ~ 11:30	Opening Address	Prof. Yeong Min Jang (OC Chair)			
		Prof. Zary Segall (KTH, Sweden)			
	Welcome Address	Prof. Yongsoo Cho (President of KICS)			
		Prof. Gabriele Anderst-Kotsis (Former President of Austrian Computer Society)			
		Eunhee Kwon (Former Member of Parliament, Korea)			
11:30 ~ 12:30	Keynote Speech: Prof. Mischa Dohler (King's College London)				
12:30 ~ 13:40	Lunch Break				
13:40 ~ 15:10	4A: Wireless Sensor Network II (4)	4B: MIMO I (4)	4C: Channel/Source Codes (4)	4D: Ubiquitous Systems (4)	4E: Wireless Communications II (4)
15:10 ~ 15:20	Session Break				
15:20 ~ 16:20	5A: Poster (5)	5B: Poster (6)	5C: Poster (6)	5D: Poster (6)	5E: Poster (5)
16:20 ~ 16:40	Coffee Break				
16:40 ~ 17:50	6A: Resource Allocation (3)	6B: MIMO II (3)	6C: Internet of Things I (3)	6D: Cognitive Radio II (3)	6E: Wireless Communications III (3)
18:30 ~ 20:00	Welcome Reception at Imperial Riding School Renaissance Vienna Hotel				
July 7, 2016 (Thursday)					
09:40 ~ 10:50	7A: Wireless Systems (3)	7B: Wireless Network I (3)	7C: Internet of Things II (3)	7D: Vehicular Network I (3)	7E: Wireless Communications IV (3)
10:50 ~ 11:00	Session Break				
11:00 ~ 12:00	8A: Poster (6)	8B: Poster (6)	8C: Poster (6)	8D: Poster (6)	8E: Poster (5)
12:00 ~ 13:30	Lunch Break				
13:30 ~ 15:30	9A: Software Defined Network I (5)	9B: Wireless Network II (5)	9C: Mobile Network (5)	9D: Internet I (5)	9E: Security II (5)
15:30 ~ 15:50	Coffee Break				
15:50 ~ 17:50	10A: Software Defined Network II (5)	10B: 5G Network I (5)	10C: Ubiquitous Service (5)	10D: Internet II (5)	10E: Machine Learning (5)
18:30 ~ 20:30	Banquet at Imperial Riding School Renaissance Vienna Hotel				
	Banquet Speech : Prof. Ramjee Prasad (Aalborg University, Denmark)				
July 8, 2016 (Friday)					
09:40 ~ 11:10	11A: Localization (3)	11B: 5G Network II (4)	11C: Wireless Network III (3)	11D: Internet III (4)	11E: Vehicular Network II (3)

* The number in parenthesis indicates the number of papers per session



ICUFN 2016 Sessions

Date	Session #	Session Title	Room	# of Papers	Chair
05-Jul	1A	5G/6G Mobile Communications I	Lecture Hall 6	5	Chair: Haneul Ko (Korea University, Korea)
	1B	Cognitive Radio Communication and Network	Lecture Hall 2	5	Chair: Won Cheol Lee (Soongsil University, Korea)
	1C	Optical-Wireless LED I	Lecture Hall 3	4	Chair: Yeong Min Jang (Kookmin University, Korea)
	1D	Intelligent Vehicles	Lecture Hall 4	5	Chair: Dong Seog Han (Kyungpook National University, Korea)
	1E	DroneCAN	Lecture Hall 7	5	Chair: Hwangnam Kim (Korea University, Korea)
	2A	5G/6G Mobile Communications II	Lecture Hall 6	5	Chair: Hwangnam Kim (Korea University, Korea)
	2B	Big Data	Lecture Hall 2	5	Chair: Wan-Sup Cho (Chungbuk National University, Korea)
	2C	Optical-Wireless LED II	Lecture Hall 3	4	Chair: Cihun-Siyong Alex Gong (Chang Gung University, Taiwan)
	2D	Intelligent Vehicles & DroneCAN	Lecture Hall 4	5	Chair: Dong Seog Han (Kyungpook National University, Korea)
	2E	Special Invited Session	Lecture Hall 7	5	Chair: Kyung-Joon Park (DGIST, Korea)
06-Jul	3A	Wireless Sensor Network I	Lecture Hall 6	3	Chair: Nestor Michael C. Tiglao (University of the Philippines, Philippines)
	3B	Security I	Lecture Hall 2	3	Chair: Feliksas Kuliesius (Vilnius University, Lithuania)
	3C	Visible Light Communications	Lecture Hall 3	4	Chair: Cihun-Siyong Alex Gong (Chang Gung University, Taiwan)
	3D	Cognitive Radio I	Lecture Hall 4	4	Chair: Won Cheol Lee (Soongsil University, Korea)
	3E	Wireless Communications I	Lecture Hall 7	4	Chair: Tae Won Ban (Gyeongsang National University, Korea)
	4A	Wireless Sensor Network II	Lecture Hall 6	4	Chair: Takeo Fujii (The University of Electro-Communications, Japan)
	4B	MIMO I	Lecture Hall 2	4	Chair: Joon-Sang Park (Hongik University, Korea)
	4C	Channel/Source Codes	Lecture Hall 3	4	Chair: Hsu-Feng Hsiao (National Chiao Tung University, Taiwan)
	4D	Ubiquitous Systems	Lecture Hall 4	4	Chair: Hyukjoon Lee (Kwangju University, Korea)
	4E	Wireless Communications II	Lecture Hall 7	4	Chair: Eisuke Kudoh (Tohoku Institute of Technology, Japan)
	6A	Resource Allocation	Lecture Hall 6	3	Chair: Eisuke Kudoh (Tohoku Institute of Technology, Japan)
	6B	MIMO II	Lecture Hall 2	3	Chair: Joon-Sang Park (Hongik University, Korea)
	6C	Internet of Things I	Lecture Hall 3	3	Chair: Kwan-Hee Yoo (Chungbuk National University, Korea)
	6D	Cognitive Radio II	Lecture Hall 4	3	Chair: Magdy Bayoumi (University of Louisiana, USA)
	6E	Wireless Communications III	Lecture Hall 7	3	Chair: Tae Won Ban (Gyeongsang National University, Korea)



ICUFN 2016 Sessions

Date	Session #	Session Title	Room	# of Papers	Chair
07-Jul	7A	Wireless Systems	Lecture Hall 6	3	Chair: Feliksas Kuliesius (Vilnius University, Lithuania)
	7B	Wireless Network I	Lecture Hall 2	3	Chair: Purnendu Karmakar (The LNM Institute of Information Technology, India)
	7C	Internet of Things II	Lecture Hall 3	3	Chair: Najam Ul Hasan (Dhofar University, Oman)
	7D	Vehicular Network I	Lecture Hall 4	3	Chair: Silvia Krug (Technische Universität Ilmenau, Germany)
	7E	Wireless Communications IV	Lecture Hall 7	3	Chair: Kiran V (VTU, India)
	9A	Software Defined Network I	Lecture Hall 6	5	Chair: Yoshihiro Niitsu (Shibaura Institute of Technology, Japan)
	9B	Wireless Network II	Lecture Hall 2	5	Chair: Takeo Fujii (The University of Electro-Communications, Japan)
	9C	Mobile Network	Lecture Hall 3	5	Chair: Mahadev Anant Gawas (BITS, India)
	9D	Internet I	Lecture Hall 4	5	Chair: Francesco Zampognaro (University of Rome Tor Vergata, Italy)
	9E	Security II	Lecture Hall 7	5	Chair: Petr Bujok (University of Ostrava, Czech Republic)
	10A	Software Defined Network II	Lecture Hall 6	5	Chair: Myungsik Yoo (Soongsil University, Korea)
	10B	5G Network I	Lecture Hall 2	5	Chair: Hiroyuki Otsuka (Kogakuin University, Japan)
	10C	Ubiquitous Service	Lecture Hall 3	5	Jianlin Guo (Mitsubishi Electronic Research Laboratories, USA)
	10D	Internet II	Lecture Hall 4	5	Chair: Francesco Zampognaro (University of Rome Tor Vergata, Italy)
	10E	Machine Learning	Lecture Hall 7	5	Chair: YoungSung Lee (Chungbuk National University, Korea)
08-Jul	11A	Localization	Lecture Hall 6	3	Chair: Fadi Al Machot (Alpen Adria University Klagenfurt, Austria)
	11B	5G Network II	Lecture Hall 2	4	Chair: Najam Ul Hasan (Dhofar University, Oman)
	11C	Wireless Network III	Lecture Hall 3	3	Chair: Purnendu Karmakar (The LNM Institute of Information Technology, India)
	11D	Internet III	Lecture Hall 4	4	Chair: Hyunggon Park (Ewha Womans University, Korea)
	11E	Vehicular Network II	Lecture Hall 7	3	Chair: Young-June Choi (Ajou University, Korea)
06-Jul	WED	Posters	Hallway	57	Chair: Joon-Sang Park (Hongik University, Korea)
07-Jul	THU				Chair: Young-June Choi (Ajou University, Korea)

July 5, 2016 (Tuesday)

14:45~16:15

Session 1A : 5G/6G Mobile Communications I

Chair: Haneul Ko (Korea University, Korea)

[1A-1] Preamble Design Technique for Millimeter-Wave Cellular Systems Using Zadoff-Chu Sequences

Dae Gen Han (Chung-Ang University, Korea), Yeong Jun Kim (LG Electronics, Korea), and Yong Soo Cho (Chung-Ang University, Korea)

[1A-2] Adaptive Control CRE Technique for eCIC in HetNet
Norihiro Naganuma and Sho Nakazawa (Kogakuin University, Japan),
Satoshi Suyama and Yukihiko Okumura (NTT DOCOMO INC, Japan),
and Hiroyuki Otsuka (Kogakuin University, Japan)

[1A-3] Throughput Improvement by Transmitter-side Three-Dimensional Beamforming in Mobile Systems

Ryota Nakao, Sho Nakazawa, and Hiroyuki Otsuka (Kogakuin University, Japan)

