

Technical Sessions

July 3, 2018 (Tuesday)

ORAL SESSION 1A (13:00-14:30, Aplaus)

DroneCAN 2018-I

Chair: Hwangnam Kim (Korea University)

[O1A-1] devKopter, Multicopter Development Platform for Engineers

Minwoo Kim and Bosung Lee (Korea Aerospace Research Institute, Korea)

[O1A-2] Simultaneous Attack on Drone and GCS in UAV Systems

Jaemin Yu, Byeong-Moon Cho and Kyung-Joon Park (DGIST, Korea); Hwangnam Kim (Korea University, Korea)

[O1A-3] Unmanned Aerial System Traffic Management with WAVE Protocol for Collision Avoidance

Jong-Hong Park, Sungchan Choi, Jaeho Kim and Kwang-Ho Won (Korea Electronics Technology Institute, Korea)

[O1A-4] Small Drone Development for Public Service Relating to Korean PPI

Yong Wun Jung, Wanggu Kang and In Seong Hwang (KARI, Korea)

ORAL SESSION 1B (13:00-14:30, Bravo)

IWMIL2018

Chair:

[O1B-1] Rank Prediction for Portfolio Management Using Artificial Neural Networks

Jiyoon Bae, Hyungbin Yun, Ghudae Sim and Junhee Seok (Korea University, Korea)

[O1B-2] A Comparison of Penalized Regressions for Estimating Directed Acyclic Networks

Kyumin Lee, SungWon Han and HyungBin Yun (University of Korea, Korea)

[O1B-3] Indoor Semantic Segmentation for Robot Navigating on Mobile

Wonsuk Kim and Junhee Seok (Korea University, Korea)

[O1B-4] Detecting Selfish Backoff Attack in IEEE 802.15.4 CSMA/CA Using Logistic Classification

Joongheon Kim and Kyeong Seon Kim (Chung-Ang University, Korea)

[O1B-5] Classifier Comparison for Failure Detection of Induction Motors Using Current Signal

GyuBeom Han and Jong-Kook Kim (Korea University, Korea)

ORAL SESSION 1C (13:00-14:30, Ceremonie)

IWFSO & IWQIT

Chair:

[O1C-1] BER Analysis of Wavelength Division Multiplexing-Based Multiple Beam Scheduling Scheme Based on Gamma Approximation Channel

Sung Sik Nam and Ju-Hyung Lee (Korea University, Korea); Changseok Yoon (Korea Electronics Technology Institute, Korea); Young-Chai Ko (Korea University, Korea)

[O1C-2] Trajectory Optimization of Energy Efficient FSO-UAV with Atmospheric and Geometric Loss

Ju-Hyung Lee (Korea University, Korea); Ki-Hong Park and Mohamed-Slim Alouini (King Abdullah University of Science and Technology (KAUST), Saudi Arabia); Young-Chai Ko (Korea University, Korea)

[O1C-3] Impact of Both Nonzero Boresight and Jitter Pointing Error on Outage Capacity of FSO Communication Systems over Strong Turbulence

Kug-Jin Jung, Sung Sik Nam and Young-Chai Ko (Korea University, Korea)

[O1C-4] Efficient Reconciliation Protocol with Polar Codes for Quantum Key Distribution

Sunghoon Lee and Jun Heo (Korea University, Korea)

[O1C-5] An Introduction to Fault-Tolerant Quantum Computation and Its Overhead Reduction Schemes

IlKwon Sohn and Jun Heo (Korea University, Korea)

[O1C-6] Implementation of Plug & Play Quantum Key Distribution Protocol

Byungkyu Ahn, Jinyoung Ha and Youngjin Seo (Korea University, Korea); Jeonghwan Shin and Kyungwoon Lee (KT, Institution of Convergence Technology, Korea); Jun Heo (Korea University, Korea)

ORAL SESSION 2A (14:40-16:10, Aplaus)

DroneCAN 2018-II

Chair: Kyung-Joon Park (DGIST)

[O2A-1] Geolocation Based Routing Protocol for Flying Adhoc Networks

Sungchan Choi, Hassen Redwan Hussen, Jong-Hong Park and Jaeho Kim (Korea Electronics Technology Institute, Korea)

