



ICUFN 2014

July 8(Tue.) ~ July 11(Fri.), 2014
Ocean Hotel Shanghai, Shanghai, China

The Sixth International Conference on Ubiquitous and Future Networks

<http://www.icufn.org>



Final Program



IEEE



**IEEE
COMMUNICATIONS
SOCIETY**

KICS

The Korean Institute of Communications
and Information Sciences

ICUFN 2014 Patrons



UWB Wireless Communication Research Center (Inha Univ.), Next Generation RFID/USN Reserch Center (Yonsei Univ.),
LED Convergence Research Center (Kookmin Univ.), Multi Screen Service Forum of Korea,
Center for IT Automobile Convergence (Kyungpook National University)

Contents

Committees	3
Message from Organizing Committee Co-Chairs.....	6
Message from TPC Co-Chairs	7
ICUFN 2014 Program at a Glance	8
Technical Sessions	9
Venue	17

International Advisory Committee

Byeong Gi Lee	Seoul National Univ., Korea
Nim Cheung	ASTRI, China
Zygmunt J. Haas	Cornell Univ., USA
Kyung Sup Kwak	Inha Univ., Korea
Ramjee Prasad	Aalborg Univ., Denmark
Chuwhan Yim	Korea Univ., Korea
Wu Hequan	Chinese Academy of Eng., China
Bijan Jabbari	George Mason Univ., USA
Iwao Sasase	Keio Univ., Japan
Jinwoo Park	Korea Univ., Korea
Douglas Zuckerman	IEEE ComSoC
Jaiyong Lee	Yonsei Univ., Korea
Naohisa Ohta	Keio Univ., Japan
Pascal LORENZ	Univ. of Haute Alsace, France
Zhisheng Niu	Tsinghua Univ., China
Dong Ho Cho	KAIST, Korea
Ilyoung Chong	HUFS, Korea

Steering Committee

Masahiro Umehira	Ibaraki University, Japan
Yeong Min Jang	Kookmin Univ., Korea
Sungchang Lee	Korea Aerospace Univ., Korea
Jiandong Li	Xidian Univ., China
C. K. Toh	National Tsing Hua Univ., Taiwan
Seong-Ho Jeong	HUFS, Korea
Zary Segall	KTH, Sweden
Seung Hyong Rhee	Kwangwoon Univ., Korea
Xin Wang	Fudan Univ., China
Sang-Jo Yoo	Inha Univ., Korea
Honggang Zhang	Zhejiang Univ., China
Nguyen Huu Thanh	HUST, Vietnam
Joel Rodrigues	IT, Univ. of Beira Interior, Portugal
Myungsik Yoo	Soongsil Univ., Korea

Organizing Committee

Honorary Conference Co-chairs

Eunhee Kwon	Member of Parliament, Korea
Ramjee Prasad	Aalborg Univ., Denmark
Zhen Yang	NUPT, China

Organizing Co-Chairs

Yeong Min Jang	Kookmin Univ., Korea
C. K. Toh	National Tsing Hua Univ., Taiwan
Masahiro Umehira	Ibaraki University, Japan
Juan Carlos Cano	Technical Univ. of Valencia, Spain

Workshop Co-Chairs

Sungrae Cho	Chung-Ang Univ., Korea
Yonghoon Choi	Kwangwoon Univ., Korea
Pradeep Kumar Ray	Univ. of New South Wales, Australia

Publication Co-Chairs

Hwangnam Kim	Korea Univ., Korea
Young-June Choi	Ajou Univ., Korea

Publicity Co-Chairs

Sunghyun Choi	Seoul National Univ., Korea
Jangwon Lee	Yonsei Univ., Korea
Takeo Fujii	Univ. of Electro-Comms, Japan
Xuejun Sha	Harbin Institute of Tech., China
Timo Sukuvaara	FMI, Finland
Jyh-Cheng Chen	National Chiao Tung Univ., Taiwan
Carlos T. Calafate	Technical Univ. of Valencia, Spain

International Liaison Chair

Jaewoo So	Sogang Univ., Korea
Seong-Lyun Kim	Yonsei Univ., Korea

Registration Co-Chairs

Sangheon Pack	Korea University, Korea
Young-Ho Jung	Korea Aerospace Univ., Korea

Finance Co-Chairs

Sangjoon Park	ETRI, Korea
---------------	-------------

Local Arrangement Co-Chairs

Xudong Wang	Shanghai Jiao Tong Univ., China
Sang-Chul Kim	Kookmin Univ., Korea
Kyung-Joon Park	DGIST, Korea

Web Co-Chairs

Jeong Ryun Lee	Chung-Ang Univ., Korea
Jaesung Park	Suwon Univ., Korea

Coordinators

Dongkyun Kim	Kyungpook National Univ., Korea
Jiman Hong	Soongsil Univ., Korea

Technical Program Committee

TPC Co-Chairs

Ki-Hyung Kim	Ajou Univ., Korea
Xin WANG	Fudan Univ., China
Masaki Aida	Tokyo Metropolitan Univ., Japan
Kun Yang	Univ. of Essex, UK
Edmund Yeh	Northeastern Univ., USA

TPC Vice Co-Chairs

Francisco Martinez	Univ. of Zaragoza, Spain
Macos Katz	Univ. of Oulu, Finland
Panos Papadimitratos	KTH, Sweden
Sanghwan Lee	Kookmin Univ., Korea

TPC Members

Sanghyun Ahn	Seoul Univ., Korea
Mohamad Yusoff	Alias Multimedia Univ., Malaysia
Beongku An	Hongik Univ., Korea
Seung Baek	Korea Univ., Korea
Hyokyung Bahn	Ewha Univ., Korea
Zhiquan Bai	Shandong Univ., China
M Bala Krishna	Guru Gobind Singh Indraprastha University, New Delhi, India
Vo Nguyen Quoc Bao	Posts and Telecommunications Institute of Technology, Vietnam
Jun Bi	Tsinghua Univ., China
Heejung Byun	Suwon Univ., Korea