[1A-4] Small Cell Offloading Algorithm Based on the Social Context

Hye-Rim Cheon (Ajou University, Korea), Seung-Que Lee (Electronics and Telecommunication Research Institute, Korea), and Jae-Hyun Kim (Ajou University, Korea)

[1A-5] Performance of Analog and Digital Modulation Schemes Under Sweep Jamming

Dong-Yeol Choi, Won-Kyung Kim, and Jae-Hyun Kim (Ajou University, Korea), and Huirae Cho (National Security Research Institute, Korea)

Session 1B : Cognitive Radio Communication and Network

Chair: Won Cheol Lee (Soongsil University, Korea)

[1B-1] EEF Criterion Based User Selection for Cooperative Spectrum Sensing in Cognitive Radio Network

Aleksandra Stefanovska (Chongqing Univ. of Posts and Telecommunications, The Republic of Macedonia), Kai Gao and Bin Shen (Chongqing Univ. of Posts and Telecommunications, China)

[1B-2] An Efficient Power Allocation Scheme for Multiple TVWS Devices Based on the Location Probability

Hyung Min Chang, Chuyen Khoa Huynh, and Won Cheol Lee (Soongsil University, Korea)

[1B-3] Study of a Multi-relay Scheme and Co-channel Interference within an Underlay Cognitive Radio Network

Jamal Hussein (Newcastle University, UK), Salama Ikki (Lakehead University, Canada), and Said Boussakta, Charalampos Tsimenidis, and Yasir Al-Mathehaji (Newcastle University, UK)

[1B-4] Primary Receiver-Aware Opportunistic Broadcasting in Cognitive Radio Ad Hoc Networks

Yasir Al-Mathehaji, Said Boussakta, Martin Johnston, and Jamal Hussein (Newcastle University, UK)

[1B-5] Throughput of an opportunistic spectrum access scheme under a frame structure

Jagadeeshchandra Shetty and Jamadagni H.S. (Indian Institute of science, India)

Session 1C : Optical-Wireless LED I

Chair: Yeong Min Jang (Kookmin University, Korea)

[1C-1] Performance Analysis of a Generalized Color Modulation Under the Channel Model for High-rate PD Communication

Jai-Eun Kim, Ji-Won Kim, and Ki-Doo Kim (Kookmin University, Korea)

[1C-2] Visible Light Communication based Vehicle Positioning using a Rolling Shutter CMOS Sensor

Trong-Hop Do and Myungsik Yoo (Soongsil University, Korea)

[1C-3] Performance Evaluation of High-Speed Visible Light Communication Combining Low-Speed Image Sensor and Polygon Mirror In an Outdoor Environment

Yoshihito Imai, Tadashi Ebihara, Koichi Mizutani, and Naoto Wakatsuki (University of Tsukuba, Japan)

[1C-4] The High-efficiency LED Driver for Visible Light Communication Applications

Yu-Chen Lee, Jyun-Liang Lai, and Chueh-Hao Yu (Industrial Technology Research Institute, Taiwan), and Cihun-Siyong Alex Gong (Chang Gung University & Chang Gung Memorial Hospital, Taiwan)

Session 1D : Intelligent Vehicles

Chair: Dong Seog Han (Kyungpook National University, Korea)

[1D-1] Software-in-the-Loop Simulation for Early-Stage Testing of AUTOSAR Software Component

Sooyong Jeong, Yongsu Kwak, and Woo Jin Lee (Kyungpook National University, Korea)

[1D-2] Development of passenger safety system based on the moving object detection and test result on the real vehicle

Kwang-Yong Kim, Yun-Won Choi (ETRI, Korea), Jeong Hyun Kim (Kyung Chang, Korea), and Mi-Ryung Park and Soo-In Lee (ETRI, Korea)

[1D-3] A Request Based Adaptive Beacon Rate Control Scheme for Vehicular Ad-hoc Networks

Gwanghyeon Kim, Sungwon Lee, Hyeongcheol Park, and Dongkyun Kim (Kyungpook National University, Korea)

[1D-4] Fast and Reliable Tracking Algorithm for On-Road Vehicle Detection Systems

Jang Woon Baek, Byung-Gil Han, Hyunwoo Kang, Yoonsu Chung, and Su-In Lee (ETRI, Korea)

[1D-5] Measurement Based V2V Path Loss Analysis in Urban NLOS Scenarios

Jhihoon Joo, Odongo Steven Eyobu, and Dong Seog Han (Kyungpook National University, Korea), and Hong-Jong Jeong (Wayties Inc., Korea)

Session 1E : DroneCAN

Chair: Hwangnam Kim (Korea University, Korea)

[1E-1] Devising Geographic Diffusion for Drone Networks

Jiyeon Lee, Kangho Kim, Hyunsoon Kim, and Hwangnam Kim (Korea University, Korea)

[1E-2] Information Propagation Modeling in a Drone Network using Disease Epidemic Models

Yoojoong Kim, Jong-Kook Kim, and Junhee Seok (Korea University, Korea), and Byoung Du Kim (Victoria University, New Zealand)

[1E-3] Research on Potential of Sound-based Direction Sensing for Drones

Ha Young Shin, Jongtaek Jung, and Hwangnam Kim (Korea University, Korea)

[1E-4] Camera-GPS-IMU Sensor Fusion for Autonomous Flying

Yongseok Lee, Jaemin Yoon, Hyunsoo Yang, Changu Kim, and Dongjun Lee (Seoul National University, Korea)

[1E-5] Spatial Retreat of Net-Drones under Communication Failure

Jin-Hyeok Kang and Kyung-Joon Park (DGIST, Korea)

July 5, 2016 (Tuesday)

16:30~18:00

Session 2A : 5G/6G Mobile Communications II

Chair: Hwangnam Kim (Korea University, Korea)

[2A-1] Tactical Beamforming Against High-Power Reactive Jammer

Sung-Ho Lim, Sungmin Han, Jaeseok Lee, and Ji-Woong Choi (Daegu Gyeongbuk Institute of Science & Technology (DGIST), Korea)

[2A-2] Joint Hierarchical Modulation and Network Coding for Asymmetric Data Rate Transmission Over Multiple-Access Relay Channel

Dongho You, Ye Hoon Lee, Seung Ho Choi, and Dong Ho Kim (Seoul National University of Science and Technology (SeoulTech), Korea), and Sunghyun Cho (Hanyang University, Korea)

[2A-3] Random Access Success Probability in Full-duplex Radio Networks

Sungmin Han, Jaeseok Lee, and Ji-Woong Choi (DGIST, Korea)

[2A-4] Optimal Placement of Service Function in Service Function Chaining

Haneul Ko, Dongeun Suh, Hosung Baek, and Sangheon Park (Korea University, Korea), and Jiyoung Kwak (ETRI, Korea)

[2A-5] Asymptotic Performance Comparison of Concatenated Codes with Different Inner Decoding Schemes in Frequency-Hopping Spread Spectrum Packet Radio Networks

Ye Hoon Lee and Dong Ho Kim (Seoul National University of Science and Technology, Korea), and Sunghyun Cho (Hanyang University, Korea)

Session 2B : Big Data

Chair: Wan-Sup Cho (Chungbuk National University, Korea)

[2B-1] Consideration of Manufacturing Data to Apply Machine Learning Methods for Predictive Manufacturing

Ji-Hyeong Han and Su-Young Chi (Electronics and Telecommunications Research Institute, Korea)

[2B-2] Integrative Manufacturing Data Visualization Using Calendar View Map

Doung Chankhihort, Sung Soo Choi, Gyu Jung Lee, Byung Mook Im, Da-Mi Ahn, Eun-Suk Choi, and Aziz Nasridinov (Chungbuk National University, Korea), Sun-Ok Kwon, Sang-Hyun Lee, Jeong-Tae Kang, and Kyu-Tae Park (YURA Co., Ltd., Korea), and Kwan-Hee Yoo (Chungbuk National University, Korea)

[2B-3] An Implementation of a High Throughput Data Ingestion System for Machine Logs in Manufacturing Industry

Jaehui Park and Su-young Chi (Electronics and Telecommunications Research Institute, Korea)

[2B-4] Data Integration and Arrangement in the Shop Floor Based-On Time Stamp: An Illustrative Study of CNC Machining

Rockwon Kim and Su-young Chi (ETRI, Korea), and Wan C. Yoon (KAIST, Korea)

[2B-5] A Comparative Study of Video Recommender Systems in Big Data Era

Seong-Eun Hong and Hwa-Jong Kim (Kangwon National University, Korea)

Session 2C : Optical-Wireless LED II

Chair: Cihun-Siyong Alex Gong (Chang Gung University, Taiwan)

[2C-1] Flicker-Free Spatial-PSK Modulation Scheme for Vehicular Image Sensor Communications

Trang Nguyen, Nam Tuan Le, Mohammad Arif Hossain, Chang Hyun Hong, Amirul Islam, and Yeong Min Jang (Kookmin University, Korea)

[2C-2] Interference Mitigation Technique for Time-of-Flight (ToF) Camera

Amirul Islam, Mohammad Arif Hossain, and Yeong Min Jang (Kookmin University, Korea)

[2C-3] Performance Evaluation of MIMO Optical Camera Communications Based Rolling Shutter Image Sensor

Nam-Tuan Le and Yeong Min Jang (Kookmin University, Korea)

[2C-4] Adaptive Rate Scheduling for ITLinQ under Fast Fading in D2D Networks

Yeon Joon Choi, Kyungmin Lee, and Sang-Hyo Kim (Sungkyunkwan University, Korea)

Session 2D : Intelligent Vehicles & DroneCAN

Chair: Dong Seog Han (Kyungpook National University, Korea)

[2D-1] Multi-Drone Control and Network Self-Recovery for

Flying Ad Hoc Network

Geon-Hwan Kim, Jae-Choong Nam, Imtiaz Mahmud, and You-Ze Cho (Kyungpook National University, Korea)

[2D-2] Improved Drone Reliability Using a Robot Operating System

Haegeon Jeong, Jeonseong Baik, Sewoong Min, and Kyungtae Kang (Hanyang University, Korea)