[O2A-2] Active Decoupling Control for a Planetary Coaxial Helicopter Using Force Feedback

Brijith Balakrishnan (National Institute of Technology Karnataka, India); G Shamrao and Aditya R (ISRO SATELLITE CENTRE, India); Narendranath S (National Institute of Technology Karnataka, India); Venkatesha Prasad (Delft University of Technology, The Netherlands); Sujay Narayana (TU Delft, The Netherlands)

[O2A-3] Study on the Network Architectures for Message Ferry Networks with Multiple UAVs

Mehdi Harounabadi (Ilmenau University of Technology, Germany); Martin Bocksberger (TU Ilmenau, Germany); Andreas Mitschele-Thiel (Ilmenau University of Technology, Germany)

[O2A-4] Dynamic Detection-Tracking Switching

Bruno Andries and Junhyeon Park (Korea Advanced Institute of Science and Technology, Korea); Sung Ju Hwang (KAIST, Korea); Minwoo Kim (Korea Aerospace Research Institute, Korea)

[O2A-5] Performance Analysis of MANET Routing Protocols for UAV Communications

Hassen Redwan Hussen, Sungchan Choi, Jong-Hong Park and Jaeho Kim (Korea Electronics Technology Institute, Korea)

ORAL SESSION 2B (14:40-16:10, Bravo)

IWIV2018

Chair: Dong Seog Han (Kyungpook National University)

[O2B-1] Real-time Drowsiness Detection Algorithm for Driver State Monitoring Systems

Jang Woon Baek (ETRI, Korea)

[O2B-2] Radar and Vision Sensor Fusion for Object Detection in Autonomous Vehicle Surroundings

Kim Jihun (Kyungpook National University, Korea); Ben Senouci (ECE Paris, France); Dong Seog Han (Kyungpook National University, Korea)

[O2B-3] Performances Evaluation Study of Some VANET Communication Technologies for Smart and Autonomous Vehicles

Ben Senouci (ECE Paris, France); Yasser Abdelaziz Dahou Djilali and Yassine Bakhti (Telecommunication and Information Technology Institute, Algeria); Belkacem Kouninef (Laboratoire LaRATIC, INTTIC of Oran Algeria, Algeria)

[O2B-4] Vehicular Acceleration Advisory Algorithm Using V2V Communication in Highway Junction Point

Kwang-Wook Yun, Hyeong-Geon Kim, Joonho Kwon, Han-You Jeong and Yoon-Ho Choi (Pusan National University, Korea)

[O2B-5] Vehicle Color Recognition via Representative Color Region Extraction and Convolutional Neural Network

Kwangju Kim and Pyong-Kun Kim (ETRI, Korea); Kil-Taek Lim (Electronics and Telecommunications Research Institute, Korea); Yun Su Chung (Electronics and Telecommunication Research Institute, Korea); Yun-Jeong Song and Soo-In Lee (Electronics and Telecommunications Research Institute, Korea); Doo-Hyun Choi (Kyungpook national university, Korea)

ORAL SESSION 3A (16:30-18:00, Aplus)

OWLED & 6G Workshop

Chair:

[O3A-1] Fuzzy Logic Based Network Selection in Hybrid OCC/Li-Fi Communication System

Moh Khalid Hasan, MD Shahjalal, Mostafa Zaman Chowdhury, Md. Tanvir Hossan and Yeong Min Jang (Kookmin University, Korea)

[O3A-2] OCC Protocol for Connected LEDs in Optical Camera Communication Networks

Thanh Luan Vu, Minh Duc Thieu, Van Thang Nguyen and Yeong Min Jang (Kookmin University, Korea)

[O3A-3] Error Mitigation in Optical Camera Communication Based Indoor Positioning System

MD Shahjalal, Moh Khalid Hasan, Md. Tanvir Hossan, Mostafa Zaman Chowdhury and Yeong Min Jang (Kookmin University, Korea)

[O3A-4] An Implementation of Binary Frequency Shift On-Off Keying Modulation for Optical Camera Communication

Van Thang Nguyen, Nam Tuan Le, Thanh Luan Vu, Minh Duc Thieu and Yeong Min Jang (Kookmin University, Korea)