Committees

Juan-Carlos Cano	Universidad Politecnica de Valencia, Spain	Hoyoung Hwang	Hansung Univ., Korea
Lee Chan-gun	Chung-Ang Univ., Korea	Insoo Hwang	Qualcomm Technologies, Inc., USA
KyungHi Chang	Inha Univ., Korea	Kyu-Sung Hwang	Kyungil Univ., Korea
Hsi-Lu Chao	National Chiao Tung Univ., Taiwan	Seung-Hoon Hwang	Dongguk Univ., Korea
Tao Chen	VTT Technical Research Centre of Finland, Finland	Taewon Hwang	Yonsei Univ., Korea
Wei Chen	Tsinghua Univ., China	Shingo Ichii	University of Tokyo, Japan
Sungrae Cho	Chung-Ang Univ., Korea	Eun-Jin Im	Kookmin Univ., Korea
Taenam Cho	Woosuk Univ., Korea	Susumu Ishihara	Shizuoka Univ., Japan
Baek-Young Choi	University of Missouri - Kansas City, USA	Yoshihiro Ito	Nagoya Institute of Technology, Japan
Bong Jun Choi	The State University of New York (SUNY) Korea, Korea	Jong-Wook Jang	Donggeui Univ., Korea
Byung (Peter) Choi	Akamai Technologies, USA	Seil Jeon	Instituto de Telecomunicacoes, Portugal
Hyun-Ho Choi	Hankyong National Univ., Korea	Jaehoon Jeong	Sungkyunkwan Univ., Korea
Jaehyuk Choi	Gachon Univ., Korea	Sangjin Jeong	ETRI, Korea
Ji-Woong Choi	DGIST, Korea	Jiong Jin	Swinburne University of Technology, Australia
Jin Seek Choi	Hanyang Univ., Korea	Minglu Jin	Dalian University of Technology, China
Mi-Jung Choi	Kangwon National Univ., Korea	Sunggeun Jin	ETRI, Korea
Nakjung Choi	Bell-Labs, Alcatel-Lucent, Korea	Changhee Joo	UNIST, Korea
Peter Choi	Emulex, USA	Bang Chul Jung	Gyeongsang National Univ., Korea
Seong Gon Choi	Chungbuk National Univ., Korea	Sangsu Jung	MtoV Inc., Korea
Su-il Choi	Chonnam National Univ., Korea	Sung-yoon Jung	Yeungnam Univ., Korea
Sunwoong Choi	Kookmin Univ., Korea	Ved Kafle	National Institute of Information and Communications Technology (NICT), Japan
Wan Choi	KAIST, Korea	Kyungtae Kang	Hanyang Univ., Korea
Yong-Hoon Choi	Kwangwoon Univ., Korea	Jussi Kangasharju	University of Helsinki, Finland
Yoon-Ho Choi	Kyonggi Univ., Korea	Eiji Kawai	National Institute of Information and Communications Technology, Japan
Young-June Choi	Ajou Univ., Korea	Kim Ki-Il	Gyeongsang National Univ., Korea
Chun-Ting Chou	National Taiwan Univ., Taiwan	Daeyoung Kim	KAIST, Korea
Li-Der Chou	National Central Univ., Taiwan	Hongseok Kim	Sogang Univ., Korea
Mostafa Zaman Chowdhury	Khulna University of Engineering and Technology (KUET), Bangladesh	Hwangnam Kim	Korea Univ., Korea
Tein Yaw David Chung	Yuan Ze Univ., Taiwan	Hwasung Kim	Kwangwoon Univ., Korea
Yun Won Chung	Soongsil Univ., Korea	Hyoil Kim	Ulsan National Institute of Science and Technology (UNIST), Korea
Katrina Dambul	Multimedia Univ., Malaysia	Hyoung Jun Kim	ETRI, Korea
Michel Diaz	Laas CNRS., France	Jeong Kim	Kyung Hee Univ., Korea
Noh Dong Kun	Soongsil Univ., Korea	JongWon Kim	GIST (Gwangju Institute of Science & Technology), Korea
Cong Du	Arista Networks, USA	Junseok Kim	Broadcom, USA
Ayman El-Saleh	University Multimedia (MMU), Malaysia	Sang-Chul Kim	Kookmin Univ., Korea
Suyong Eum	NICT, Japan	Seong-Lyun Kim	Yonsei Univ., Korea
Yee Loo Foo	Multimedia Univ., Malaysia	Suk Chan Kim	Pusan National Univ., Korea
Hacene Fouchal	Université de Reims Champagne-Ardenne, France	Yeongkwun Kim	Western Illinois Univ., USA
Tapio Frantti	Finnish Research and Engineering, Finland	Young Kim	Yonsei Univ., Korea
Vasilis Friderikos	King's College London, United Kingdom	Younghyun Kim	Korea Univ., Korea
Takeo Fujii	The University of Electro-Communications, Japan	Teruaki Kitasuka	Kumamoto Univ., Japan
Xinbo Gao	Xidian Univ., China	Bong Jun Ko	IBM T.J. Watson Research Center, USA
Debasis Giri	Haldia Institute of Technology, India	Nobuyoshi Komuro	Chiba Univ., Japan
Visvasuresh Victor Govindaswamy	Concordia Univ., Canada	Eisuke Kudoh Tohoku	Institute of Technology, Japan
Jeongseok Ha	KAIST, Korea	Yau Hwang Kuo	National Cheng Kung Univ., Taiwan
Zygmunt Haas	Cornell Univ., USA	Sungoh Kwon	University of Ulsan, Korea
Dong Seog Han	Kyungpook National Univ., Korea	Edmund Lai	Massey Univ., New Zealand
Jae-II Han	Kookmin Univ., Korea	Kwok-Yan Lam	National University of Singapore, Singapore
Sang-Kook Han	Yonsei Univ., Korea	Nam Tuan Le	Kookmin Univ., Korea
Youn-Hee Han	Korea University of Technology and Education, Korea	Hoa Le Minh	Northumbria Univ., United Kingdom
Eui Nam Huh	Kyung Hee Univ., Korea	Chae-Woo Lee	Ajou Univ., Korea
Junbeom Hur	Chung-Ang Univ., Korea	Choonhwa Lee	Hanyang Univ., Korea
Nguyen Huu Thanh	Hanoi University of Science and Technology, Vietnam	HyungJune Lee	Ewha Womans Univ., Korea
Ho Young Hwang	Kwangwoon Univ., Korea	Jae-Hwoon Lee	Dongguk Univ., Korea

Committees

Jang-Won Lee	Yonsei Univ., Korea	Kuei-Ping Shih	Tamkang Univ., Taiwan
Jeong Woo Lee	Chung-Ang Univ., Korea	Byonghyo Shim	Korea Univ., Korea
Jihoon Lee	Sangmyung Univ., Korea	Oh-Soon Shin	Soongsil Univ., Korea
Jong-Hyouk Lee	Sangmyung Univ., Korea	Seokjoo Shin	Chosun Univ., Korea
Jung Ryun Lee	Chung-Ang Univ., Korea	Won-Yong Shin	Dankook Univ., Korea
Jungwoo Lee	Seoul National Univ., Korea	Yoan Shin	Soongsil Univ., Korea
Kyong-Ho Lee	Yonsei Univ., Korea	Ryoichi Shinkuma	Kyoto Univ., Japan
Sanghoon Lee	Yonsei Univ., Korea	Shigeki Shiokawa	Kanagawa Institute of Technology, Japan
SuKyoung Lee	Yonsei Univ., Korea	Jungmin So	Hallym Univ., Korea
Sung-Hyup Lee	Korea Communications Agency, Korea	Hwangjun Song	POSTECH (Pohang University of Science and Technology), Korea
Tae-Jin Lee	Sungkyunkwan Univ., Korea	Lingyang Song	Peking Univ., China
Won Cheol Lee	Soongsil Univ., Korea	Sejun Song	University of Missouri Kansas City, USA
Hyuk Lim	Gwangju Institute of Science and Technology, Korea	Wang-Cheol Song	Jeju National Univ., Korea
Yujin Lim	University of Suwon, Korea	Wei-Tsung Su	Aletheia Univ., Taiwan
Kai Lin	Dalian University of Technology, China	Kazunori Sugiura	Keio Univ., Japan
Jingwei Liu	Xidian Univ., China	Hwee Pink Tan	Institute for Infocomm Research, Singapore
Jaime Lloret	Universidad Politécnic de Valencia, Spain	Athanasios Vasilakos	National Technical University of Athens, Greece
Pascal Lorenz	University of Haute Alsace, France	Van Yem Vu	Hanoi University Of Science and Technology, Vietnam
Eng Lua	Monash Univ., Australia	Naoki Wakamiya	Osaka Univ., Japan
Pietro Lungaro	Royal Institute of Technology (KTH), Sweden	Lei Wang	Dalian University of Technology, China
Stefan Mangold	Disney Research, Switzerland	Xin Wang	Fudan Univ., China
Pietro Manzoni	Universidad Politécnic de Valencia, Spain	Hung-Yu Wei	National Taiwan Univ., Taiwan
Abdelhamid Mellouk	UPEC, University Paris-Est Creteil Val de Mame, France	Xuetao Wei	UC, Riverside, USA
Jeonghoon Mo	Yonsei Univ., Korea	Carlos Becker	Westphall Federal University of Santa Catarina, Brazil
Bongkyo Moon	Dongguk Univ., Korea	Yong-Yuk Won	Yonsei Univ., Korea
Hichan Moon	Hanyang Univ., Korea	Liang Wu	Southeast Univ., Bangladesh
Hiroaki Morino	Shibaura Institute of Technology, Japan	Yulei Wu	Chinese Academy of Sciences, China
Norbert Noury	University of Lyon., France	Gaogang Xie	Institute of Computing Technology, Chinese Academy of Sciences, China
Kimio Oguchi	Seikei Univ., Japan	Jiping Xiong	Zhejiang Normal Univ., China
JongTaek Oh	Hansung Univ., Korea	Rongtao Xu	Beijing Jiaotong Univ., China
Hiraku Okada	Nagoya Univ., Japan	Shaoyi Xu	Beijing Jiaotong Univ., China
Eiji Okamoto	Nagoya Institute of Technology, Japan	Nariyoshi Yamai	Okayama Univ., Japan
Sangheon Pack	Korea Univ., Korea	Kenichi Yamazaki	Shibaura Institute of Technology, Japan
Ai-Chun Pang	National Taiwan Univ., Taiwan	Qinghai Yang	Xidian Univ., China
Hyunggon Park	Ewha Womans Univ., Korea	Ikjun Yeom	Sungkyunkwan Univ., Korea
Joon-Sang Park	Hongik Univ., Korea	Joon Yoo	Gachon Univ., Korea
Ki-Hong Park	King Abdullah University of Science and Technology (KAUST), Saudi Arabia	Myungsik Yoo	Soongsil Univ., Korea
Kyung-Joon Park	DGIST, Korea	Sang-jo Yoo	Inha Univ., Korea
Namje Park	Jeju National Univ., Korea	Younghwan Yoo	Pusan National Univ., Korea
Soohong Park	SAMSUNG Electronics, Korea	Seokhoon Yoon	Ulsan Univ., Korea
Suwon Park	Kwangwoon Univ., Korea	Kim Young-Hwa	ETRI., Korea
Anh Pham	The University of Aizu, Japan	Chang Wu Yu	Chung Hua Univ., Taiwan
Tony Q. S. Quek	Singapore University of Technology and Design (SUTD), Singapore	Heejung Yu	Yeungnam Univ., Korea
Md. Abdur Razzaque	University of Dhaka, Bangladesh	Xutao Yu	Southeast Uni. National Mobile Communication Research Laboratory, Bangladesh
Joel Rodrigues	Instituto de Telecomunicações, University of Beira Interior, Portugal	Ji-Hoon Yun	Seoul National University of Science and Technology, Korea
Byeong-hee Roh	Ajou Univ., Korea	Honggang Zhang	Université Européenne de Bretagne (UEB) and Supélec, France
Rajarshi Roy	Indian Institute of Technology, Kharagpur, India	Weihua Zhang	IGRS Industry Alliance, China
Pablo Salvador	Institute IMDEA Networks, Spain	Zaichen Zhang	Southeast Univ., Bangladesh
Hiroo Sekiya	Chiba Univ., Japan	Junhui Zhao	Beijing Jiaotong Univ., China
Seung-Hyun Seo	Purdue Univ., USA	Liang Zhou	Nanjing University of Posts and Telecommunications, China
Xuejun Sha	Communication Research Center, Harbin Institute of Technology, China		
Bin Shen	Chongqing University of Posts and Telecommunications (CQUPT), China		
Lianfeng Shen	National Mobile Communications Research Laboratory Southeast Univ., China		
Zhefu Shi	University of Missouri - Kansas City, USA		