[2D-3] Vehicle Visualization System on the iOS Devices Using VANETs

Naoto Tanaka and Taku Noguchi (Ritsumeikan University, Japan)

[2D-4] A Tool Breakage Detection System using Load Signals of Spindle Motors in CNC Machines

Hyeon Sung Cho, Ji-hyeong Han, and Su-young Chi (ETRI, Korea), and Kwan-Hee Yoo (Chungbuk National University, Korea)

[2D-5] Data Integration for Clinical Decision Support

Yuchae Jung and Yong Ik Yoon (Sookmyung Women's University, Korea)

Session 2E : Special Invited Session

Chair: Kyung-Joon Park (DGIST, Korea)

[2E-1] TCP Congestion Window Tuning for Satellite Communication Using Cross-Layer Approach

Jong-Mu Kim, Seung-Yong Lee, and Jae-Hyun Kim (Ajou University, Korea)

[2E-2] Optimal Scheduling of Energy Storage System for Self-Sustainable Base Station Operation Considering Battery Wear-out Cost

Yohwan Choi and Hongseok Kim (Sogang University, Korea)

[2E-3] Load-Aware Association with AP for Internet-Connected Vehicles

Youngmi Baek and Sang Hyuk Son (DGIST, Korea)

[2E-4] BER Analysis of CAN Under BPSK Passband CAN-HD Interference

Eunmin Choi, Sungmin Han, and Jaeseok Lee (DGIST, Korea), Suwon Kang (GCT Semiconductor, Inc., USA), and Ji-Woong Choi (DGIST, Korea)

[2E-5] Performance Analysis of Relayed-Broadcasting with Probabilistic Flooding in WLANs

Young Boo Kim and Eun-Chan Park (Dongguk University, Korea)

July 6, 2016 (Wednesday)

09:40~11:00

Session 3A : Wireless Sensor Network I

Chair: Nestor Michael C. Tiglao (University of the Philippines, Philippines)

[3A-1] PSR-based ANC Protocol in Energy Harvesting Bidirectional Networks

MinChul Ju and Jung Hun Oh (Kookmin University, Korea), and Kyu-Sung Hwang (Kyungil University, Korea)

[3A-2] Receiver Beacon Transmission Interval Design for Multi-Stage Wireless Sensor Networks

Tomokazu Moriyama, Taiki Nakayama, and Takeo Fujii (The University of Electro-Communications, Japan)

[3A-3] Simulation Study of Maximum Amount Shortest Path Routing in Wireless Sensor Networks Using Ns-3

Alberto Gallegos, Taku Noguchi, Tomoko Izumi, and Yoshio Nakatani (Ritsumeikan University, Japan)

Session 3B : Security I

Chair: Feliksas Kuliesius (Vilnius University, Lithuania)

[3B-1] High Accessible Virtual Keyboards for Preventing Key-Logging

Wooguil Pak, Youngrok Cha, and Sunki Yeo (Keimyung University, Korea)

[3B-2] A Routing Method Designed for a Quantum Key Distribution Network

Yoshimichi Tanizawa, Ririka Takahashi, and Alexander R. Dixon (Toshiba Corporation, Japan)

[3B-3] Ticket-based Authentication Protocol for Underwater Wireless Sensor Network

Chae-Won Yun, Jae-Hoon Lee, Okyeon Yi, and Soo-Hyun Park (Kookmin University, Korea)

Session 3C : Visible Light Communications

Chair: Cihun-Siyong Alex Gong (Chang Gung University, Taiwan)

[3C-1] Secure Communication with Beamforming and Jamming in Time-Varying Channels

Heejung Yu and Waqas Khalid (Yeungnam University, Korea)

[3C-2] High-Speed 2x2 MIMO-OFDM Visible Light Communication Employing Phosphorescent LED

I-Cheng Lu and Yen-Liang Liu (Industrial Technology Research Institute, Taiwan), and Chih-Han Lai (National Chiao-Tung University, Taiwan)

[3C-3] Uplink Bidirectional Efficient Multiuser Visible Light Communications Using TDD and Diversity Techniques

Samrat Vikramaditya Tiwari, Atul Sewaiwar, and Yeon-Ho Chung (Pukyong National University, Korea)

[3C-4] A 10.7 Km Visible Light Communications Experiment

Zhang Minglun, Yuan Xueguang, and Huang Yongqing (Beijing University of Posts and Telecommunications, P.R. China)

Session 3D : Cognitive Radio I

Chair: Won Cheol Lee (Soongsil University, Korea)

[3D-1] Exact Quickest Spectrum Sensing Algorithms for Eigenvalue-Based Change Detection

Martijn Arts, Andreas Bollig, and Rudolf Mathar (RWTH Aachen University, Germany)

[3D-2] Performance Limits of Cooperative Eigenvalue-Based Spectrum Sensing Under Noise Calibration Uncertainty

Martijn Arts and Rudolf Mathar (RWTH Aachen University, Germany)

[3D-3] The Future of Spectrum Sensing

Johanna Vartiainen (University of Oulu, Finland), Marko Höyhtyä (VTT Technical research Centre of Finland, Finland), Risto Vuohioniemi, and Vidhya L. Ramani (University of Oulu, Finland)

[3D-4] Joint Optimal Access and Sensing Policy on Distributed Cognitive Radio Networks with Channel Aggregation

Sangdon Park, Jaedeok Kim, Ganguk Hwang, and Jun Kyun Choi (KAIST, Korea)

Session 3E : Wireless Communications I

Chair: Tae Won Ban (Gyeongsang National University, Korea)

[3E-1] Outage Probability of Macrodiversity system in the presence of Gamma long term fading Rayleigh short term fading and Nakagami-m CCI

Dusan Stefanovic (Collage of Applied technical Sciences, Serbia) and Caslav Stefanovic (University of Pristina, Serbia)

[3E-2] Mixed RF/FSO Two-Way Relaying System Under Generalized FSO Channel with Pointing Error

Lei Kong, Wei Xu, Hua Zhang, and Chunming Zhao (Southeast University, P.R. China)

[3E-3] On the DoF of Co-existing 2x2 X Channel and 2x2 Interference Channel

Cong Li, Feng Liu, and Liansun Zeng (Shanghai Maritime University, P.R. China)

[3E-4] Exact BER Performance Analysis of Incremental Relaying over Rayleigh Fading Channels

Özgür Özdemir (Selçuk University, Turkey)

July 6, 2016 (Wednesday)

13:40~15:10

Session 4A : Wireless Communications I

Chair: Takeo Fujii (The University of Electro-Communications, Japan)

[4A-1] RFID Sensor Network Based Pervasive Computing

Jetendra Joshi, Abhinandan Bhargava, Urijit kurulkar, Joshitha Reddy, Amrit Bagga, Abhinav Goel, and Pranith Reddy (NIIT University, India)

[4A-2] A General-Purpose Service-Oriented Middleware Model for WSN

Atif Naseer, Basem Y Alkazemi, and Hossam I Aldoobi (Umm Al-Qura University, Saudi Arabia)

[4A-3] Fractal Clustering and Similarity Measure: Two New Approaches for Reducing Energy Consumption in Wireless Sensor Networks

Fernando R. Almeida Jr. and Angelo Brayner (UNIFOR, Brazil), Joel J.P.C. Rodrigues (UNIFOR & Inatel, Brazil & Universidade da Beira Interior, Portugal), and Jose E. Bessa Maia (UECE, Brazil)

[4A-4] A Sub-interval-based Scheduling Algorithm in Duty-cycled Wireless Sensor Networks

Thi-Nga Dao and Seokhoon Yoon (University of Ulsan, Korea)

Session 4B : MIMO I

Chair: Joon-Sang Park (Hongik University, Korea)

[4B-1] Performance Analysis for Pilot Decontamination of Massive MIMO Using Alternating Projection

Yiliang Chen, Rong Ran, and Seongkeun Oh (Ajou University, Korea)

[4B-2] The Achievable Sum Rate of Large-Scale Fading in Multi-pair AF Massive MIMO Systems

Yang Liu (Yangzhou University, P.R. China), Jie Ding (Yangzhou University & Beihang University, P.R. China), Jing Yang, and Qiqing Yang (Yangzhou University, P.R. China)

[4B-3] Training Design and Two-stage Channel Estimation for Correlated Two-way MIMO Relay Systems

Huiming Chen and Wong Hing Lam (University of Hong Kong, P.R. China)

[4B-4] Achievable Rate Analysis for Multi-Pair Two-Way Amplify-and-Forward MIMO System in Ricean Fading

Caihong Xu (Yangzhou University, P.R. China), Jing Yang (Yangzhou University & Southeast University, P.R. China), Lei Zhou, and Yuren Du (Yangzhou University, P.R. China)

Session 4C : Channel/Source Codes

Chair: Hsu-Feng Hsiao (National Chiao Tung University, Taiwan)

[4C-1] Cognitive HF Communication System with Adaptive Complementary Codes

Johanna Vartiainen, Pekka Pirinen, and Risto Vuohioniemi (University of Oulu, Finland)

[4C-2] Generation of Cyclically Permutable Codes by Galois Field Fourier Transform

Ting-Ya Yang, Houshou Chen, and Kuo-Cheng Chung (National Chung Hsing University, Taiwan)

[4C-3] Nonuniform Overlapped Rateless Codes for Streaming over Error Prone Channels

Yu-Shu Chang and Hsu-Feng Hsiao (National Chiao Tung University, Taiwan)

[4C-4] Construction and Complement Circuit of a Quantum Stabilizer Code with Length 7

Duc Manh Nguyen and Sunghwan Kim (University of Ulsan, Korea)

Session 4D : Ubiquitous Systems

Chair: Hyukjoon Lee (Kwangju University, Korea)

[4D-1] Smart City Interoperability Framework Based on City Infrastructure Model and Service Prioritization

Jae-young Ahn, Jun Seob Lee, and Hyoung Jun Kim (ETRI, Korea), and Dae Joon Hwang (Sungkyunkwan University, Korea)