[O3A-5] New Waveforms for Selective-RoI-Signaling High-rate Optical Camera Communication System

Minh Duc Thieu (Kookmin University, Korea); Trang Nguyen (Kookmin University, Seoul, South Korea, Korea); Thanh Luan Vu, Van Thang Nguyen and Yeong Min Jang (Kookmin University, Korea)

ORAL SESSION 3B (16:30-18:00, Bravo)

Quality of Service

Chair:

[O3B-1] Leveraging OTT and ISP Cooperation to Enhance End to End QoS by Exchanging Valuable Resources

Michele Scarlato (University of Cagliari, Italy); Jordi Ortiz (University of Murcia, Spain); Cristian Perra (University of Cagliari, Italy); Antonio Fernando Skarmeta Gomez (University of Murcia, Spain)

[O3B-2] Towards Application-Aware Networking: ML-based End-to-End Application KPI/QoE Metrics Characterization in SDN

Hamed Z Jahromi, Andrew Hines and Declan Delaney (University College Dublin, Ireland)

[O3B-3] Enhanced Failure Recovery Mechanism Using OpenState Pipeline in SDN

Abdullah Soliman Alshra'a (Technische Universität Ilmenau, Germany); Parag Sewalkar and Jochen Seitz (Technische Universität Ilmenau, Germany)

[O3B-4] Integration of Multiple IP Domains in Low-cost and Security-oriented Small Networks

S Kodama and R Nakagawa (Tokyo University of Science, Japan)

July 4, 2018 (Wednesday)

ORAL SESSION 4A (09:20-10:50, Aplus)

Future Internet and Network

Chair:

[O4A-1] Cooperative Spectrum Sensing Algorithm Based on Phase Compensation in Cognitive Cloud Networks

Li Wang, Xiaoxiao Wu, Shibing Zhang, Guodong Zhang and Zhihua Bao (Nantong University, P.R. China)

[O4A-2] User-Driven Smart Home Control System Based on Named Data Networking

Manxin Huang, Ru LI, Jun Fan and Xin Zhang (Inner Mongolia University, P.R. China)

[O4A-3] Path Provisioning for Fibbing Controlled Load Balanced IP Networks

Saeed Barkabi Zanjani, Kuang-Yi Li, Steven S. W. Lee and Yuan-Sun Chu (National Chung Cheng University, Taiwan)

[O4A-4] A Cache Replacement Strategy Based on Hierarchical Popularity in NDN

YingQi Li, Meiju Yu and Ru LI (Inner Mongolia University, P.R. China)

[O4A-5] Fair and Efficient Channel Observation-Based Listen-Before Talk (CoLBT) for LAA-WiFi Coexistence in Unlicensed LTE

Rashid Ali (WIN LAB., Yeungnam University & WINLab, Korea); Nurullah Shahin and Arslan Musaddiq (Yeungnam University, Korea); Byung-Seo Kim (Hongik University, Korea); Sung Won Kim (Yeungnam University, Korea)

ORAL SESSION 4B (09:20-10:50, Bravo)

SDN and Network Virtualization

Chair:

[O4B-1] Distributed NFV Orchestration in a WMN-based Disaster Network

Gregor Frick, Auberlin Paguem Tchinda, Ulrich Trick and Armin Lehmann (Frankfurt University of Applied Sciences, Germany); Bogdan Ghita (Plymouth University, United Kingdom (Great Britain))

[O4B-2] Relay-Based iBGP Multicasting in Software Defined Networks

Ukemeobong Bassey (University of Ottawa, Canada); Amiya Nayak (SITE, University of Ottawa, Canada)

[O4B-3] MACsec Extension over Software-Defined Networks for In-Vehicle Secure Communication

Ju-Ho Choi and Sung-Gi Min (Korea University, Korea); Youn-Hee Han (Korea University of Technology and Education, Korea)

[O4B-4] Design of an SDN Security Mechanism to Detect Malicious Activities

Christopher Mansour and Danai Chasaki (Villanova University, USA)

[O4B-5] An Efficient Label-Based Packet Forwarding Scheme in Software Defined Networks

Yeim-Kuan Chang, Yi-Tsung Huang and Yu-To Chen (National Cheng Kung University, Taiwan)