Message from Organizing Co-Chairs

We would like to welcome you to Shanghai, and welcome to ICUFN 2014. It is the 6th edition of this international conference, organized by the Korean Institute of Communications and Information Sciences (KICS) and technically co-sponsored by IEEE Communications Society (ComSoC), in the area of Ubiquitous and Future Networks. 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 sixth ICUFN in Shanghai. Shanghai is the largest Chinese city by population. Shanghai serves as the most influential economic, financial, international trade, cultural, science and technology center in East China. The municipal government is working towards building Shanghai into a modern metropolis and a global economic, financial, trading and shipping center by 2020. Shanghai is a popular tourist destination renowned for its historical landmarks such as The Bund, City God Temple and Yu Garden as well as the extensive Lujiazui skyline and major museums including the Shanghai Museum and the China Art Museum.

ICUFN is a truly international annual conference! Our TPC team consists of members from countries around the world. For ICUFN 2014, we have received over 307 submissions from many different countries and 124 papers have been accepted. Thanks to the tireless efforts of the technical program committee co-chairs, professors Ki-Hyung Kim, Xin WANG, Masaki Aida, Kun Yang, and Edmund Yeh, ICUFN2014 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 Sungrae Cho, Yonghoon Choi and Pradeep Kumar Ray, the local arrangement co-chairs, professors Xudong Wang, Sang-Chul Kim, and Kyung-Joon Park, all members of ICUFN2014, and workshop organizing committees for producing such a wonderful program. We 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 Shanghai. 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. In addition, if you have additional time, please do not miss the chance to tour around Shanghai. Shanghai is a popular tourist destination renowned for its historical landmarks. We look forward to your active participation and support in the future. Thank you very much.

Enjoy ICUFN2014 in Shanghai!

Yeong Min Jang
Kookmin Univ., Korea

C. K. Toh
National Tsing Hua Univ.,
Taiwan

Masahiro Umehira
Ibaraki University, Japan

Juan Carlos Cano
Technical Univ. of
Valencia, Spain

Message from TPC Co-Chairs

*I*t is our great pleasure to welcome all of you to Shanghai from July 8 to 11, 2014, for the Sixth International Conference on Ubiquitous and Future Networks (ICUFN). ICUFN has been covered all converging aspects of computing, networking and communications from the 2009 conference and this ICUFN 2014 will be also a successful and exciting conference covering broad topics on ubiquitous and future network technologies.

This year we have received 307 paper submissions electronically from 14 countries in the world. Many of the papers were submitted from the Asia/Pacific region, and also the increasing number of submissions was made from Europe and USA. A rigorous review process has followed in which all papers received two or more independent reviews. After the reviews, we have selected 124 technical papers for presentation at the conference.

The accepted technical and workshop papers were organized into 30 technical sessions including 3 workshops. The program covers a variety of topics on wireless and wired communication networking technologies including cognitive radios, wireless sensor networks, Internet of Things (IoT), broadband wireless communications, future network issues, mobile multimedia networking, and other important technologies. In addition to the contribution of prominent authors from all over the world, we believe that this year's precious 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 and IEEE Communications Society, for their kind support of this successful event. We extend our sincere thanks to the Organizing Committee Co-Chairs, Prof. Yeong Min Jang, Prof. C. K. Toh, Prof. Masahiro Umehira, Prof. Juan Carlos Cano, for their continued support and guidance. We hope that all of you will enjoy the excellent program of ICUFN 2014 as well as the beautiful scenery and attractions of Shanghai.

Sincerely

Ki-Hyung Kim
Ajou Univ., Korea

Xin Wang
Fudan Univ., China

Masaki Aida
Tokyo Metropolitan
Univ., Japan

Kun Yang
Univ. of Essex, UK

Edmund Yeh
Northeastern Univ.,
USA

ICUFN 2014 Program at a Glance

July 8 (Tuesday)	
10:00 ~ 12:00	Session 1 (1A, 1B)
12:00 ~ 13:30	Lunch Break
13:30 ~ 15:30	Session 2 (2A, 2B)
July 9 (Wednesday)	
09:00 ~ 10:20	Session 3 (3A, 3B, 3C)
10:20 ~ 10:30	Session Break
10:30 ~ 10:50	Opening Address Yeong Min Jang (General Co-Chair of ICUFN2014)
	Welcome Address Dong Ho Cho (President of KICS) Zhen Yang (President of NUPT)
10:50 ~ 11:30	Keynote Speech Nano Networks (Kyung Sup Kwak, Prof. of Inha University, Korea)
11:30 ~ 13:30	Lunch Break
13:30 ~ 14:50	Session 4 (4A, 4B, 4C)
14:50 ~ 15:00	Session Break
15:00 ~ 16:20	Session 5 (5A, 5B, 5C)
16:20 ~ 16:40	Coffee Break
16:40 ~ 18:20	Session 6 (6A, 6B, 6C)
18:30 ~ 20:00	Welcome Reception
July 10 (Thursday)	
09:00 ~ 10:20	Session 7 (7A, 7B, 7C)
10:20 ~ 10:30	Session Break
10:30 ~ 12:00	Session 8 (8A, 8B, 8C)
12:00 ~ 13:30	Lunch Break
13:30 ~ 15:30	Session 9 (9A, 9B, 9C)
15:30 ~ 16:00	Coffee Break
16:00 ~ 18:20	Session 10 (10A, 10B, 10C)
18:30 ~ 20:30	Banquet
July 11 (Friday)	
09:20 ~ 11:20	Session 11 (11A, 11B)

Workshop

July 8, 2014 (Tue)

10:00 – 12:00

Session 1A : Vehicular Networks

Chair : Prof. Damianos Gavalas, University of the Aegean, Greece

[1A-1] Lane Detection Algorithm Based on Top-View Image Using Random Sample Consensus Algorithm and Curve Road Model

Juseok Shin (Electronics and Telecommunications Research Institute, Korea), Eunryung Lee (Electronics and Telecommunications Research Institute, Korea), KeeKoo Kwon (Electronics and Telecommunications Research Institute, Korea), Sooln Lee (Electronics and Telecommunications Research Institute, Korea)

[1A-2] Lane-Level Localization Based on Situational Awareness on Highway

Heong-tae Kim (Ajou University, Korea), Bongsob Song (Ajou University, Korea), Yeonsik Kang (Kookmin University, Korea)

[1A-3] An Energy Efficient Vehicle to Pedestrian Communication Method for Safety Applications

Sungwon Lee (Kyungpook National University, Korea), Junhwan Park (Kyungpook National University, Korea), Dongkyun Kim (Kyungpook National University, Korea), Yong-Geun Hong (ETRI, Korea)

[1A-4] Opportunistic Splitting Algorithm for Underlay Cognitive Radio Networks

Manal El Tanab (Faculty of Engineering Cairo University, Egypt), Yasmine Fahmy (Faculty of Engineering Cairo University, Egypt), Mohamed M. Khairy (Faculty of Engineering Cairo University, Egypt)