[4D-2] Picture Puzzle Augmented Reality System for Infants Creativity

Yeon-Jae Oh (Sunchon National University, Korea), Young-Sang Suh (Sunchon National University & Chonnam National University, Korea), and Eung-Kon Kim (Sunchon National University, Korea)

[4D-3] An Empirical Study of Applying a Reflective-

Distributed Memory for Automation Systems

Takashi Sakakura and Mitsuteru Shiba (Mitsubishi Electric Corporation, Japan), and Tatsuji Munaka (Tokai University, Japan)

[4D-4] Effect of Bounded Rationality on Tradeoff Between Systemic Risks & Economic Efficiency in Networks

V. Marbukh (National Institute of Standards and Technology, USA)

Session 4E : Wireless Communications II

Chair: Eisuke Kudoh (Tohoku Institute of Technology, Japan)

[4E-1] Complexity Reduced Blind Diversity at Low IF Band for Indoor Reception

Sungwon Hong (Kyungpook National University, Korea), Donghoon Lee (Samsung Electronics Co., Ltd., Korea), and Dong Seog Han (Kyungpook National University, Korea)

[4E-2] Antenna Selection with Decoupling Network for Small Receiving Monopole Array in a Correlated MIMO System

Affum Emmanuel Ampoma and Guangjun Wen (University of Electronic Science and Technology of China, P.R. China)

[4E-3] 100 Gb/s PDM-DQPSK Optical Label Switching System with Spectral Amplitude Code Labels

Aboagye Adjaye Isaac, Cao Yongsheng, Chen Fushen, and Jin Wang (University of Electronic Science and Technology of China, P.R. China)

[4E-4] Signal Detection with Parallel Orthogonal Matching Pursuit in Multi-User Spatial Modulation Systems

Jeonghong Park and Bang Chul Jung (Chungnam National University, Korea), Tae-Won Ban (Gyeongsang National University, Korea), and Jong Min Kim (Korea Science Academy of KAIST, Korea)

July 6, 2016 (Wednesday)

15:20~16:20

Session 5A : Poster

Chair: Joon-Sang Park (Hongik University, Korea)

[5A-1] Design and Implementation of a Transmitter on Embedded Multicore DSP Systems

Chan-Bok Jeong and Hyekyung Jwa (Electronics and Telecommunication Research Institute, Korea), and Hyeon-Deok Bae (Chungbuk National University, Korea)

[5A-2] Integrated Community Service Platform System Linked to Smart Home and Smart City

Eungha Kim and Changsup Keum (Electronics and Telecommunication Research Institute, Korea)

[5A-3] The Mobile Edge Intelligence Services Based on the Space-Specific Ontology

HyunKyung Yoo and Changsup Keum (Electronics and Telecommunication Research Institute, Korea)

[5A-4] A Design of Smart Docent Service Using Hybrid Recommenders

Ki-Sook Chung, Thai Quang Tung, and Chang-sup Keum (Electronics

and Telecommunication Research Institute, Korea)

[5A-5] Software Monitoring System for Register Marker Detection

Sang-Chul Kim (Kookmin University, Korea)

Session 5B : Poster

Chair: Joon-Sang Park (Hongik University, Korea)

[5B-1] Design of a Collision-free Backoff Method to Improve the IEEE 802.11 DCF

Xiaoying Lei (Yangzhou University, China) and Seung Hyong Rhee (Kwangwoon University, Korea)

[5B-2] Adaptive Access Class Barring for Machine-Type Communications in LTE-A

Jihun Moon (University of Suwon, Korea) and Yujin Lim (Sookmyung Women's University, Korea)

[5B-3] Joint Power Allocation and Relay Selection for Two-Way Relaying with Digital Network Coding

Thinh Phu Do and Yun Hee Kim (Kyung Hee University, Korea)

[5B-4] Improvement of Key Exchange Protocol to prevent Man-in-the-middle Attack in the Satellite Environment

In-A Song and Young-Seok Lee (Kunsan National University, Korea)

[5B-5] Content-Centric Distribution in Wireless Networks

Mahfuzur Rahman Bosunia and Seong-Ho Jeong (Hankuk University of Foreign Studies, Korea)

[5B-6] Test Node-Based WCL Algorithm for Wireless Sensor Networks

Kwang-Yul Kim and Yoan Shin (Soongsil University, Korea)

Session 5C : Poster

Chair: Joon-Sang Park (Hongik University, Korea)

[5C-1] Indoor Navigation for an Automatic Guided Vehicle with Beacon based Relative Distance Estimation

Jae-Ho Lee, Uk-Jin JANG, and Youn-Sik Hong (Incheon National University, Korea)

[5C-2] Android Forensics Analysis: Private Chat on Social Messenger

G. B. Satrya, P. T. Daely, and S. Y. Shin (Kumoh National Institute of Technology, Korea)

[5C-3] Cascaded Learning System for SR Noise Induced Spectrum Sensing in Cognitive Radio Network

Reda Hafu Tasew and Soo Young Shin (Kumoh National Institute of Technology, Korea)

[5C-4] Design and Implementation of IoT Planner: Device Interaction Service for IoT

Seung Woo Kum, Sung-hyun Kim, Young Ran Jeon, Jaewon Moon, and Tae-Boem Lim (Korea Electronics Technology Institute, Korea)

[5C-5] A location-based interactive model for Internet of Things and Cloud (IoT-cloud)

Thanh Dinh and Younghan Kim (Soongsil University, Korea), and Hyukjoon Lee (Kwangwoon University, Korea)

[5C-6] Pixel to Signal Conversion Based Invisible Image Sensor Communication

Mohammad Arif Hossain, Amirul Islam, and Yeong Min Jang
(Kookmin University, Korea)

Session 5D : Poster

Chair: Joon-Sang Park (Hongik University, Korea)

[5D-1] A Simple Approach to Share Users' Own Healthcare Data with a Mobile Phone

Hyunsoo Kim, Hyeon Song, Soobin Lee, Hyangjung Kim, and Inkwang Song (NEOFECT Co., Ltd., Korea)

[5D-2] Performance Evaluation of In-Memory Computing on Scale-Up and Scale-Out Cluster

Taekyung Yoo, Minsub Yim, Ilgyun Jeong, Yunsu Lee, and Seung-Tae Chun (Datastreams Corp., Korea)

[5D-3] Turbo Equalization for Covert Communication in Underwater Channel

Tae-Seok Ahn, Ji-Won Jung, and Ha-Hyun Sung (Korea Maritime and Ocean University, Korea), Dong-Won Lee and Tae-Doo Park (Hanwha Corporation, Korea)

[5D-4] A Network-Aware Adaptive Streaming for Improving the Video Quality

Dongchil Kim, Chang Mo Yang, Chai-Jong Song, and Sungjoo Park (Korea Electronics Technology Institute, Korea)

[5D-5] K-NN based Positioning Performance Estimation for Fingerprinting Localization

Jooyoung Kim, Myungin Ji, Ju-il Jeon, Sangjoon Park, and Youngsu Cho (Electronics & Telecommunication Research Institute (ETRI), Korea)

[5D-6] Hybrid Modulation Scheme for Indoor Image Sensor Communication System Using Smartphone and LEDs

Chang Hyun Hong, Mohammad Arif Hossain, Trang Nguyen, and Yeong Min Jang (Kookmin University, Korea)

Session 5E : Poster

Chair: Joon-Sang Park (Hongik University, Korea)

[5E-1] An Efficient FTN Decoding Method Using Separation Of LDPC Decoding Symbol

Ha-Hyun Sung and Ji-Won Jung (Korea Maritime and Ocean University, Korea)

[5E-2] A Packet Scheduling Scheme for Seamless Transmission of Life Media Contents

Sungjoo Park, Dongchil Kim, Chang Mo Yang, and Chai-Jong Song (Korea Electronics Technology Institute, Korea)

[5E-3] Design and Implementation of the Car Multimedia Data Transmission System Using Ethernet AVB

An, Donghun (INFACELECS Co. Ltd., Korea)

[5E-4] QoS-Based AMC and Dynamic SINR Margin Scheduling in Wireless Multimedia Transmission Systems

Sungkyung Kim, Kyung Sook Kim, Dae Ik Kim, and Jee-Hyeon Na (Electronics and Telecommunications Research Institute, Korea)

[5E-5] Testbed for Analyzing Performance Degradation of MIMO-OFDM WLAN due to WPAN Interferer Using USRP

Hyungoo Yoon (Myongji College, Korea), Jin-Soo Park, and Byung-Jun Jang (Kookmin University, Korea)

July 6, 2016 (Wednesday)

16:40~17:50

Session 6A : Resource Allocation

Chair: Eisuke Kudoh (Tohoku Institute of Technology, Japan)

[6A-1] Cooperative Spectrum Sharing with Space Time Block Coding and Non-orthogonal Multiple Access

Md Fazlul Kader and Soo Young Shin (Kumoh National Institute of Technology, Korea)

[6A-2] A Convex Optimization for Sum Rate Maximization in a MIMO Cognitive Radio Network

Hieu V. Nguyen, Van-Dinh Nguyen, Hyeon Min Kim, and Oh-Soon Shin (Soongsil University, Korea)

[6A-3] Coalition based Low-Complexity Algorithm for Nash Bargaining Solution

Jisoo Choi, Seunghyun Jung, and Hyunggon Park (Ewha Womans University, Korea)

Session 6B : MIMO II

Chair: Joon-Sang Park (Hongik University, Korea)

[6B-1] A Study on Turbo Equalization for MIMO System based on LDPC codes

Chang-uk Baek and Ji-won Jung (Korea Maritime and Ocean University, Korea)

[6B-2] A Study on MIMO-FTN Scheme based on Layered Space Time Code using Turbo Codes

Gun-Woong Park and Ji-won Jung (Korea Maritime and Ocean University, Korea)

[6B-3] MIMO-HFM: Acoustic System Design for Reliability and High Data Rate in Underwater Sensor Networks

Sungryul Kim, Jiseong Lee, and Younghwan Yoo (Pusan National University, Korea)