ORAL SESSION 4C (09:20-10:50, Ceremonie)

Machine Learning and Computational Intelligence

Chair:

[O4C-1] Development of a Hybrid Decision-Making Method Based on a Simulation-Genetic Algorithm in a Web-Oriented Metallurgical Enterprise Information System

Konstantin Aksyonov and Anna Antonova (Ural Federal University, Russia)

[O4C-2] Non Keyword-Based Music Retrieval Using Social Tags

Chang Bae Moon, Jong Yeol Lee, Dong Seong Kim and Byeong Man Kim (Kumoh National Institute of Technology, Korea)

[O4C-3] Automatic Sleep Stage Classification Using EEG and EMG Signal

Hyung-jik Kim and Sunwoong Choi (Kookmin University, Korea)

[O4C-4] C4.5 Decision Tree Machine Learning Algorithm Based GIS Route Identification

Anurag Yadav (CDOT, India); Pankaj Kumar Dalela, Prashant Bansal, Vipin Tyagi and Arun Yadav (C-DOT, India); Sabyasachi Majumdar (Research Engineer, India)

[O4C-5] UAV Detection Using the Cepstral Feature with Logistic Regression

Yoojeong Seo (Soongsil University, Korea); Beomhui Jang (University of Soongsil, Korea); Jangwon Jung and Sungbin Im (Soongsil University, Korea)

ORAL SESSION 5A (13:50-15:20 , Aplaus)

Smart Grid and Green Internets

Chair:

[O5A-1] Study on an Energy-IoT Service Platform for Energy Saving in Legacy Manufacturing Site

Hyo-Sub Choi (Korea Electronics Technology Institute, Korea); Kyeo-rae Yeom (KETI(Korea Electronics Technology Institute), Korea)

[O5A-2] Routing Redundancy Reducing Method for U-Bus Air Using Cloud Cooperation

Hiroshi Sanada (The University of Electro-Communications, Japan); Takuya Kawata (Tokyo Gas, Japan); Reina Aizawa (Tokyo Gas Co., Ltd, Japan); Takeo Fujii (The University of Electro-Communications, Japan)

[O5A-3] Modeling of Management System for Hydroelectric Power Generation from Water Flow

Kwang-Soon Choi and Ji-Woon Yeom (Korea Electronics Technology Institute, Korea)

[O5A-4] Prediction of Manufacturing Plant's Electric Power Using Machine Learning

Kyeo-rae Yeom and Hyo-Sub Choi (KETI(Korea Electronics Technology Institute), Korea)

[O5A-5] Path Similarity Based Spurious Retransmission Minimization over Flooding Based Routing in UWSN

Yeongjoon Bae, Sungwon Lee, Yonghwan Jeong and Dongkyun Kim (Kyungpook National University, Korea)

ORAL SESSION 5B (13:50-15:20 , Bravo)

Internet of Things (IoT) - I

Chair:

[O5B-1] Design and Evaluation of a Hybrid D2D Discovery Mechanism in 5G Cellular Networks
Mingfu Li and Hsin-Ling Tsai (Chang Gung University, Taiwan)

[O5B-2] Reduction Scheme for Sensor-Data Transmission on a Big Data Streaming Platform
S. t. Cheng and Yi-Wei Huang (National Cheng Kung University, Taiwan)

[O5B-3] Trust-based Composition of M2M Application Services
Besfort Shala, Ulrich Trick and Armin Lehmann (Frankfurt University of Applied Sciences, Germany); Bogdan Ghita and Stavros Shiaeles (Plymouth University, United Kingdom (Great Britain))

[O5B-4] Topic Based Clustering of Vehicles for Information Retrieval and Sharing
Lijun Dong (Huawei, USA); Richard Li (Huawei USA, USA)

[O5B-5] Improving Physical Layer Security of NOMA Networks by Using Opportunistic Scheduling
Kyusung Shim (Hongik University, Korea); Tri Nhu Do (Hongik University, Sejong Campus, Korea); Beongku An (Hongik University, Korea)

ORAL SESSION 5C (13:50-15:20 , Ceremonie)

Wireless and Communication Network-I

Chair:

[O5C-1] Tunnel-Based EAP Effective Security Attacks-WPA2 Enterprise Evaluation and Proposed Amendments

Mohamed Abo-Soliman (Nile University, Egypt); Marianne Azer (National Telecommunication Institute + Nile University, Egypt)

[O5C-2] Information and Energy Cooperation in Overlay Hierarchical Cognitive Radio Networks

Kun-Yueh Hsieh and Fan-Shuo Tseng (National Sun Yat-sen University, Taiwan); Meng-Lin Ku (National Central University, Taiwan); Chao-Yuan Hsu (Chunghwa Telecom Co., Ltd)

[O5C-3] Construction of Frequency-Hopping System Using RF Communications Trainer

Eisuke Kudoh, Hiroya Fujisawa and Kohya Satoh (Tohoku Institute of Technology, Japan)

[O5C-4] Robust Spectrum Sensing Based on Hyperbolic Tangent in Gaussian and Non-Gaussian Noise Environments

Hua Qu, Xiguang Xu, Jihong Zhao, Feiyu Yan and Weihua Wang (Xi'an Jiaotong University, P.R. China)

[O5C-5] Relay Position Considering Interference from Other Sub-Channels in D2D Group-casting Systems

Eul Hyeon Go, Soyi Kim and Minjoong Rim (Dongguk University, Korea); Junghwan Kim and YoonSeok Song (University of Dongguk, Korea)

ORAL SESSION 6A (15:50-17:20 , Aplaus)

Network Security and Management-I

Chair:

[O6A-1] An Ahead-of-Time Compiler System for the IoT-Cloud Virtual Machine

Junho Jeong (Electronic Commerce Institute, Dongguk University Gyeongju Campus, Korea); Yunsik Son (Dongguk University, Korea); YangSun Lee (Seokyeong University, Korea)

[O6A-2] False Secret Keys to Disturb Power Analysis

Seungkwang Lee and Taesung Kim (ETRI, Korea)

[O6A-3] A Comparative Study of Off-Line Deep Learning Based Network Intrusion Detection

Jiaqi Yan and Dong Jin (Illinois Institute of Technology, USA); Cheol Won Lee (National Security Research Institute, Korea); Ping Liu (Illinois Institute of Technology, USA)

[O6A-4] Memory-Efficient Random Forest Generation Method for Network Intrusion Detection

Seok-Hwan Choi, Donghyun Ko, Seonjin Hwang and Yoon-Ho Choi (Pusan National University, Korea)

[O6A-5] Blockchain Based Billing System for Electric Vehicle and Charging Station

Seohyeon Jeong, Yongwoon Jang and Sungrae Cho (Chung-Ang University, Korea)

ORAL SESSION 6B (15:50-17:20 , Bravo)

Internet of Things (IoT) - II

Chair:

[O6B-1] An Improved Mobility Support Mechanism for Downward Traffic in RPL

Min SoonWoong (Pusan National University & Electrical and Computer Engineering, Korea); Sang-Hwa Chung and YuVin Ha (Pusan National University, Korea)

[O6B-2] Performance Evaluation of Centralized and Distributed Control Methods for Efficient Registration of Massive IoT Devices

Nurullah Shahin (Yeungnam University, Korea); Rashid Ali (WIN LAB., Yeungnam University & WINLab, Korea); Seung Yeob Nam and Young-Tak Kim (Yeungnam University, Korea)

[O6B-3] Fuzzy Energy Efficient Routing for Internet of Things (IoT)

Babar Shah (Zayed University, United Arab Emirates)

[O6B-4] 3D Character Model Recognition Method with Cartoon Image Using Deep Learning Technology

Ruichen Jin and Jongweon Kim (Sangmyung University, Korea)

[O6B-5] High-level Architectural Design of Management System for the Internet of Underwater Things

Khamdamboy Urunov (Kookmin University, Korea); Soo-Young Shin (University of Kookmin, Korea); Jung-Il Namgung and Soo-Hyun Park (Kookmin University, Korea)

ORAL SESSION 6C (15:50-17:20 , Ceremonie)

Wireless and Communication Network-II

Chair:

[O6C-1] An Efficient Backoff Scheme in Wireless Sensor Networks

Batbayar Khandish and EunSik Lee (Yonsei University, Wonju, Korea); Hyun Park (Yonsei University, Korea); Jung-Bong Suk (Yonsei University, Wonju, Korea)

[O6C-2] A Study on the Effect of Moving Small Cell in Heterogeneous Networks with Interference Cancellation

In Seok Kang (Myongji University, Korea); Sarang Han and Cheolwoo You (Myongji University, Korea)

[O6C-3] A Machine-Learning-Based Handover Prediction for Anticipatory Techniques in Wi-Fi Networks

Stefano Tomasin and Mauro Feltrin (University of Padova, Italy)

[O6C-4] Optimization-Based Resource Management Strategies for 5G C-RAN Slicing Capabilities

Frank Yeong-Sung Lin and Chiu-Han Hsiao (National Taiwan University, Taiwan); Yean-Fu Wen (National Taipei University, Taiwan); Ya-Syuan Wu (National Taiwan University, Taiwan)

[O6C-5] User Detection Performance Analysis for Grant-Free Uplink Transmission in Large-Scale Antenna Systems

Jonghyun Kim, Kyung Lin Ryu and Kwang Soon Kim (Yonsei University, Korea)

[O6C-6] Detectors for Intent ICC Security Vulnerability with Android IDE

Xianyong Meng and Kai Qian (Kennesaw State University, USA); Prabir Bhattacharya (Morgan State University, USA); Dan Chia-Tien Lo (Kennesaw State University, USA)

July 5, 2018 (Thursday)

ORAL SESSION 7 (09:20-10:50, Aplaus)

Wireless and Communication Network-III

Chair:

[O7-1] Multichannel-Sniffing-System for Real-World Analysing of Wi-Fi-Packets

Kristof Friess (Erfurt University of Applied Sciences, Germany)

[O7-2] AL-FEC Application on NGMN-Edge Computing Integrated Systems

Christos J Bouras (University of Patras CTI&P-Diophantus & University of Patras, Greece);
Nikolaos Kanakis (University of Patras, Greece)

[O7-3] Beamformer Design and Power Allocation for Two-Cluster Two-User NOMA System

Carlo Piccoli and Stefano Tomasin (University of Padova, Italy); Eduard Jorswieck (TU
Dresden, Germany)

[O7-4] Joint User Association and RRH Clustering in Cloud Radio Access Networks

Hussein Taleb (ESIB, Saint-Joseph University, Lebanon); Melhem El Helou (Saint Joseph
University of Beirut, Lebanon); Kinda Khawam (Université de Versailles, France); Samer Lahoud (ESIB,
Saint-Joseph University of Beirut, Lebanon); Steven Martin (Paris-Sud University, France)

[O7-5] Pseudo-Random Beamforming with Beam Selection for Improving Physical-Layer Security

Woong Son, Bang Chul Jung and Choul-Young Kim (Chungnam National University, Korea);
Jongmin Kim (KAIST, Korea)

[O7-6] Downlink Multiuser Superposition Using QPSK and 256-QAM in Mobile Communication
Systems

Koki Senda and Hiroyuki Otsuka (Kogakuin University, Japan)

ORAL SESSION 8 (11:10-12:40, Aplaus)

Cloud Computing and Networks

Chair:

- [O8-1] Cloud-based Microservices to Decision Support
Konstantin Aksyonov, Andrew Kondratyev, Natalia Buravova and Olga Aksyonova (Ural Federal University, Russia)
- [O8-2] Monitoring of IoT Data for Reducing Network Traffic
Jeongjin Lee, Gunjae Yoon and Hoon Choi (Chungnam National University, Korea)
- [O8-3] Selective Encryption for 3D Printing Model in DCT Domain
Giao Pham Ngoc, Jin-Hyeok Park and Oh-Heum Kwon (Pukyong National University, Korea); Ha-Joo Song (PuKyong National University, Korea); Suk-Hwan Lee (TongMyong University, Korea); Kwang-Seok Moon (Pukyong National University, Korea); Yeong-Rak Choi (Social Network Communication, Korea); Seok Tae Kim and Ki-Ryong Kwon (Pukyong National University, Korea)
- [O8-4] Multi-Objective Mixed Integer Linear Programming Model for VM Placement to Minimize Resource Wastage in a Heterogeneous Cloud Provider Data Center
Rym Regaieg, Mohamed Koubaa, Evans Osei-Opoku and Taoufik Aguilí (Université Tunis El Manar - Ecole Nationale d'Ingénieurs de Tunis - Laboratoire SYStèmes de COMMunications)
- [O8-5] Appliance Type Constraint Design for Demand Response Smart Grid Systems
Yongwoon Jang, Seohyeon Jeong and Sungrae Cho (Chung-Ang University, Korea)
- [O8-6] Cloud Assisted Overlay Routing
Suat Mercan (American University of the Middle East, Kuwait)