[1A-5] Cooperative Wireless Relay Networks Using Partial Rateless Codes

Lei Zhang (Beijing University of Posts and Telecommunications, P.R. China), Jianxin Liao (Beijing University of Posts and Telecommunications, P.R. China), Jingyu Wang (Beijing University of Posts and Telecommunications, P.R. China), Qi Qi (Beijing University of Posts and Telecommunications, P.R. China)

Session 1B : Optical Camera Communications (I)

Chair : Prof. Yeong Min Jang (Kookmin University, Korea)

[1B-1] Performance Analysis of Passive - Active Optical Wireless Transmission for Personal Health Monitoring

Wasinee NOONPAKDEE (Thammasat University, Thailand)

[1B-2] Frequency Shift On-Off Keying for Optical Camera Communication

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

[1B-3] Visible Light Communication System for Mobile Device

Yu Zeng (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Yunqing Chen (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Shuntian Feng

(China Telecom Corporation Limited Beijing Research Institute, P.R. China), Kaiyu Zhou (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Xianghui Sun (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Tong Mao (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Lei Shi (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Baohua Lei (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Feng Wang (China Telecom Corporation Limited Beijing Research Institute, P.R. China) Xiaojun Yan (Beijing Jiatong University, P.R. China), Quanhui Xu (Beijing Jiatong University, P.R. China), Bofei Zhang (Beijing Jiatong University, P.R. China)

[1B-4] Analysis of Imaging Diversity for MIMO Visible Light Communication

Nirzhar Saha (Kookmin University, Korea), Yeong Min Jang (Kookmin University, Korea)

July 8, 2014 (Tue)

13:30 – 15:30

Session 2A : Resource Control

Chair : Prof. Sanghwan Lee (Kookmin University, Korea)

[2A-1] Automatic Control on Transmission Power in Wireless Networking

Xue Zhang (University of Electronic Science and Technology of China, P.R. China), Haigang Gong (University of Electronic Science and Technology of China, P.R. China), Ming Liu (University of Electronic Science and Technology of China, P.R. China)

[2A-2] Performance Comparisons of the Routing Tree Construction Algorithms for IEEE 802.16 Centralized Scheduling Mesh Networks

Po-Yuan Wang (University of Taipei, Taiwan), Shih-Tsung Liang (University of Taipei, Taiwan)

[2A-3] Compressive Spectrum Sensing Algorithm Based on Robust Detection Criterion with Ratio of Residual Matrix

Hoiyeon Jung (ETRI, Korea), Jung-Sun Um (ETRI, Korea), Byung Jang Jeong (ETRI, Korea), Hyung Do Choi (ETRI, Korea)

Session 2B : Optical Camera Communications (II)

Chair : Dr. Yu Zeng (CTBRI, China)

[2B-1] Asynchronous Scheme for Unidirectional Optical Camera Communications (OCC)

Trang Nguyen (Kookmin University, Korea), Nam Tuan Le (Kookmin University, Korea), Yeong Min Jang (Kookmin University, Korea)

[2B-2] Adaptive Screen Modulation Schemes for mobile device employing Optical Camera Communication

Ming Feng, (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Yu Zeng, (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Kaiyu Zhou, (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Mingchuan Yang, (China Telecom Corporation Limited

Beijing Research Institute, P.R. China), Ying Zhu, (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Yongshun Cai, (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Nan Yang, (China Telecom Corporation Limited Beijing Research Institute, P.R. China), Yang Lu, Lei Li (Beijing Jiatong University, P.R. China)

[2B-3] Simple Method for Indoor Localization in OCC Using Smart Phone Image Sensor

Md. Shareef Ifthekhar (Kookmin University, Korea), Ratan Kumar Mondal (Kookmin University, Korea), Nam-Tuan Le (Kookmin University, Korea), Yeong Min Jang (Kookmin University, Korea)

[2B-4] A New Load-Balancing Method Applying Link-Cost Adjustment Based on Betweenness Centrality in WDM Networks

Yutaro Nagata (Kogakuin University, Japan), Koichi Asatani (Kogakuin University, Japan), Hiroyuki Otsuka (Kogakuin University, Japan)

[2B-5] STMS: SCM-based Single-Tier Memory Scheme in Infotainment Systems

Jong Woo Park (Kyungpook National University, Korea), Seung Wan Jung (Kyungpook National University, Korea), Jun Young Yoon (Kyungpook National University, Korea), Dae-Wha Seo (Kyungpook National University, Korea)

July 9, 2014 (Wed)

09:00 – 10:20

Session 3A : Network Security

Chair : Prof. Sanghyun Ahn (University of Seoul, Korea)

[3A-1] A SDN-Oriented DDoS Blocking Scheme for Botnet-Based Attacks

Sungheon Lim (Korea University, Korea), Jihun Ha (Korea University, Korea), Hyogon Kim (Korea University, Korea), Young Hwa Kim (ETRI, Korea), Sunhee Yang (ETRI, Korea)

[3A-2] A Risk-Driven Security Analysis for a Bluetooth Low Energy Based Microdata Ecosystem

Tapio Frantti (University of Oulu, Finland), Juha Rönning (University of Oulu, Finland)

[3A-3] Secure Computation Offloading Based on Social Trust in Mobile Networks

Wei-Tsung Su (Aletheia University, Taiwan), Chiang-Sheng Liang (Aletheia University, Taiwan), Cheng-Yi Dai (Aletheia University, Taiwan)

[3A-4] DeCache: A Decentralized Two-Level Cache for Mobile Location Privacy Protection

Chenyu Xiao (Fudan University, P.R. China), Zhe Chen (Fudan University, P.R. China), Xin Wang (Fudan University, P.R. China), Jin Zhao (Fudan University, P.R. China), Chen Chen (Fudan University, P.R. China)

Session 3B : Wireless Sensor Network (I)

Chair : Prof. Seokhoon Yoon (University of Ulsan, Korea)

[3B-1] Basketball Net - A Flexible and Resilient Topology for Wireless Sensor Networks

Soung-Yue Liew (Universiti Tunku Abdul Rahman, Malaysia), Ming-Lee Gan (Universiti Tunku Abdul Rahman, Malaysia), Chong Shen Lim (Universiti Tunku Abdul Rahman, Malaysia), Hock Guan Goh (Universiti Tunku Abdul Rahman, Malaysia)

[3B-2] Placement Patterns for Confidential Information Coverage in Wireless Sensor Networks

Jiajun Zhu (Huazhong University of Science and Technology (HUST), P.R. China), Bang Wang (Huazhong University of Science and Technology (HUST), P.R. China)

[3B-3] Reliable Routing in Large Scale Wireless Sensor Networks

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

[3B-4] Benchmarking Mobile Agent Itinerary Planning Algorithms for Data Aggregation on WSNs

Ioannis E. Venetis (Technological Educational Institution of Athens, Greece), Grammati Pantziou (Technological Educational Institution of Athens, Greece), Damianos Gavallas (University of the Aegean, Greece), Charalampos Konstantopoulos (University of Piraeus, Greece)

Session 3C : WPAN

Chair : Prof. Soung-Yue Liew (Universiti Tunku Abdul Rahman, Malaysia)

[3C-1] Interference Analysis in 2.4GHz Band for Railroad Sensor Networks

Yongzhe Ren (Pusan National University, Korea), Dong Chan Park (Pusan National University, Korea), Jiun Yun (Pusan National University, Korea), Suk Chan Kim (Pusan National University, Korea)

[3C-2] Outage-Constrained Source-Sum-Power Minimization in Multiple-Sensor Single-DF-Relay Networks with Direct Links

Insook Kim (Hanyang University, Korea), Dongwoo Kim (Hanyang University, Korea)

[3C-3] A Wearable Wireless Body Area Network for Human Activity Recognition

Zongjian He (Tongji University, P.R. China), Xiaolin Bai (BMW, P.R. China)

[3C-4] Particle swarm optimization-based low-complexity three-dimensional UWB localization scheme

Eiji Okamoto (Nagoya Institute of Technology, Japan), Manato Horiba (Nagoya Institute of Technology, Japan), Keita Nakashima (Nagoya Institute of Technology, Japan), Toshiko Shinohara (Daifuku Co., Ltd., Japan), Katuhiko Matsumura (Daifuku Co., Ltd., Japan)

July 9, 2014 (Wed)

13:30 – 14:50

Session 4A : LTE-Advanced

Chair : Prof. Wei-Tsung Su, Aletheia University, Taiwan

[4A-1] Open-source Wireless Switch for Experimental Research Vitalization for B4G/5G Networks