Session 6C : Internet of Things I

Chair: Kwan-Hee Yoo (Chungbuk National University, Korea)

[6C-1] Social Correlation Group Generation Mechanism in Social IoT Environment

Deok-Hee Kang, Hoan-Suk Choi, and Woo-Seop Rhee (Hanbat National University, Korea)

[6C-2] RISE: Role-based Internet of Things Service Environment

Hoan-Suk Choi, Deok-Hee Kang, and Woo-Seop Rhee (Hanbat National University, Korea)

[6C-3] Knowledge Creation Model in WoO Enabled Smart Ageing IoT Service Platform

Muhammad Golam Kibria and Ilyoung Chong (Hankuk University of Foreign Studies, Korea)

Session 6D : Cognitive Radio II

Chair: Magdy Bayoumi (University of Louisiana, USA)

[6D-1] Single-channel Blind Identification Based Advanced Energy Detection for Cognitive Radio

Hang LIU and Takeo FUJII (The University of Electro-Communications, Japan)

[6D-2] Different Weighted Fusion Scheme for Cooperative Spectrum Sensing using Normal Factor Graph

Guman Kanwar Shekhawat and Purnendu Karmakar (The LNMIIT, India)

[6D-3] On Sub-Nyquist Spectrum Sensing for Wideband Cognitive Radios

Mohamed Shaban and Magdy Bayoumi (University of Louisiana at Lafayette, USA)

Session 6E : Wireless Communications III

Chair: Tae Won Ban (Gyeongsang National University, Korea)

[6E-1] Novel Channel Estimation Scheme for Backhaul System based on LTE-Advanced

Myeonghun Chu, Jihye Lee, Soonho Kwon, Sangmi Moon, and Intae Hwang (Chonnam National University, Korea)

[6E-2] Channel Equalizer Performance Analysis for Hybrid 3DTV in ATSC 3.0 Standard

Sol Lim and Dae Jin Kim (Chonnam National University, Korea), Sung-Hoon Kim and Hui Yong Kim (Electronics and Telecommunications Research Institute, Korea)

[6E-3] FSC Receiver for Performance Improvement of D2D Communication in LTE-Advanced System

Sangmi Moon, Myeonghun Chu, Jihye Lee, Soonho Kwon, and Intae Hwang (Chonnam National University, Korea)

July 7, 2016 (Thursday)

09:40~10:50

Session 7A : Wireless Systems

Feliksas Kuliesius (Vilnius University, Lithuania)

[7A-1] A 3-11GHz Current-Reuse Low Noise Amplifier for Ultra-Wideband Receivers

Hamid Karrari, Hassan Faraji Baghtash, and Esmaeil Najafi Aghdam (Sahand University of Technology, Iran)

[7A-2] On the Investigation of Voltage Standing Wave Ratio to Design a Low Noise Wideband Microwave Amplifier

M. R. M. Rizk (Alexandria University, Egypt), Ehab Abou-Bakr (The Higher Institute of Engineering and Technology, Egypt), A.A.A. Nasser (Arab Academy For Science Technology and Maritime Transport, Egypt), El-Sayed A. El-Badawy (Alexandria University, Egypt), and Amr M. Mahros (Alexandria University, Egypt & University of

Jeddah, Saudi Arabia)

[7A-3] Study on Construction of CDMA Transmission Simulator Using SH3 Microcomputer Board

Eisuke Kudoh, Kojiro Oka, and Kenichi Suzuki (Tohoku Institute of Technology, Japan)

Session 7B : Wireless Network I

Chair: Purnendu Karmakar (The LNM Institute of Information Technology, India)

[7B-1] QoE Assessment of a Reliable Groupcast Scheme in Audiovisual Transmission Over a Wireless LAN

Toshiro Nunome, Haruki Yamamoto, and Yuma Honda (Nagoya Institute of Technology, Japan)

[7B-2] Cross Layer Multi QoS Metric Routing for Multimedia Traffic in 802.11E Over MANETs

Mahadev A. Gawas, Lucy J. Gudino, and K. R. Anupama (BITS-Pilani K.K.Birla, India)

[7B-3] A New MAC Protocol for Emergency Handling in Wireless Body Area Networks

Sabita Nepal, Amod Pudasaini, Jae-young Pyun, Suk-seung Hwang, Chung Ghiu Lee, and Seokjoo Shin (Chosun University, Korea)

Session 7C : Internet of Things II

Chair: Najam Ul Hasan (Dhofar University, Oman)

[7C-1] Hop-Interval Based Decision of Operational Mode In RPL With Multi-Instance

Yonghwan Jeong, Sungwon Lee, Eunbae Moon, and Hyeongcheol Park (Kyungpook National University, Korea), Hongseok Yoo (Kyungwoon University, Korea), and Dongkyun Kim (Kyungpook National University, Korea)

[7C-2] A Positioning Algorithm in the Internet of Things

Ha. Nguyen Thi (Hoa Sen University, Viet Nam) and Khanh. Ngo Tan Vu (Tien Giang University, Viet Nam)

[7C-3] Resource Aware Hierarchical Routing in Heterogeneous Wireless IoT Networks

Jianlin Guo and Philip Orlik (Mitsubishi Electric Research Laboratories, USA), and Koichi Ishibashi (Mitsubishi Electric Corporation IT R&D Center, Japan)

Session 7D : Vehicular Network I

Chair: Silvia Krug (Technische Universitaet Ilmenau, Germany)

[7D-1] ACPM: An Associative Connectivity Prediction Model for AANET

Soumi Ghosh and Amiya Nayak (University of Ottawa, Canada)

[7D-2] Emergency Application for Vehicle-to-Vehicle Communication using Named Data Networking (eVNDN)

Yao-Hua Ho, Chun-Han Lin, and Shih-Jie Sun (National Taiwan Normal University, Taiwan), and Ling-Jyh Chen (Academia Sinica, Taiwan)

[7D-3] Utility-Based Scheduling for In-Taxi Video Advertising Systems

Shih-Fan Chou and Yu-Chia Hsu (National Taiwan University, Taiwan), and Ai-Chun Pang (National Taiwan University, Taiwan & Academia Sinica, Taiwan)

Session 7E : Wireless Communications IV

Chair: Kiran V (VTU, India)

[7E-1] Effect of Intra-Flow Interference Canceller for Large-Scale Ad Hoc Network

Jingze Dai (Hitachi, Ltd, Japan) and Yasushi Yamao (The University of Electro-Communications, Japan)

[7E-2] The selective transmission with majority even/odd subcarriers for the high data throughput in OFDMA based Cognitive Radio systems

Yihu Xu (Yanbian University, China) and Myoung-Seob Lim (Chonbuk National University, Korea)

[7E-3] New Channel Hopping Sequence for Cognitive Radio Systems Using p-ary m-sequence

Ji-Woong Jang (Ulsan College, Korea), Young-June Choi and Rajib Paul (Ajou University, Korea), and Young-Sik Kim (Chosun University, Korea)

July 7, 2016 (Thursday)

11:00~12:00

Session 8A : Poster

Chair: Young-June Choi (Ajou University, Korea)

[8A-1] Layered Architecture of Device Virtualization and Functional Collaboration for Efficient Cyber Services Configurability

Kyou Ho Lee (Inje University, Korea), Chae Min Park (Barun Technology Co., Korea), and Myung Hyun Yoon (Korea Electronics Technology Institute (KETI), Korea)

[8A-2] Low Complexity Algorithms for Network Coding based on Singular Value Decomposition

Jungmin Kwon and Hyunggon Park (Ewha Womans University, Korea)

[8A-3] Design of Positioning DB Automatic Update Method Using Google Tango Tablet for Image Based Localization System

Juil Jeon, Myungin Ji, Juyoung Kim, Sangjoon Park, and Youngsu Cho (Electronics and Telecommunications Research Institute, Korea)

[8A-4] An Inter-cell Interference Coordination Method with Beam Pattern Diversity of User Terminals in Heterogeneous Multi-cell Networks

Yun Hee Choo and SeungKwon Baek (Electronics and Telecommunications Research Institute, Korea)

[8A-5] Multi-antenna-based Transmission Strategy in 5GHz Unlicensed Band

Jungsun Um (Electronics and Telecommunications Research Institute (ETRI), Korea), Jaehyun Park (Pukyong National University, Korea),

and Seungkeun Park (Electronics and Telecommunications Research Institute (ETRI), Korea)

[8A-6] Access Control with ONOS Controller in the SDN Based WLAN Testbed

Jung Wan Shin, Hwi Young Lee, Won Jin Lee, and Min Young Chung (Sungkyunkwan University, Korea)

Session 8B : Poster

Chair: Young-June Choi (Ajou University, Korea)

[8B-1] Improving Frequency Multiplexing of Random Access Resources for TDD System Enhancement

Jisoo Park (ETRI, Korea) and Jaemin Ahn (CNU, Korea)

[8B-2] A Comparison of Clustering Algorithms for Botnet Detection Based on Network Flow

Long Mai and Minh Park (Soongsil University, Korea)

[8B-3] Performance of Secure Network Coding based on Homomorphic Encryption

Seong-Min Choi and Joon-Sang Park (Hongik University, Korea)

[8B-4] Two-Dimensional Interleaver for Holographic Data Storage Systems

Seongkwon Jeong and Janjin Lee (Soongsil University, Korea)

[8B-5] Handover Measurement for Millimeter Wave Cellular System with Beamforming

Jasper Meynard P. Arana, Rothna Pec, and Yong Soo Cho (Chung-Ang University, Korea)

[8B-6] Spectrum and Connectivity Aware Anchor-based Routing in Cognitive Vehicular Ad Hoc Networks

Huma Ghaffoor and Insoo Koo (University of Ulsan (UOU), Korea)

Session 8C : Poster

Chair: Young-June Choi (Ajou University, Korea)

[8C-1] Using Social Internet of Things (SIoT) Demand Side Management on the Plant

Jaehyeon Eom, Laihyuk Park, Woongsoo Na, Nhu- Ngoc Dao, Seon Min Jang, Yong Hun Kim, Jun Wook Lee, and Sungrae Cho (Chung-Ang University, Korea)