ORAL SESSION 9 (14:00-15:30, Aplaus)

Wireless Sensor Networks-I

Chair:

- [O9-1] Joint Clustering and Routing Protocol for 3-D Underwater Acoustic Sensor Network
Sarang Dhongdi, Aashray Bhandari, Jayati Singh, Spandan Kachhadia and Varad Joshi (BITS Pilani K K Birla Goa Campus, India)

[O9-2] Novel Query Tree Algorithm Based on Reservation and Time-Divided Responses to Support Efficient Anti-Collision Protocol

Ji Hwan Choi (Samsung Electronics, Korea); Hyuckjae Lee (Information and Communications University, Korea)

[O9-3] Enhancements of IEEE802.15.4e DSME Model of Wireless Sensor Networks

Sameer K. Alsudany, Said Boussakta and Martin Johnston (Newcastle University, United Kingdom (Great Britain))

[O9-4] Performance Analysis of Hybrid-based Packet Forwarding in Wireless Sensor Networks

Irvanda Kurniadi Virdaus (Chosun University, Korea); Moonsoo Kang and Chung Ghiu Lee (Chosun University, Korea)

[O9-5] To Improve the Convergence and Parallelism of Gauss-Seidel Routing Algorithm with Finite Element Method for Wireless Sensor Networks

Ren-Song Ko (National Chung Cheng University, Taiwan)

ORAL SESSION 10 (16:00-17:30, Aplaus)

Network Applications

Chair:

[O10-1] Performance Evaluation of Community Detection Algorithms Based on Relationship Strength Measurement

Soom Behera and Haoye Lu (University of Ottawa, Canada); Amiya Nayak (SITE, University of Ottawa, Canada)

[O10-2] Mobility Robustness Optimization Based on Radio Link Failure Prediction

Yiwei Ma (Shanghai Maritime University, P.R. China); Jiann-Liang Chen (National Taiwan University of Science and Technology, Taiwan); Hao-Kai Lin (National Taiwan University of Science & Technology, Taiwan)

[O10-3] Performance Evaluation of Kademia in Mobile Ad Hoc Networks

Mohammad Al mojamed (UMM AL-QURA University, Saudi Arabia); Awadh Al-shehri (Technical and Vocational Training Corporation, Saudi Arabia)

[O10-4] A Sequential Auction Game for QoS-aware User Association in Heterogeneous Cellular Networks

Gongchao Su (Faculty of Information Engineering, Shenzhen University, P.R. China)

[O10-5] A Novel Approach to Make Presentation Using Powerpoint Without Projector

Daniel Silli Bataona (State Polytechnic of Kupang, Indonesia); Rinaldi Munir (Bandung Institute of Technology, Indonesia); Tutun Juhana (Institut Teknologi Bandung, Indonesia); Gloria Christiana Manulangga and Jemsrado Sine (State Polytechnic of Kupang, Indonesia)

[O10-6] Analysis of Call Detail Records of International Voice Traffic in Mobile Networks

Zagroz Aziz (Czech Technical University, Czech Republic); Robert Bestak (Czech Technical University in Prague, Czech Republic)

July 6, 2018 (Friday)

ORAL SESSION 11A (09:20-10:50, Aplus)

Network Security and Management-II

Chair:

[O11A-1] SigPloit: A New Signaling Exploitation Framework

Loay Abdelrazek (Nile University, Egypt); Marianne Azer (National Telecommunication Institute + Nile University, Egypt)

[O11A-2] Adaptive Broadcast Routing Assignment Algorithm for Blockchain Synchronization Services