Sungwon Lee (Kyung Hee University, Korea), Young-hwa Kim (Electronics and Telecommunications Research Institute (ETRI), Korea), Sunhee Yang (Electronics and Telecommunications Research Institute (ETRI), Korea)

[4A-2] OpenAirInterface-An Effective Emulation Platform for LTE and LTE-Advanced

Renyuan Wang (Beijing University of Posts and Telecommunications, P.R. China), Yuexing Peng (Beijing University of Posts & Telecoms, P.R. China), Huan Qu (Beijing University of Posts and Telecommunications, P.R. China), Wenfang Li (Beijing University of Posts and Telecommunications, P.R. China), Hui Zhao (Beijing University of Posts and Telecommunications, P.R. China), Bin Wu (Institute of Microelectronics of Chinese Academy of Sciences, P.R. China)

[4A-3] Genetic Algorithm Based Self-Organized Resource Allocation in LTE-Advanced Network

Adnan Shahid (Sejong University, Korea), Saleem Aslam (Sejong University, Korea), Hyung Seok Kim (Sejong University, Korea), Kyung-Geun Lee (Sejong University, Korea)

[4A-4] Design of Synchronization Preambles for LTE-Advanced D2D Communications

Jong-Hoon Kim (Korea Aerospace University, Korea), Ki-Young Sung (Korea Aerospace University, Korea), Young-Ho Jung (Korea Aerospace University, Korea), Taesoo Kwon (ETRI, Korea), Jihyung Kim (ETRI, Korea), Moon-Sik Lee (ETRI, Korea)

Session 4B : Wireless Sensor Network (II)

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

[4B-1] Performance Analysis of Asynchronous MAC Protocol in Tree-topology for WSNs

Sunghun Lee (Daegu Technopark, Korea), Kwanghyun Cho (Daegu Technopark, Korea), Dongseop Kim (Daegu Technopark, Korea), Hun Jung (Daegu Technopark, Korea), Inhye Park (Korea Electronics Technology Institute, Korea)

[4B-2] Virtual Group leader Election Algorithm in Distributed WSN

Gebere Akele (Ajou University, Korea), Hassen Redwan (Ajou University, Korea), Ki-Hyung Kim (Ajou University, Korea)

[4B-3] Location Based Clustering Scheme Considering Node Mobility in Wireless Sensor Networks

Shigeki Shiokawa (Kanagawa Institute of Technology, Japan), Daqi chen (Kanagawa Institute of Technology, Japan)

[4B-4] Precision Irrigation Performance Measurement using Wireless Sensor Network

Ibrahim Mat (MIMOS, Malaysia), Mohamed Rawidean Mohd Kassim (MIMOS, Malaysia), Ahmad Nizar Harun (MIMOS, Malaysia)

Session 4C : Content-Centric Network

Chair : Dr. Yusuke Fukushima (NICT, Japan)

[4C-1] Proactive Neighbor Pushing for Enhancing Provider Mobility Support in Content-Centric Networking

Taehee Woo (Korea National Defense University, Korea), Heungsoon Park (Korea National Defense University, Korea), Seunghoon Jung (Korea National Defense University, Korea), Taewook Kwon (Korea National Defense University, Korea)

[4C-2] Data Pushing Using IPT in Content-Centric Networking

Seunghoon Jung (Korea National Defense University, Korea), Heungsoon Park (Korea National Defense University, Korea), Taehee Woo (Korea National Defense University, Korea), Taewook Kwon (Korea National Defense University, Korea)

[4C-3] Popularity-based Congestion Control in Named Data Networking

Heungsoon Park (Korea National Defense University, Korea), Hoseok Jang (Korea National Defense University, Korea), Taewook Kwon (Korea National Defense University, Korea)

July 9, 2014 (Wed)

15:00 – 16:20

Session 5A : Cellular Network (II)

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

[5A-1] On the Optimal Small Cell Deployment for Energy-Efficient Heterogeneous Cellular Networks

Gongchao Su (Shenzhen University, P.R. China), Lemin Li (Shenzhen University, P.R. China), Xiaohui Lin (Shenzhen University, P.R. China), Hui Wang (Shenzhen University, P.R. China)

[5A-2] Effective Placement of Femtocell Base Stations in Commercial Buildings

Muhammad Faizan Khan (Huazhong University of Science and Technology, P.R. China), Bang Wang (Huazhong University of Science and Technology, P.R. China)

[5A-3] Augmenting Small Cell with Personal Area Cell for Performance Improvement

Hyunsoon Kim (Korea University, Korea), Seungho Yoo (Korea University, Korea), Jongtaek Jung (Korea University, Korea), Hwangnam Kim (Korea University, Korea), Chung G. Kang (Korea University, Korea), Minjoong Rim (Dongguk University, Korea)

Session 5B : Cloud Service & Application (I)

Chair : Prof. Md. Iftekhar Hussain (North-Eastern Hill University, India)

[5B-1] Resolving Web Services Mismatch in Mashup

Wei Fu (Beijing University of Posts and Telecommunications, P.R. China), Chunhong Zhang (Beijing University of Posts & Telecommunication, P.R. China), Yang Ji (Beijing University of Posts

and Telecommunications, P.R. China)

[5B-2] Heterogeneous Cloud Storage System for Privacy

Woonghee Lee (Korea University, Korea), Hwangnam Kim (Korea University, Korea)

[5B-3] Load Balancing Job Assignment for Cluster-Based Cloud Computing

Yean-Fu Wen (National Taipei University, Taiwan), Chih-Lung Chang (National Taipei University, Taiwan)

[5B-4] Cooperative Minimization of Power Losses in Smart Micro Grids with PLC System

Enrico Scarbottolo (University of Padova, Italy), Stefano Tomasin (University of Padova, Italy)

Session 5C : Wireless Network (III)

Chair : Mr. Ibrahim Mat (MIMOS, Malaysia)

[5C-1] Applying Loss-rate Driven Network Coding to Transmission Control Protocol

Yihjia Tsai (Tamkang University, Taiwan), Chaoyuan Chiang (Tamkang University, Taiwan)

[5C-2] LT Codes with Loss Rate and Decreasing Ripple Size for Wireless Relay Communications

Lei Zhang (Beijing University of Posts and Telecommunications, P.R. China), Jianxin Liao (Beijing University of Posts and Telecommunications, P.R. China), Jingyu Wang (Beijing University of Posts and Telecommunications, P.R. China), Qi Qi (Beijing University of Posts and Telecommunications, P.R. China)

[5C-3] Seamless Video Streaming Algorithm Using Variable Media Chunk

Myung-Hyun Yoon (Korea Electronics Technology Institute, Korea), Kue Back Lee (Barun Technology Corp, Korea), Chae Min Park (Barun Technology Corp, Korea)

[5C-4] Digital Backend Design of Implantable RFID Tag

Yong-Ju Park (Korea Electronics Technology Institute (KETI), Korea), Hyun-Suk Ahn (Korea Electronics Technology Institute (KETI), Korea), Young-Han Kim (Korea Electronics Technology Institute (KETI), Korea), YongSuk Lim (Korea Electronics Technology Institute (KETI), Korea), Myung-Hyun Yoon (Korea Electronics Technology Institute (KETI), Korea)

July 9, 2014 (Wed)

16:40 – 18:20

Session 6A : Cellular Network (III)

Chair : Jang-Won Lee (Yonsei University, Korea)

[6A-1] A Joint Detection Algorithm for PUCCH

Jingxing Zhang (Beijing University of Posts and Telecommunications, P.R. China), Hui Zhao (Beijing University of Posts and Telecommunications, P.R. China), Yuexing Peng (Beijing University of Posts and Telecoms, P.R. China), Long Zhao (Beijing University of Posts and Telecommunications, P.R. China)

[6A-2] Optimal Subchannel and Power Allocation for Multi-Cell OFDMA Systems

Sung-Yeon Kim (Yonsei University, Korea), Jeong-Ahn Kwon (Yonsei University, Korea), Jang-Won Lee (Yonsei University, Korea)

[6A-3] Coefficients Optimization in Femtocell Utility Function for Distributed Utility-based SINR Adaption Algorithm

Lili Sun (Shandong University, P.R. China), Haixia Zhang (Shandong University, P.R. China), Dongmei Jiang (Qingdao University, P.R. China)

[6A-4] Performance Analysis of an OFDM-based Method for V2X Communication

Md. Sazzad Hossen (Kookmin University, Korea), Min-Suk Bang (Kookmin University, Korea), Youngil Park (Kookmin University, Korea), Ki-Doo Kim (Kookmin University, Korea)

