

2013 Fourth International Conference on the Network of the Future

(NOF 2013)

**Pohang, South Korea
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Program at a glance

Oct.23	Oct. 24	Oct. 25
Welcome Address (8:45 - 9:00)		
Keynote Speech 1 (9:00 - 10:00)	Keynote Speech 2 (9:00 - 10:00)	Keynote Speech 2 (9:00 - 10:00)
Coffee Break (10:00 - 10:30)	Coffee Break (10:00 - 10:30)	Poster Session (10:00 - 10:45)
Technical Session 1 (10:30 - 12:00)	Technical Session 4 (10:30 - 12:15)	Panel (10:45 - 12:30)
Lunch (12:00 - 13:30)	Lunch (12:15 - 13:30)	Lunch (12:30 - 14:00)
Invited Talk 1 (13:30 - 14:15)	Invited Talk 2 (13:30 - 14:15)	POSTECH Line Tour & Gyeongju Tour (14:00 -)
Technical Session 2 (14:15 - 12:00)	Technical Session 5 (14:15 - 12:00)	
Coffee Break (15:30 - 16:00)	Coffee Break (15:30 - 16:00)	
Technical Session 3 (16:00 - 17:45)	Technical Session 6 (16:00 - 17:45)	
Dinner (18:00 - 20:00)	Banquet (18:00 - 20:00)	

Keynote Speech 1

5G on the Horizon

C. Randy Giles (Bell Labs Seoul /APAC Open Innovation for Bell Labs) ^{***B#5}

Keynote Speech 2

Opportunities and Challenges in the Future Networks - The Operator's Perspective

Dong-Myun Lee (Head of Infra R&D Lab, Korea Telecom) ^{***B#5}

Keynote Speech 3

Smart Internet, The Network of Future in Korea

Steven Y. Rim (Korean Communication Agency/Ministry of Science) ^{***B#5}

Invited Talk 1

Trend of BAN Standard and Preamble Structure for 30Mbps HBC System of BAN

Hyung-il Park (Electronics and Telecommunications Research Institute) ^{***B#5}

Invited Talk 2

Trend on RAN Evolution

Brian Cho (Nokia Solutions and Networks) ^{**B#5}

Technical Session 1

Software Cybernetics to Infuse Adaptation Intelligence in Networked Systems
Kaliappa Ravindran (City University of New York, USA); Mohammad Rabby (City University of New York, USA)

Ontology Property-based Adaptive Crawler for Linked Data(OPAC)
Jihoon An (KAIST, Korea); Younggi Kim (Korea Advanced Institute of Science and Technology, Korea); Minseok Lee (KAIST, Korea); Younghee Lee (KAIST, Korea)

A Clean-Slate Security Vision for Future Networks
Irfan Simsek (University of Duisburg-Essen, Germany); Martin Becke (University of Duisburg-Essen, Germany); Yves Igor Jerschow (Heinrich Heine University Düsseldorf, Germany); Erwin P. Rathgeb (Universität Duisburg-Essen, Germany)

Technical Session 2

Field Trial Results on a Cooperative Small Cell Feeder Uplink Using Six-Fold Sectorization
Michael Grieger (Technische Universität Dresden, Germany); Gerhard P. Fettweis (Technische Universität Dresden, Germany)

A Fuzzy Adaptive DRX Power Saving Mechanism for LTE-Advanced Networks
Gwo-Jong Yu (Aletheia University, Taiwan)

Enhanced Adaptive Periodic Mobility Load Balancing Algorithm for LTE Femtocell Networks
Woojoong Kim (Pohang University of Science and Technology (POSTECH), Korea); Young-Joo Suh (Pohang University of Science and Technology (POSTECH), Korea)

Technical Session 3

BreezChirp: Energy Efficient Wi-Fi Bandwidth Estimator for Smartphones
Jian Li (Pohang University of Science and Technology, Korea); Jin Xiao (POSTECH, Korea); Huu Nhat Minh Nguyen (Hochiminh City University of Technology, Vietnam); James W. Hong (POSTECH, Korea); Raouf Boutaba (University of Waterloo, Canada)

Characteristics of a Large-Scale WiFi Radiomap and Their Implications in Indoor Localization
Sangwook Bak (POSTECH, Korea); Seokseong Jeon (POSTECH, Korea); Young-Joo Suh (Pohang University of Science and Technology (POSTECH), Korea); Chansu Yu (Cleveland State University, USA); Dongsoo Han (KAIST, Korea)

Application-Awareness Support for QoS-Aware Routing Protocols in Wireless Ad-hoc Networks
Byoungheon Shin (Korea Advanced Institute of Science and Technology, Korea); Seon Yeong Han (KAIST, Korea); Dongman Lee (KAIST, Korea); Wonyong Yoon (Dong-A University, Korea)

Handoff Performance Enhancement Scheme for Multi-Interface Enterprise WLANs
Jae-Pil Jeong (Pohang University of Science and Technology (POSTECH), Korea); Young Deok Park (Pohang University of Science and Technology (POSTECH), Korea); Young-Joo Suh (Pohang University of Science and Technology (POSTECH), Korea)

Technical Session 4

CCN Traffic Optimization for IoT

Jérôme François (University of Luxembourg, Luxembourg); Thibault Cholez (University of Luxembourg, Luxembourg); Thomas Engel (University of Luxembourg, Luxembourg) () (Multisource Dissemination in Content-Centric Networking

Liu Wai-xi (College of Information and Electromechanical Engineering, Guangzhou University, P.R. China); Yu Shunzheng (Sun Yat-Sen University, P.R. China); Ping-Yu Zhu (Guangzhou University, P.R. China) () -

How to make Content-Centric Networks interwork with CDN networks

Wei You (Orange Labs, France); Bertrand Mathieu (Orange Labs, France); Gwendal Simon (Institut Telecom - Telecom Bretagne, France) () (