[8C-2] Optimization of ISM Band Interference Coordination Between WLAN and IEEE 802.15.4 Using NAV on PAN Coordinator

Seonmin Jang, Laihyuk Park, Woongsoo Na, Nhu-Ngoc Dao, Jae Hyeon Eom, Yong Hun Kim, Jun Wook Lee, and Sungrae Cho (Chung-Ang University, Korea)

[8C-3] Clustering Control in Isopleth-Oriented Ad Hoc Communication for Disaster Detection

Satoshi Katayama and Tomotaka Wada (Kansai University, Japan), and Young-Bok Choi (Tongmyong University, Korea)

[8C-4] Using D2RQ and Ontop to Publish Relational Database as Linked Data

PhalPheaktra Chhaya, Chi-Hwan Choi, Kyung-Hee Lee, Wan-Sup

Cho, Kwang-soo Shin, and Young-Sung Lee (Chungbuk National University, Korea)

[8C-5] A Study on Quality of Experience of Controlling a Device Remotely in an IoT Environment

Yejin Shin, Soonuk Seol, and Kangwon Lee (Korea University of Technology and Education, Korea)

[8C-6] A Study on Vehicular Image Sensor Communication Intelligent System

T. Nguyen, C. H. Hong, Se Bong Jang, and Y. M. Jang (Kimin Electronics co.ltd, Korea)

Session 8D : Poster

Chair: Young-June Choi (Ajou University, Korea)

[8D-1] Improved Scheduling for MAC Protocol in WBAN Based Monitoring Environment

Rae Hyun Kim and Jeong Gon Kim (Korea Polytechnic University, Korea)

[8D-2] A Practical Method of Designing DFT-based Channel Estimator

Jun-woo Kim, Jang-won Moon, Young-jo Bang, and Hoon Lee (ETRI (Electronics and Telecommunications Research Institute), Korea)

[8D-3] Novel Detection Scheme for LSAS Using Power Allocation in Multi User Scenario with LTE-A and MMB Channels

Jihye Lee, Myeonghun Chu, Soonho Kwon, Sangmi Moon, and Intae Hwang (Chonnam National University, Korea)

[8D-4] Design of Open-Ring Monopole Antenna for TPMS Sensor Modules

Seung Gi Kim, HanWool Choi, Sol Lim, and Dae Jin Kim (Chonnam National University, Korea)

[8D-5] A Survey on MITM and its Countermeasures in the TLS Handshake Protocol

Seung-Woo Han, Hyunsoo Kwon, Changhee Hahn, Dongyoung Koo, and Junbeom Hur (Korea University, Korea)

[8D-6] Realistic Media Authoring Tool Based on MPEG-V International Standard

Sang-Ho Shin, Keum-Sook Ha, Han-O Yun, and Yoon-Seok Nam (Dongguk University Gyeongju Campus, Korea)

Session 8E : Poster

Chair: Young-June Choi (Ajou University, Korea)

[8E-1] An Orthogonal Coded Hybrid MAC Protocol with Received Power Based Prioritization for M2M Networks

In-Seop Park, Ethungshan Shitiri, and Ho-Shin Cho (Kyungpook National University, Korea)

[8E-2] Cell Decomposition for the Table in Document Image Based on Analysis of Texts and Lines Distribution

Hong Tai Tran, Tuan Anh Tran, In Seop Na, and Soo Hyung Kim (Chonnam National University, Korea)

[8E-3] Sensing-based Adaptive Data Reporting Scheme in Wireless Sensor Networks

Taemin Hwang, Yujin Nam, and Jaewoo So (Sogang University, Korea), Minsoo Na and Changsoon Choi (SK Telecom, Korea)

[8E-4] TPMS Tire Position Registration Algorithm Using Acceleration and RSSI Data

Chul Kyun Bae, Sol Lim, Seung Gi Kim, and Dae Jin Kim (Chonnam National University, Korea)

[8E-5] Ubiquitous Creation of Digital Bas-Reliefs Using Smartphone

Bong-Soo Sohn (Chung-Ang University, Korea)

July 7, 2016 (Thursday)

13:30~15:30

Session 9A : Software Defined Network I

Chair: Yoshihiro Niitsu (Shibaura Institute of Technology, Japan)

[9A-1] A Framework for Fine-Grained Inter-Domain Routing Diversity Via SDN

Yangyang Wang, Jun Bi, and Keyao Zhang (Tsinghua University, P.R. China), and Yangchun Wu (ZTE Corporation, P.R. China)

[9A-2] Constructing Infrastructure Wireless Network Using Open Source

Junho Kim and Sungwon Lee (Kyunghee University, Korea)

[9A-3] The ACO Routing Agent Implementation for the Real Network

Sim Young-Bo, SeungGwan Lee, and SungWon Lee (Kyunghee University, Korea)

[9A-4] A Cross-Layer Design for Large Transfers in SDNs

Fatemah Alali and Malathi Veeraraghavan (University of Virginia, USA)

[9A-5] PathMon: Path-Specific Traffic Monitoring in OpenFlow-Enabled Networks

Ming-Hung Wang, Shao-You Wu, Li-Hsing Yen, and Chien-Chao Tseng (National Chiao Tung University, Taiwan)

Session 9B : Wireless Network II

Chair: Takeo Fujii (The University of Electro-Communications, Japan)

[9B-1] High reliable broadcasting protocol in WLAN using retransmission

Byungcheol Kang, Minjoon Kim, and Jaeseok Kim (Yonsei University, Korea)

[9B-2] Challenges of Applying DTN Routing Protocols in Realistic Disaster Scenarios

Silvia Krug and Jochen Seitz (Technische Universität Ilmenau, Germany)

[9B-3] Evaluation of BLE Mesh Capabilities: A Case Study Based on CSRMESH

Philipp Zenker and Silvia Krug (Technische Universität Ilmenau, Germany), Michael Binhack (senTec Elektronik GmbH, Germany),

and Jochen Seitz (Technische Universität Ilmenau, Germany)

[9B-4] Automatic Failure Diagnosis for Wireless LAN Systems Based on Distribution of Responses From STAs

Hiroshi Fujita, Takayoshi Nakayama, Yun Wen, and Dai Kimura
(FUJITSU LABORATORIES LTD., Japan)

[9B-5] 6LoWPAN Based Intelligent Transport System for Surveillance- A Model of Ubiquitous Computing Technology

Vinila Nagaraj, Kiran V, and Padmaja K V (RVCE, India)

Session 9C : Mobile Network

Chair: Mahadev Anant Gawas (Bits, India)

[9C-1] Enhanced Multi-Criteria-Based Path Selection Algorithm for Heterogeneous Networks

Yevgeniy Yeryomin and Jochen Seitz (Technische Universität Ilmenau, Germany)

[9C-2] Evaluation of MCDA-based Handover Algorithms for Mobile Networks

Radion Bikmukhamedov (Radion Bikmukhamedov & Kazan National Research Technical University, Russia), Yevgeniy Yeryomin and Jochen Seitz (Technische Universität Ilmenau, Germany)

[9C-3] A Data Scheduling Algorithm for Medical Streaming in Mobile P2P Network

Xiaoxiang Wang, Xiaopeng Ma, and Yulong Wang (Beijing University of Posts and Telecommunications, P.R. China), and Dongyu Wang (Chinese PLA General Hospital, P.R. China)

[9C-4] A Cross-Layer Mobility Management with Multi-Criteria Decision Making

Atheer Al-Rubaye and Jochen Seitz (Technische Universität Ilmenau, Germany)

[9C-5] Performance Analysis for Use of Mobile Agent in Wireless Multihop Networks

Shigeki Shiohara (Kanagawa Institute of Technology, Japan)

Session 9D : Internet I

Chair: Francesco Zampognaro (University of Rome Tor Vergata, Italy)

[9D-1] Bandwidth Efficiency in the Next Generation Access Architecture XG-PON

Constantine A. Kyriakopoulos and Georgios I. Papadimitriou (Aristotle University, Greece)

[9D-2] A No Reference Method for Detection of Dropped Video Frames in Live Video Streaming

Muhammad Arslan Usman, Muhammad Rehan Usman, and Soo Young Shin (Kumoh National Institute of Technology, Korea)

[9D-3] Web Protocols and Challenges of Web Latency in the Web of Things

Nitin Naik and Paul Jenkins (Ministry of Defence, UK)

[9D-4] Web Services-Based Trust Framework Design and Applications: A Case Study

Cheng-Han Kuo and Shuchih Ernest Chang (National Chung Hsing University, Taiwan)

[9D-5] Cloud Service in Stock Trading Game: Service Virtualization, Integration and Financial Application

Chin-Wei Wang and Shuchih Ernest Chang (National Chung Hsing University, Taiwan)

Session 9E : Security II

Chair: Petr Bujok (University of Ostrava, Czech Republic)

[9E-1] Analysis of Attackers Against Windows Emulating Honey Pots in Various Types of Networks and Regions

Tomas Sochor, Matej Zuzcak, and Petr Bujok (University of Ostrava, Czech Republic)

[9E-2] A Modified Reversible Data Hiding in Encrypted Image Using Enhanced Measurement Functions

Fatema-Tuz-Zohra Khanam (University of Ulsan, Korea), Kyoung-Young Song (Ulsan College, Korea), and Sunghwan Kim (University of Ulsan, Korea)

[9E-3] Detection of Android Malware by Static Analysis on Permissions and Sensitive Functions

Ming-Yang Su and Kek-Tung Fung (Ming Chuan University, Taiwan)

[9E-4] Performance Evaluation of Network Scanning Tools with Operation of Firewall

Sun-young Im, Seung-Hun Shin, Ki Yeol Ryu, and Byeong-hee Roh (Ajou University, Korea)

[9E-5] BadVoice: Soundless Voice-control Replay Attack on Modern Smartphones

Park Joon Young, Jo Hyo Jin, Samuel Woo, and Dong Hoon Lee (Korea University, Korea)

July 7, 2016 (Thursday)