Session 6B : Cloud Service & Application (II)

Chair : Dr. Wasinee Noonpakdee (Thammasat University, Thailand)

[6B-1] An Adaptive Probabilistic Scheduler for Offloading Time-Constrained Tasks in Local Mobile Clouds

Ting Shi (University of Nevada, Las Vegas, USA), Mei Yang (University of Nevada, Las Vegas, USA), Yingtao Jiang (University of Nevada, Las Vegas, USA), Xiang Li (Harbin Engineering University, P.R. China), Qing Lei (University of International Business and Economics, P.R. China)

[6B-2] An Optical VM Resource Allocation For Near-Client-Datacenter For Multimedia Cloud

Wenqiang Gong (Communication University of China, P.R. China), Zheng Chen (Communication University of China, P.R. China), Jinyao Yan (Communication University of China, P.R. China), Shuai Qianjun (Communication University of China, P.R. China)

[6B-3] A Uniform EPC Scheme Design of IEEE 1451 Transducers for IoT Applications

Chao-Wen Tseng (Feng Chia University, Taiwan), Chua-Huang Huang (Feng Chia University, Taiwan)

[6B-4] On the Necessity of VM Migration: Simulation on Datacenter Network Resources

Jongtaek Jung (Korea University, Korea), Hwangnam Kim (Korea University, Korea)

Session 6C : Wireless Network (IV)

Chair : Prof. Shigeki Shiokawa (Kanagawa Institute of Technology, Japan)

[6C-1] Throughput Enhancement Based on Optimum Transmission Range in MANETs

Hyungseok Choi (Agency for Defense Development, Korea), JaeYong Lee (Chungnam National University, Korea), ByungChul Kim (Chungnam National University, Korea)

[6C-2] Energy-consumption Analysis of DP-based Clustering Strong Duplicate Address Detection

Sang-Chul Kim (Kookmin University, Korea)

[6C-3] GIDPS: A Game Theory-based IDPS for RPL-Networked Low Power Lossy Networks with Energy Limitation

Ting Miao (Ajou University, Korea), Ramnath Teja Chekka (Ajou

University, Korea), Ki-Hyung Kim (Ajou University, Korea)

[6C-4] An Impedance Mismatching Compensation based CM Noise Rejection Method for Capsule Endoscope System

Ju Hyung Song (SungKyunkwan University, Korea), Won Jun Hwang (SungKyunkwan University, Korea), Ki Yun Kim (Myongji College, Korea), Hyung Jin Choi (SungKyunkwan University, Korea)

[6C-5] Extending EPCglobal ALE Middleware to Integrate Transducer Capability of IEEE 1451 Standards

Chao-Wen Tseng (Feng Chia University, Taiwan), Yu-Sheng Lin (Feng Chia University, Taiwan), Wei-Han Lu (Feng Chia University, Taiwan), Chua-Huang Huang (Feng Chia University, Taiwan)

July 10, 2014 (Thu)

09:00 – 10:20

Session 7A : Future Internet (I)

Chair : Prof. Lin Lin (Shanghai University, China)

[7A-1] A Mobility-Aware Flow Admission Control Scheme in OpenFlow-Based Mobile Networks

Yeunwoong Kyung (Korea University, Korea), Taihyong Yim (Korea University, Korea), Tri M. Nguyen (Korea University, Korea), Sungho Park (Korea University, Korea), Jinwoo Park (Korea University, Korea)

[7A-2] Evaluation of Digital Baseband Modulation Schemes for Molecular Communication in Nanonetworks

Lin Lin (Shanghai University, P.R. China), Chengfeng Yang (Shanghai University, P.R. China), Jiandong Wang (Shanghai University, P.R. China), Shiwei Ma (Shanghai University, P.R. China)

[7A-3] Mobility-Centric Host Stack for the Future Internet

Chunhui Zhang (University of Massachusetts Lowell, USA), Guanling Chen (University of Massachusetts Lowell, USA), Kiran Nagaraja (Rutgers University, USA), Ivan Seskar (Rutgers University, USA), Samuel Nelson (Raytheon BBN Technologies, USA)

Session 7B : Cloud Service & Application (III)

Chair : Prof. Yean-Fu Wen (National Taipei University, Taiwan)

[7B-1] Budget-Aware Task Scheduling in the Cloud

Vasileios Thanasis (Hanyang University, Korea), Choonhwa Lee (Hanyang University, Korea), Sumi Helal (University of Florida, USA)

[7B-2] A Cooperative Game Method for Load Balancing in Cloud Based on Cost-Efficiency

Shaoyi Song (Beijing Technology And Business University, P.R. China), Tingjie Lv (Beijing University of Posts and Telecommunications, P.R. China), Xia Chen (Beijing University of Posts and Telecommunications, P.R. China)

[7B-3] SNS of Things: Concept, Issues, and Challenges for Globe Scale Interoperability of IoT Applications

Sanghwan Lee (Kookmin University, Korea), Sung-Soo Lim (Kookmin University, Korea), MyungKeun Yoon (Kookmin University, Korea), Sang-Min Yoon (Kookmin University, Korea), Junho Kim (Kookmin University, Korea)

[7B-4] Research on Maintainability of Network Topology for Data Centers

Yixing Peng (National University of Defense Technology, P.R. China), Yuan Yuan (National University of Defense Technology, P.R. China), Xin Huang (Wuhan University, P.R. China), Wenjun Wu (Beihang University, P.R. China), Xiangfei Meng (National Supercomputer Center, P.R. China)

Session 7C : Routing

Chair : Prof. Qinghai Yang, (Xidian University, China)

[7C-1] Implementation of Communication Path Recovery Mechanism in a Multihomed ID/Locator-split Network

Yusuke Fukushima (National Institute of Information and Communications Technology, Japan), Ved P. Kafle (National Institute of Information and Communications Technology, Japan), Tomoji Tomuro (National Institute of Information and Communications Technology, Japan), Hiroaki Harai (National Institute of Information and Communications Technology, Japan)

[7C-2] DROUND: Direct Routing on Unique Network-layer Identifier

Feng Zhao (National University of Defense Technology, P.R. China), Yaping Liu (National University of Defense Technology, P.R. China), Baosheng Wang (National University of Defense Technology, P.R. China)

[7C-3] Comparative Study on Overlay Multicast Routing Algorithms' Design Methods

Longxin Lin (Jinan University, P.R. China)

[7C-4] Heterogeneous Probabilistic Model Based Spray Routing Protocol for Delay Tolerant Networks

Lin Bai (Inner Mongolia University, P.R. China), Xuebin Ma (Inner Mongolia University, P.R. China), ZhenChao Ouyang (Inner Mongolia University, P.R. China), Xin Zhan (Inner Mongolia University, P.R. China)

July 10, 2014 (Thu)

10:30 – 12:10

Session 8A : Cognitive Radio

Chair : Dr. Feng Liu (Shanghai Maritime University, China)

[8A-1] Eigenvector Based Cooperative Wideband Spectrum Sensing for Cognitive Radios

Shu Wang (Chongqing University of Post and Telecommunications (CQUPT), P.R. China), Junjie Bao (Chongqing University of Post and Telecommunications (CQUPT), P.R. China), Bin Shen (Chongqing University of Post and Telecommunications (CQUPT), P.R. China), Qiong Huang (Chongqing University of Post and Telecommunications (CQUPT), P.R. China), Qianbin Chen (Chongqing University of Post and Telecommunications (CQUPT), P.R. China)

[8A-2] Traffic Pattern-based Opportunistic Spectrum Access of Cognitive Femto Base Stations for Decentralized Cross-tier Interference Management

Jaeki Lee (The Attached Institute of ETRI, Korea), Jangho Yoon

Technical Sessions

(KAIST, Korea), Heecheol Song (KAIST, Korea), Hwang Soo Lee (KAIST, Korea)

[8A-3] Performance Enhancement of TCP in Cognitive Mobile IP Based Networks

Satish Anamalamudi (Dalian University of Technology, P.R. China), Minglu JIN (Dalian University of Technology, P.R. China)

[8A-4] Extending Cognitive Radios with New Perspectives

Suzan Bayhan (University of Helsinki, Finland), Jussi Kangasharju (University of Helsinki, Finland)

Session 8B : MIMO (I)

Chair : Prof. Eiji Okamoto (Nagoya Institute of Technology, Japan)