Distributed Certificate Authority Scheme with Weighted Secret Sharing for Mobile Ad-hoc Networks

Jong Kim (POSTECH, Korea); Young-min Park (POSTECH, Korea); Yoonho Kim (Sangmyung University, Korea) () (

Technical Session 5

Solving virtual network resource allocation problems using a Constraint Satisfaction Problem model

Fouad Amine Guenane (UPMC, France); Pierre Yves Dumas (UPMC, France); Michele Nogueira (Federal University of Parana, Brazil); Guy Pujolle (University Pierre et Marie Curie - Paris 6, France) () (

Cannot Take My Allocation: Enforcing Fairness by Considering Demand and Payment in Clouds

Gyuyeong Kim (Korea University, Korea); Wonjun Lee (Korea University, Korea) () (, \$

QoS-based Network Virtualization to Future Networks: An approach based on network constraints

Ines Ayadi (Telecom Paristech, France); Gladys Diaz (University of Paris 13, France); Noémie Simoni (Telecom Paristech, France) () (,)

Technical Session 6

Optimizing OpenFlow Load-Balancing with L2 Direct Server Return

Marc Koerner (Technische Universitaet Berlin, Germany); Odej Kao (TU Berlin, Germany) () (- \$

Architecture for resource controllable NVE to meet service providers' dynamic QoS demands

Masayoshi Shimamura (Tokyo Institute of Technology, Japan); Hiroaki Yamanaka (National Institute of Information and Communications Technology, Japan); Yoshiyuki Uratani (Tokyo Institute of Technology, Japan); Akira Nagata (Kyushu Institute of Technology, Japan); Shuji Ishii (National Institute of Information and Communications Technology, Japan); Katsuyoshi Iida (Tokyo Institute of Technology, Japan); Eiji Kawai (National Institute of Information and Communications Technology, Japan); Masato Tsuru (Kyushu Institute of Technology, Japan) () (-)

YouTube Traffic Content Analysis in the Perspective of Clip Category and Duration

Jie Li (Acreo Swedish ICT AB, Sweden); Hantao Wang (Ericsson AB, Sweden); Andreas Aurelius (Lund University, Sweden); Manxing Du (ICT Sweden Acreo AB and

Lund University, Sweden); Åke Arvidsson (Ericsson, Sweden); Maria Kihl (Lund University, Sweden)

Weighted Nearest Valid Motion Vector Averaging for Spatial Motion Vector Recovery in Wireless HD Video Transmission using H.264 over WLANs

Kevin Gatimu (Oregon State University, USA); Ben Lee (Oregon State University, USA); Tae-Wook Lee (LG Display Co., Ltd., LCD Laboratory, Korea); Chang-Gone Kim (LG Display Co., Ltd., Korea); Jone-Keun Shin (LG Display Co., Ltd., LCD Laboratory, Korea)

Poster Session

Flat identifier to locator mapping scheme in the global Internet

Jungim Kim (Electronics and Telecommunications Research Institute, Korea); Tae-Ho Lee (ETRI, Korea); Heeyoung Jung (Electronics and Telecommunications Research Institute, Korea)

HLA - A Hierarchical Layer Application for OpenFlow Management Abstraction

Marc Koerner (Technische Universitaet Berlin, Germany); Herbert Almus (Technische Universitaet Berlin, Germany)

An Approach for QoS Constraint Networks in Cloud Environments

Marc Koerner (Technische Universitaet Berlin, Germany); Alexander Stanik (Technische Universität Berlin, Germany); Andreas Kliem (Technische Universität Berlin, Germany)

CogTag: Cognitive Tags Framework for New Generation Internet Beyond IP & MPLS

Yue Wu (Shanghai Jiaotong University, P.R. China); Zhangyin Qian (Shanghai Jiao Tong University, P.R. China); Michel Riguidel (Telecom Paristech, France); Gongliang Chen (Shanghai Jiao Tong University, P.R. China)

Towards Cloud-Based Architectures for Robotic Applications Provisioning

Fatima Zahra Errounda (Concordia University, Canada); Fatna Belqasmi (Concordia University, Canada); Roch Glitho (Concordia University, Canada)

An Evaluation on Enterprise WLAN Techniques

Jaegook Lee (POSTECH, Korea); Young-Joo Suh (Pohang University of Science and Technology (POSTECH), Korea); Chansu Yu (Cleveland State University, USA)

A Fully Homomorphic Encryption scheme with Symmetric Keys with Application to Private Data Processing in Clouds

Chandra Prakash Gupta (Rajasthan Technical University, India); Iti Sharma (Rajasthan Technical University, India)

DCAR Coding Gain Modeling and Analysis

Cao Vien Phung (Vietnam National University, Vietnam); Thuong Van Vu (Université Pierre et Marie Curie, France); Thi Mai Trang Nguyen (Université Pierre et Marie Curie, France)

Improving IEEE 802.11 PSM for Smartphones by Exploiting Hidden Tail-time

Young Deok Park (Pohang University of Science and Technology (POSTECH), Korea); Kyoung-Hak Jung (Pohang University of Science and Technology (POSTECH), Korea); Young-Joo Suh (Pohang University of Science and Technology (POSTECH), Korea)

A Contention/Collision Resolution Scheme for Large- Scale Sensor Networks based on IEEE 802.15.4

Hyo Ryun Lee (POSTECH, Korea); Kyoung-Hak Jung (Pohang University of Science and Technology (POSTECH), Korea); Young-Joo Suh (Pohang University of Science and Technology (POSTECH), Korea)

Content-Centric Networking for Telematics Services

Taeyeol Jeong (POSTECH, Korea); James W. Hong (POSTECH, Korea)