15:50~17:50

Session 10A : Software Defined Network II

Chair: Myungsik Yoo (Soongsil University, Korea)

[10A-1] An Adaptive Mobility Manager for Software-Defined Enterprise WLANs

Yunong Han and Kun Yang (University of Essex, UK)

[10A-2] SDN Enhanced Campus Network Authentication and Access Control System

Feliksas Kuliesius and Vainius Dangovas (Vilnius University, Lithuania)

[10A-3] Study on Coupling of Software-Defined Networking and Wireless Sensor Networks

Younghwan Choi, Yunchul Choi, and Yong-Geun Hong (Electronics and Telecommunications Research Institute, Korea)

[10A-4] On Addressing Mobility Issues in Wireless Mesh Networks using Software-Defined Networking

Mohamed Labraoui (Commissariat l'Energie Atomique (CEA) & Université Pierre et Marie Curie-Paris VI, France), Charalampos Chatzinakis and Michael Mathias Boc (Commissariat l'Energie Atomique (CEA), France), and Anne Fladenmuller (Université Pierre et Marie Curie-Paris VI, France)

[10A-5] A Fully Meshed Backbone Network for Data-Intensive Sciences and SDN Services

Takashi Kurimoto, Shigeo Urushidani, Hiroshi Yamada, Kenjiro Yamanaka, Motonori Nakamura, Shunji Abe, Kensuke Fukuda, Michihiro Koibuchi, Yusheng Ji, Hiroki Takakura, and Shigeki Yamada (National Institute of Informatics, Japan)

Session 10B : 5G Network I

Chair: Hiroyuki Otsuka (Kogakuin University, Japan)

[10B-1] Multi-Cell Interference Coordinated Scheduling in mmWave 5G Cellular Systems

Chun-Yen Chen, Yin-Yi Chen, and Hung-Yu Wei (National Taiwan University, Taiwan)

[10B-2] Enhancing Throughput Performance in LTE-Advanced Hetnets with Buffered Fractional Frequency Reuse

Sani Umar Abdullahi, Jian Liu, Ci Huang, and Xiaonan Zhang (University of Science and Technology Beijing, P.R. China)

[10B-3] QoS-aware Channel Assignment for IoT-enabled Smart Building in 5G Systems

Najam ul Hasan (Dhofar University, Oman), Waleed Ejaz (Ryerson University, Canada), Imran Baig and Manaf Zghaibeh (Dhofar University, Oman), and Alagan Anpalagan (Ryerson University, Canada)

[10B-4] Satisfaction Degree and Channel State Difference Based Fair Resource Allocation in Femto Networks

Lin Shi and Sang-Jo Yoo (Inha University, Korea)

[10B-5] Traffic Regulation for Power Saving in LTE-A Networks Supporting Video-on-Demand Services

Mingfu Li and Yuan-Chen Lo (Chang Gung University, Taiwan)

Session 10C : Ubiquitous Service

Chair: Jianlin Guo (Mitsubishi Electronic Research Laboratories, USA)

[10C-1] TARGETED ADVERTISING USING BEHAVIOURAL DATA AND SOCIAL DATA MINING

Vrinda Bhatia and Varun Hasija (Delhi Technological University, India)

[10C-2] A Big Data Approach for Proactive Healthcare Monitoring of Chronic Patients

Atif Naseer and Basem Y. Alkazemi (Umm al Qura University, Kingdom of Saudi Arabia), and Ehsan Ullah Waraich (Eindhoven University of Technology, The Netherlands)

[10C-3] EEG-Based Emotion Recognition Approach for E-Healthcare Applications

Mouhannad Ali, Ahmad Haj Mosa, Fadi Al Machot, and Kyandoghre Kyamakya (Alpen-Adria University, Austria)

[10C-4] A Windowing Approach for Activity Recognition in Sensor Data Streams

Fadi Al Machot, Heinrich C. Mayr, and Suneth Ranasinghe (Alpen-Adria Universität Klagenfurt, Austria)

[10C-5] Power Utilization Efficiency Improvement Method for DTN Using a Message Ferry

Yoshihiro Niitsu, Tsubasa Sakuma, and Hiroyuki Date (Shibaura Institute of Technology, Japan)

Session 10D : Internet II

Chair: Francesco Zampognaro (University of Rome Tor Vergata, Italy)

[10D-1] Feature Transformation and Mutual Information for DNS Tunneling Analysis

E. Cambiaso, M. Aiello, M. Mongelli, and G. Papaleo (National Research Council of Italy, Italy)

[10D-2] Tendency-Based Caching in Content-Centric Networking

YuSheng Xia, YaPing Liu, and JinShu Su (National University of Defense Technology, P.R. China)

[10D-3] Flow Distribution Strategy in Heterogeneous Networks Based on Satisfaction

Yingping Feng and Xiaoxiang Wang (Ministry of Education, P.R. China), Yulong Wang (Beijing University of Posts and Telecommunications, P.R. China), and Dongyu Wang (Chinese PLA General Hospital, P.R. China)

[10D-4] A QoS-Adaptive Framework for Screen Sharing Over Internet

Duc V. Nguyen and Huyen T. T. Tran (The University of Aizu, Japan), Pham Ngoc Nam (Hanoi University of Science and Technology, Vietnam), and Truong Cong Thang (The University of Aizu, Japan)

[10D-5] Emulation of IP-based video streaming through simultaneous satellite connections

M. Luglio, C. Roseti, and F. Zampognaro (University of Rome, Italy)

Session 10E : Machine Learning

Chair: YoungSung Lee (Chungbuk National University, Korea)

[10E-1] Understanding Pending Issue of Society and Sentiment Analysis Using Social Media

Jong-Seon Jang, Byoung-In Lee, Chi-Hwan Choi, Jin-Hyuk Kim, Dong-Myung Seo, and Wan-Sup Cho (Chungbuk National University, Korea)

[10E-2] Performance of classification based on PCA, Linear SVM, and Multi-kernel SVM

Sarwar Alam, Moonsoo Kang, Jae-Young Pyun, and Goo-Rak Kwon (Choson University, Korea)

[10E-3] Maximizing the Number of Qualified Work Teams Based on Social Network Relationships

Sheng-Wei Wang (Fo Guang University, Taiwan)

[10E-4] Understanding Enterprise Interaction Analysis from Newspapers: A Network Approach

Yong-Yeon Kim, Ji-Hyeon Lee, Kyung-Hee Lee, and Wan-Sup Cho (Chungbuk National University, Korea)

[10E-5] Smart Answering Chatbot based on OCR and Overgenerating Transformations and Ranking

Ly Pichponreay, Chi-Hwan Choi, Jin-Hyuk Kim, Kyung-Hee Lee, and Wan-Sup Cho (Chungbuk National University, Korea)

July 8, 2016 (Friday)

09:40~11:10

Session 11A : Localization

Chair: Fadi Al Machot (Alpen Adria University Klagenfurt, Austria)

[11A-1] A Fingerprinting Indoor Localization Algorithm Based Deep Learning

Gibrán Félix and Mario Siller (CINVESTAV Unidad Jalisco, Mexico), and Ernesto Navarro Álvarez (Universidad Tecnológica de Manzanillo, Mexico)

[11A-2] Range Based Wireless Node Localization Using Dragonfly Algorithm

Philip T. Daely and Soo Y. Shin (Kumoh National Institute of Technology, Korea)

[11A-3] Beacon Based Indoor Positioning System Using Weighted Centroid Localization Approach

Santosh Subedi, Goo-Rak Kwon, Seokjoo Shin, Suk-seung Hwang, and Jae-Young Pyun (Chosun University, Korea)

Session 11B : 5G Network II

Chair: Najam Ul Hasan (Dhofar University, Oman)

[11B-1] Energy-Aware Topology Management for 5G Dual-hop Ultra-High Capacity Backhaul Networks Exploiting Path Diversity

Aftab Ahmed and David Grace (University of York, England)

[11B-2] TCP Flow-Level Traffic Model for Evaluating LTE-Advanced Networks

Moritz Lossow, Paul Arnold, Heinz Droste, and Gerhard Kadel (Deutsche Telekom Innovation Laboratories, Germany)

[11B-3] Performance of Transmit Antenna Selection in Non-Orthogonal Multiple Access for 5G Systems

Anish Prasad Shrestha (Inha University, Korea), Tao Han (Huazhong University of Science and Technology, P.R. China), Zhiquan Bai (Shandong University, P.R. China), Jae Myoung Kim and Kyung Sup Kwak (Inha University, Korea)

[11B-4] Sidehaul Link Management Scheme for Mobile Contents Caching Environments in Moving Small-Cell Networks

Minsu Shin, Jun Suk Kim, and Min Young Chung (Sungkyunkwan university, Korea), and Young Min Kwon (ATTO Research, Korea)

Session 11C : Wireless Network III

Chair: Purnendu Karmakar (The LNM Institute of Information Technology, India)

[11C-1] Data Dissemination Strategy Based on Time Validity for Opportunistic Networks

Chun-Chih Lo, Yau-Hwang Kuo, and Jung-Yi Jiang (National Cheng Kung University, Taiwan)

[11C-2] Low Complexity Energy-hole Detouring Scheme with Energy Harvesting

Minkyu Chun, Kyoungtaek Lee, and Jaiyong Lee (Yonsei University, Korea)

[11C-3] Testbed Implementation for Routing WLAN Traffic in Software Defined Wireless Mesh Network

Won Jin Lee, Jung Wan Shin, Hwi Young Lee, and Min Young Chung (Sungkyunkwan University, Korea)

Session 11D : Internet III

Chair: Hyunggon Park (Ewha Womans University, Korea)

[11D-1] Proposal for Server Management System by Using Embedded Packet with VNIC

Satoshi Kodama, Akio Minakawa, and Yusuke Goto (Tokyo University of Science, Japan)

[11D-2] The Data Indexing for Cyber Threat Resources

Hyeisun Cho, Seulgi Lee, Byungik Kim, and Taejin Lee (Korea Internet & Security Agency, Korea)