[8B-1] A Novel Interference Alignment Scheme for Two-Cell MIMO Downlink Channels

Shuashuai Guo (Shandong University P.R. China), Haixia Zhang (Shandong University P.R. China), Dongfeng Yuan (Shandong University, P.R. China), Feng Zhao (Guilin University of Electronic Technology, P.R. China)

[8B-2] A Joint Optimized Precoding Design for Bidirectional Relaying MIMO-OFDM Networks

Dongyue Zhou (South China University of Technology, P.R. China), Binjie Hu (Guangdong University of Technology, P.R. China)

[8B-3] The Problem of Pilot Contamination Reduction in Massive MIMO for Physical Channel Models

Van-Dinh Nguyen (Soongsil University, Korea), Son Dinh-Van (Soongsil University, Korea), Yoan Shin (Soongsil University, Korea), Won Cheol Lee (Soongsil University, Korea), Oh-Soon Shin (Soongsil University, Korea)

[8B-4] Performance Analysis and Comparison of ZF and MRT Based Downlink Massive MIMO Systems

Tebe Parfait (University of Electronic Science and Technology of China, P.R. China), Yijun Kuang (University of Electronic Science and Technology of China, P.R. China), Kponyo Jerry (University of Electronic Science and Technology of China, P.R. China)

[8B-5] Calculation on Characteristics of VLF Umbrella Inverted-Cone Transmitting Antenna

Huifen Li (Naval University of Engineering, P.R. China), Chao Liu (Naval University of Engineering, P.R. China)

Session 8C : Wireless Network (V)

Chair : Dr. Ved Kadle, (NICT, Japan)

[8C-1] A Multi-Channel Assignment for Wireless Networks with a Limited Number of Channels

Taejin Ha (Gwangju Institute of Science and Technology, Korea), Hyuk Lim (Gwangju Institute of Science and Technology, Korea), Hyunduk Kang (Electronics and Telecommunications Research Institute, Korea)

[8C-2] Study on Construction of Wireless 2-hop Transmission Simulator by H8 Microcomputer Board

Eisuke KUDOH (Tohoku Institute of Technology, Japan), Masahiro MATSUDA (Tohoku Institute of Technology, Japan)

[8C-3] Rumours and Good Practices in Community Networks Wireless Links

Miguel Pérez-Francisco (Universitat Jaume I, Spain), Pablo Boronat (Universitat Jaume I, Spain), Pietro Manzoni (Universitat Politècnica de Valencia, Spain), Carlos T. Calafate (Universitat Politècnica de Valencia, Spain), Juan-Carlos Cano (Universitat Politècnica de Valencia, Spain)

[8C-4] Improving Air Pollution Forecast with Ubiquitous Mobile Sensor Network

Ke Hu (UNSW, Australia), Ashfaqur Rahman (CSIRO, Australia), Vijay Sivaraman (UNSW, Australia), Pradeep Ray (UNSW, Australia)

[8C-5] Cluster-Based Failure Detection and Recovery Scheme in Wireless Sensor Network

Hassen Redwan (Ajou University, Korea), Gebere Akele (Ajou University, Korea), Ki-Hyung Kim (Ajou University, Korea)

July 10, 2014 (Thu)

13:40 – 15:20

Session 9A : Future Internet (II)

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

[9A-1] Theoretical Models Study and Analysis of the Impact of Buffer Unit in Routers for Future Internet

Bo Zhang (Communication University of China, P.R. China), Jinyao Yan (Communication University of China, P.R. China), Zheng Chen (Communication University of China, P.R. China)

[9A-2] BTSDN: BGP-based Transition for the Existing Networks to SDN

Pingping Lin (Tsinghua University, P.R. China), Jun Bi (Tsinghua University, P.R. China), Hongyu Hu (Tsinghua University, P.R. China)

[9A-3] Design and Implementation of Light-Weight Smart Home Gateway for Social Web of Things

Tein-Yaw Chung (Yuan Ze University, Taiwan), Ibrahim Mashal (Yuan Ze University, Taiwan), Osama Alsaryrah (Yuan Ze University, Taiwan), Tsung-Hsuan Hsu (Yuan Ze University, Taiwan), Chih-Hsiang Chang (Yuan Ze University, Taiwan), Wen-Hsing Kuo (Yuan Ze University, Taiwan)

[9A-4] ID-Based Communication Framework for New Generation Networks

Ved P. Kadle (National Institute of Information and Communications Technology, Japan), Yusuke Fukushima (National Institute of Information and Communications Technology, Japan), Kenji Fujikawa (National Institute of Information and Communications Technology, Japan), Hiroaki Harai (National Institute of Information and Communications Technology, Japan)

Session 9B MIMO (II)

Chair : Dr. Hsuan-Yu Lin (Telecom Technology Center, Taiwan)

[9B-1] Transition Detection with Spectrum Database Using Weighted Cooperative Sensing

Hao Wang (The University of Electro-Communications, Japan),

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

[9B-2] An Opportunistic Transmission Mechanism for Seamless Video Streaming in the MIMO-capable Wireless Ad Hoc Network

Hayoung Oh (Soongsil University, Korea), Sanghyun Ahn (University of Seoul, Korea), Yang Cheng (University of Seoul, Korea)

[9B-3] Performance Analysis of Energy Efficiency and Symbol Error Rate in Amplify-and-Forward Cooperative MIMO Networks

Manar Al-Kali (Huazhong University of Science and Technology, P.R. China), Li Yu (Huazhong University of Science & Technology, P.R. China), Ali A. Mohammed (Huazhong University of Science and Technology, P.R. China)

[9B-4] High Speed LDPC Decoder Design Based on General Overlapped Message-Passing Architecture

Baihong Lin (Tsinghua University, P.R. China), Qi Li (Tsinghua University, P.R. China), Yukui Pei (Tsinghua University, P.R. China), Liuguo Yin (Tsinghua University, P.R. China), Jianhua Lu (Tsinghua University, P.R. China)

Session 9C : Wireless Network (VI)

Chair : Prof. Dongkyun Kim (Kyungpook National University, Korea)

[9C-1] Adaptive Overall QoS Maximizing Multicast Video Streaming System over Wireless Network

Kyuhwi Choi (POSTECH(Pohang University of Science and Technology), Korea), Hwangjun Song (POSTECH (Pohang University of Science and Technology), Korea)

[9C-2] Dynamic Inter-RAT Handover Decision for Offloading Heavy Traffic in Heterogeneous Networks

So-Yeon Park (Ewha Womans University, Korea), Ji-Hyeon Kim (Ewha Womans University, Korea), HyungJune Lee (Ewha Womans University, Korea)

[9C-3] Experimental Evaluation of Consumer Mobility on Named Data Networking

Zongzhen Liu (Chinese Academy of Sciences, P.R. China), Yulei Wu (Chinese Academy of Sciences, P.R. China), Yuepeng E (Chinese Academy of Sciences, P.R. China), Jingguo Ge (Chinese Academy of Sciences, P.R. China), Tong Li (Chinese Academy of Sciences, P.R. China)

[9C-4] Implementation of Approximate Decoding Algorithm Over TCP/IP

Jungmin Kwon (Ewha Womans University, Korea), Minhae Kwon (Ewha Womans University, Korea), Byungchul Park (INRIA, France), Hyunggon Park (Ewha Womans University, Korea)

[9C-5] Traffic-Aware Parameter Tuning for Wi-Fi Direct Power Saving

Hongseok Yoo (Kyungwoon University, Korea), Sunghyun Kim (Kyungpook National University, Korea), Sungwon Lee (Kyungpook National University, Korea), Je-Yun Hwang (Samsung Electronics, Korea), Dongkyun Kim (Kyungpook National University, Korea)

July 10, 2014 (Thu)

15:50 – 17:30

Session 10A : VANET

Chair : Prof. Myung-Kyun Kim (University of Ulsan, Korea)

[10A-1] Vehicle-to-Vehicle Visible Light Communications Using Sub-Pulse Manchester Modulation

Jonghun Kim (Kookmin University, Korea), Seungwoo Lee (Kookmin University, Korea), Yeulhyeong Lee (Kookmin University, Korea), Seungwoo Hyun (Kookmin University, Korea), MinChul Ju (Kookmin University, Korea), Youngil Park (Kookmin University, Korea)

[10A-2] The Architecture for Vehicular Black-Box Image Communication in VANET

Jeonghee Chi (Konkuk University, Korea), Hyunsun Park (Konkuk University, Korea), Taehyeon Hwang (Konkuk University, Korea), Soyoun Park (Konkuk University, Korea)

[10A-3] A Bayesian Game-Theoretic Approach for MAC Protocol to Alleviate Beacon Collision Under IEEE 802.11p WAVE Vehicular Network

Yong Ho Kwon (Hanyang University, Korea), Byung Ho Rhee (Hanyang University, Korea)

[10A-4] Schedule Optimization of Static Messages with Precedence Relations in FlexRay

Armaghan Darbandi (University of Ulsan, Korea), Myung Kyun Kim (University of Ulsan, Korea)

[10A-5] SAEMD: A Scheduling Algorithm for Emergency Message Dissemination in Vehicular Ad Hoc Networks

Jihoon Joo (Kyungpook National University, Korea), Hee Chang Lee (Kyungpook National University, Korea), Dong Seog Han (Kyungpook National University, Korea)

Session 10B : Performance Evaluation

Chair : Prof. Hiroyuki Otsuka (Kogakuin University, Japan)

[10B-1] Performance Analysis of Cooperative Control between CSO on CRE and Transmission Power for Pico-eNB in HetNet

Shingo Matsuoka (Kogakuin University, Japan), Katsunori Kikuchi (Kogakuin University, Japan), Hiroyuki Otsuka (Kogakuin University, Japan)

[10B-2] Throughput Performance of Time-Division Relaying for Blank Subframe Ratio and RN Transmission Power

Naohiro Tanoi (Kogakuin University, Japan), Chen Chen (Kogakuin University, Japan), Hiroyuki Otsuka (Kogakuin University, Japan)

[10B-3] A Projector-based Full Windshield HUD Simulator to Evaluate the Visualization Methods

Min Woo Park (Kyungpook National University, Korea), Soon Ki Jung (Kyungpook National University, Korea)

[10B-4] Improvement of Folded Dipoles Based on a Branch Current Distribution

Xu XIE (Naval University of Engineering, P.R. China), Huaning WU (Naval University of Engineering, P.R. China), Yu Zhao (University of Electronic Science and Technology of China, P.R. China)

[10B-5] Large-scale Mobile Internet Performance Measurement in Taiwan

Hsuan Yu Lin (Telecom Technology Center, Taiwan), Shan Hsiung Hsieh (Telecom Technology Center, Taiwan), Kuo Hong Chen (Telecom Technology Center, Taiwan), Tzu Chen Wu (Telecom Technology Center, Taiwan)

Session 10C : Wireless Network (VII)

Chair : Prof. Yuxing Peng (The National University of Defense Technology, China)

[10C-1] Square-Law Combining for SIM/SM in Atmospheric Turbulence Channels

Jeong-Ho Lee (Dongguk University, Korea), Seung-Hoon Hwang (Dongguk University, Korea)

[10C-2] A Novel Hierarchical Cooperative Data Gathering Architecture Using Multiple Mobile Elements

Duc Van Le (University of Ulsan, Korea), Hoon Oh (University of Ulsan, Korea), Seokhoon Yoon (University of Ulsan, Korea)

[10C-3] Stimulating Multi-Service Forwarding under Node-Selfishness Information

Jinglei Li (Xidian University, P.R. China), Qinghai Yang (Xidian University, P.R. China), Kyung Sup Kwak (Inha University, Korea)

[10C-4] Adaptive Virtual Resource Clustering and Monitoring through Nonlinear Dimensionality Reduction

Zihou Wang (National Computer Network Emergency Response Technical Team/Coordination Center of China, P.R. China), Yanni Han (Chinese Academy of Sciences, P.R. China), Tao Lin (Chinese Academy of Sciences, P.R. China)

[10C-5] Packet Loss Tolerance for Reference Broadcast Synchronization

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

July 11, 2014 (Fri)

09:00 – 11:00

Session 11A WLAN

Chair : Prof. Myungsik Yoo (Soongsil University, Korea)

[11A-1] Admission control in medical-grade WLAN

Sunghwa Son (Daegu Gyeongbuk Institute of Science & Technology, Korea), Kyung-Joon Park (Daegu Gyeongbuk Institute of Science & Technology, Korea), Eun-Chan Park (Dongguk University, Korea)

[11A-2] A Tightly Synchronized TDMA MAC Protocol for Multi-hop WiFi-based Long Distance Networks

I. Hussain (North-Eastern Hill University, India), Z. I. Ahmed, (North-Eastern Hill University, India), D. K. Saikia (National Institute of Technology, India), N. Sarma (Tezpur University, India)

[11A-3] Protocol Design for Interference Alignment in 802.11 WLAN Interfering Network

Jinhyung Oh (Electronics and Telecommunications Research Insti-

tute(ETRI), Korea), Gwangzeen Ko (Electronics and Telecommunications Research Institute(ETRI), Korea), Jaeick Choi (Department head, Electronics and Telecommunications Research Institute(ETRI), Korea), Myungsun Song (Electronics and Telecommunications Research Institute(ETRI), Korea), Hyung-Do Choi (Electronics and Telecommunications Research Institute(ETRI), Korea), Myeong-Jin Kim (Korea University, Korea)

[11A-4] Partial Band Interference Alignment for Overlapped WLAN Channel Allocation

Jinhyung Oh (Electronics and Telecommunications Research Institute(ETRI), Korea), Myungsun Song (Electronics and Telecommunications Research Institute(ETRI), Korea), Jaeick Choi (Electronics and Telecommunications Research Institute(ETRI), Korea), Hyung-Do Choi (Electronics and Telecommunications Research Institute(ETRI), Korea), Myeong-Jin Kim (Korea University, Korea)

Session 11B Wireless Network (VIII)

Chair : Prof. Kiman Kim (Korea Maritime University, Korea)

[11B-1] Underwater Communication with Amplitude-Hyperbolic Frequency Modulation

Chang-Eun Lee (Korea Maritime and Ocean University, Korea), Hyung-Woo Lee(Korea Maritime and Ocean University, Korea), Ki-Man Kim(Korea Maritime and Ocean University, Korea), Woo-Sik (Agency for Defense Development, Korea), Seung-Yong Chun (Agency for Defense Development, Korea), Sang-Kook Lee (Agency for Defense Development, Korea)

[11B-2] Implementation of Adaptive Binary Exponential Backoff (ABEB) Algorithm with Dynamical Sizing Buffer for Load-Balanced RPL

Ramnath Teja Chekka (Ajou University, Korea), Ting Miao (Ajou University, Korea), Ki-Hyung Kim (Ajou University, Korea)

[11B-3] A Social Aggregation Based Combination Movement Model for Opportunistic Networks

Xuebin Ma (Inner Mongolia University, P.R. China), Zhenchao Ouyang (Inner Mongolia University, P.R. China), Liting Wang (Inner Mongolia University, P.R. China), Jing Bai (Inner Mongolia University, P.R. China)

Venue

Ocean Hotel Shanghai

Web Site : <http://www.oceanhotel.sh.cn/en>

Located at the bustling North Bund Shipping Zone, Ocean Hotel Shanghai shows up a four-star brand new look after three year's renovation. Adjacent to the new Bund and Shanghai International Shipping Center, the hotel enjoys a most convenient traffic near Metro Line Four, Gongping Road Ferry Terminal and two cross- river tunnels which become superb transportation links to the Lujiazui Financial and Trade Zone.

Hotel address :

1171 Dong Da Ming Road, Shanghai, China

General Information

Tel : 'International Access Code '+86-21-65458888

Fax : 'International Access Code '+86-21-65458993

Email : resv@oceanhotel.sh.cn

Website : <http://www.oceanhotel.sh.cn/en>

Reservations

Tel : 'International Access Code '+86-21-65458888

Fax : 'International Access Code '+86-21-65458993

Email : resv@oceanhotel.sh.cn



Venue



Travel Info

Yuyuan Garden is the largest of Shanghai's ancient gardens with Ming and Qing architectural styles. The garden has six areas, each with its own style. The Grand Rockery, in the center of the Garden, is the most renowned sight. Near the garden, there is the City God Temple of Shanghai, where various of local snack shops and streets are scattered around.



The Bund is the symbol of Shanghai. New finance and commercial houses as well as grand buildings built in 1930s in the European architectural styles cluster along the Bund. At night bright lights add to the happy atmosphere as people stroll along the wide riverside promenade.

Jade Buddha Temple is one of the most famous Buddhist shrines in Shanghai. The White Jade Buddhas were brought here from Burma in the nineteenth century. One is seated while the other is in the recumbent position of Sakyamuni symbolizing the Buddha's attainment of enlightenment or nirvana. The temple also has some impressive images of the Heavenly Kings.



A series of horizontal dotted lines for writing, spanning the width of the page.



ICUFN 2014

The Sixth International Conference on
Ubiquitous and Future Networks



<http://www.icufn.org>