[11D-3] Context-aware HTTP Adaptive Streaming in Mobile Cloud Environments

Chaemin Seong, Minsoo Jang, and Kyungshik Lim (Kyungpook National University, Korea)

[11D-4] S-DASH: A New Transmission Mechanism for IP-based Digital Broadcasting Systems

Hyung-Yoon Seo and Jun-Hwan Huh (Pusan National University, Korea), Soon-Choul Kim and Byungjun Bae (Electronics and Telecommunication Research Institute, Korea), and Jong-Deok Kim (Pusan National University, Korea)

Session 11E : Vehicular Network II

Chair: Young-June Choi (Ajou University, Korea)

[11E-1] MoM - A Real Time Monitoring and Management Tool to Improve the Performance of Vehicular Delay Tolerant Networks

João A. F. F. Dias (Universidade da Beira Interior, Portugal), Joel J. P. C. Rodrigues (Universidade da Beira Interior, Portugal & University of Salamanca, Spain), Juan F. de Paz and Juan M. Corchado (University of Salamanca, Spain)

[11E-2] RTKLIB-Based GPS Localization for Multipath Mitigation in ITS Applications

Immanuel V. Encarnacion and Nestor Michael C. Tiglaio (University of the Philippines, Philippines)

[11E-3] Context-aware Two-Level Hierarchical Routing for VANETs

Zubair Amjad, Wang Cheol Song, and Khi Jung Ahn (Jeju National University, Korea)

Technische Universität (TU) Wien

Web Site : http://www.ub.tuwien.ac.at/eng/hauptbibliothek_eng.html

Freihaus building is situated close to Karlsplatz square, about 5 minutes walking distance from the Opera House, at the corner of Wiedner Hauptstrasse and Treitlstrasse. It is easily recognisable by its large owl sculpture.

The Freihaus building can be reached by the underground lines U1, U2 and U4, "Karlsplatz" station. The nearest tramway stop is the "Resselgasse" tram stop (tramway lines 62, 65 and "Lokalbahn Baden"). You can find it under number (1) on this map <http://www.ub.tuwien.ac.at/lageplan.html>

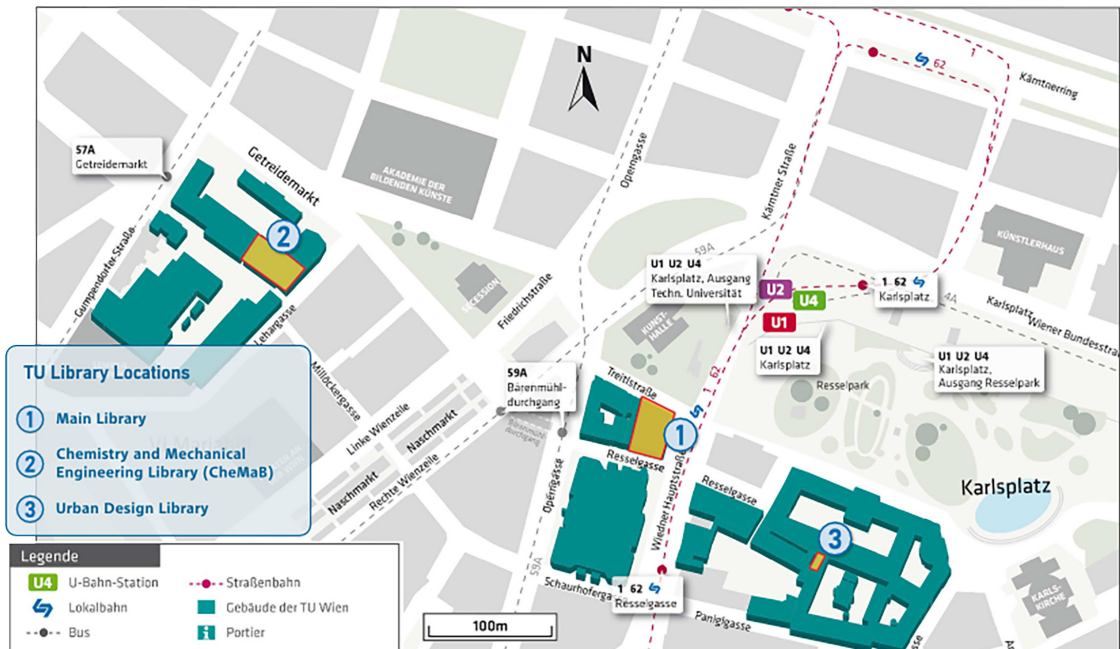
Location :

Freihaus building (TU Library building), TU Wien, Vienna, Austria

General Information

Tel : +43-1-58801-44001

Website : http://www.ub.tuwien.ac.at/eng/hauptbibliothek_eng.html



Travel Info

by plane

The Vienna International Airport (VIE) in Schwechat is about 20 km away in the south-east of Vienna. On the airport's web site you find flight information as well as transportations into the city center:

- train S7 to Landstraße/Wien Mitte
- Bus Service Vienna Airport Lines:
 - VIA to Wien Schwedenplatz: Travel time 20 minutes,
 - VIA to UNO-City: Travel time 20 minutes,
 - VIA to Wien Südtiroler Platz : Travel time 20 minutes,
 - VIA to Wien Südbahnhof: Travel time 25 minutes,
 - VIA to Wien Westbahnhof: Travel time 35 minutes,
- City Airport Train (CAT)
- A Taxi stand is right in front of the Arrival Hall.



by train/bus

If you prefer travelling by train you will find necessary information online at Austrian Federal Railways or via phone +43-05-1717.

by car

from the South and East: Südbahnhof - Prinz Eugenstraße - Schwarzenbergplatz - Karlsplatz

from the West: Westbahnhof - Hietzinger Kai - Schönbrunner Straße - Rechte Wienzeile - Karlsplatz

from the North: Donauuferautobahn (A22) - Südbahnhof - Prinz Eugenstraße - Schwarzenbergplatz - Karlsplatz

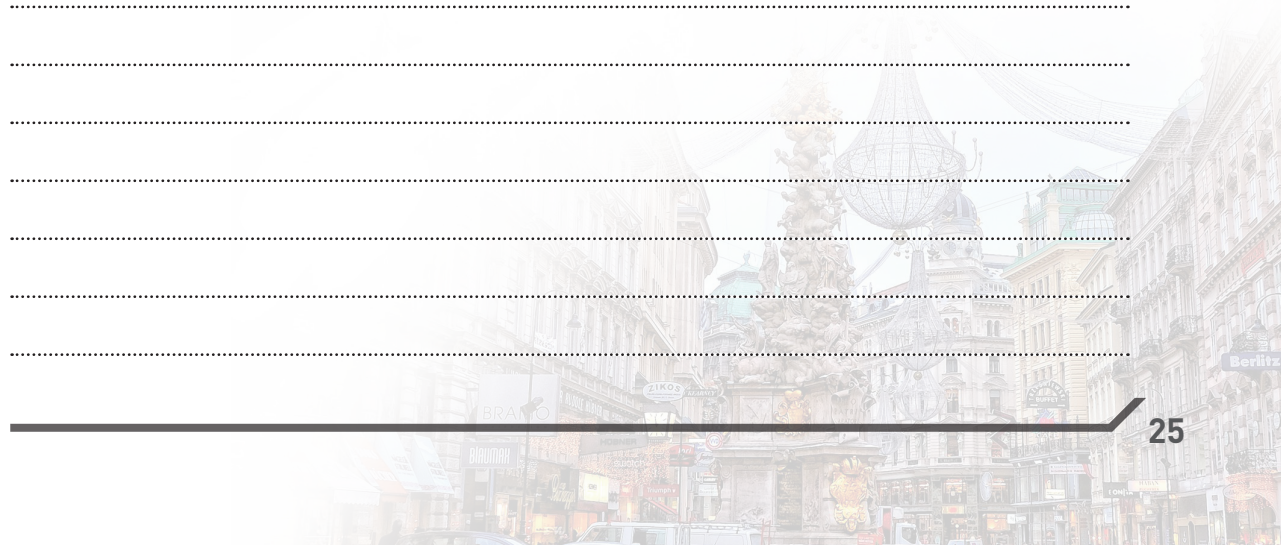
Please bear in mind to include the official highway toll label for Austrian motorways (<http://www.vignette.at/home-en>).

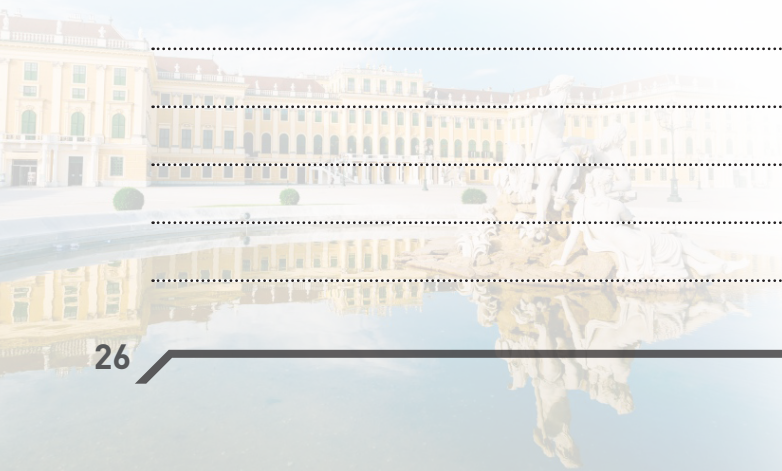
public transport in Vienna

The main building of TU Wien is reachable with the lines U1, U2, U4 and D (station = Karlsplatz), with the trams 1 and 62 (station = Opernring).

Tickets are available at the airport, at the subway stations and in tobacco shops.





A faint, artistic illustration of a large, ornate building with many windows, possibly a school or government building, with a statue in the foreground. The illustration is positioned at the bottom of the page, below the lined writing area. The building has a classical architectural style with multiple stories and arched windows. In the foreground, there is a statue of a person, possibly a historical figure, standing on a pedestal. The overall scene is depicted in a soft, painterly style with muted colors.

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