Frank Yeong-Sung Lin and Chiu-Han Hsiao (National Taiwan University, Taiwan); Yean-Fu Wen (National Taipei University, Taiwan); Yang-Che Su (National Taiwan University, Taiwan)

[O11A-3] Session Key Agreement for End-to-End Security in Time-Synchronized Networks

Qinghua Wang (Kristianstad University SWEDEN, Sweden); Xin Huang (Xi'an Jiaotong-Liverpool University, P.R. China); Dawit Mengistu (Kristianstad University, Sweden)

[O11A-4] Synchronization of Complex Dynamical Networks with Randomly Coupling via Nonfragile Control

Fehrs Adu-Gyamfi (University of Electronic Science and Technology of China, P.R. China); Yuhua Cheng and Chun Yin (University of Electronic Science and Technology of China & School of Automation Engineering, P.R. China); Shouming Zhong (University of Electronic and Technology of China, P.R. China)

ORAL SESSION 11B (09:20-10:50, Bravo)

Wireless and Communication Network-IV

Chair:

[O11B-1] Machine Learning Based Link-to-System Mapping for System-Level Simulation of Cellular Networks

Eunmi Chu, Hyuk Ju Jang and Bang Chul Jung (Chungnam National University, Korea)

[O11B-2] Impact of SC-FDMA and Pilots on PAPR and Performance of Power Domain NOMA-UFMC System

Ajit Singh (Defence Institute of Advanced Technology Pune, India); Krishna K Naik (Defence Institute of Advanced Technology, India); Suthikshn Kumar (DIAT, India)

[O11B-3] Low Complexity Polar Code Decoder for HARQ Application

Huang Chang Lee (Chang Gung University, Taiwan); Guan-Chun Liao (Chang Gung University, Taoyuan, Taiwan)

[O11B-4] Research on Polar Code Construction Algorithms Under Gaussian Channel

Jianping Li, Man Hu and Zhiyuan Cheng (Communication University of China, P.R. China)

[O11B-5] Multipath Selection Method for Maximum Ratio Combining in Underwater Acoustic Channels

Hojun Lee (Inha University, Korea); Jongmin An (University of Inha, Korea); Jongpil Seo and Jaehak Chung (Inha University, Korea)

ORAL SESSION 11C (09:20-10:50, Ceremonie)

Wireless Sensor Networks-II

Chair:

[O12C-1] A Magnetic Field Detection and Localization Scheme for Internet of Underwater Things

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

[O12C-2] Localization of Submerged Sensors with a Single Beacon for Non-Parallel Planes
State

Anisur Rahman and Vallipuram Muthukkumarasamy (Griffith University, Australia)

[O12C-3] A Multi-node Rechargeable Algorithm via Wireless Charging Vehicle with Optimal
Traveling Path in Wireless Rechargeable Sensor Networks

Fan Zhang (Hohai University, P.R. China); Jie Zhang (HoHai University, P.R. China); Yujie Qian
(Hohai University, P.R. China)

[O12C-4] A Probabilistic Model of File Transfer Time Based on Markov Chain in Vehicular Ad
Hoc Networks

Xinyu Wu, Meiju Yu and Ru LI (Inner Mongolia University, P.R. China)

[O12C-5] Inductive Coupling Characteristics of Nano-crystalline Alloy for Electric Vehicle PLC

Kyung-Rak Sohn (Korea Maritime and Ocean University, Korea)

Poster Session

July 5, 2018 (Thursday)

Poster Session 1 (09:20-10:50, Conference Exhibition)

- [P1-1] Hello-Message Transmission-Power Control for Network Self-Recovery in FANETs
Geon-Hwan Kim, Imtiaz Mahmud and You-Ze Cho (Kyungpook National University, Korea)
- [P1-2] Throughput Analysis of Dynamic Multi-Hop Network Under High Traffic Load
Yusuke Sunada (The University of Electro-Communications & Advanced Wireless & Communication Research Center, Japan); Koichi Adachi (The University of Electro-Communications, Japan); Yasushi Yamao (The University of Electro-Communications, Japan)
- [P1-3] A Design of Integrated LDM Information for Intersection Safety
Shin-Kyung Lee (ETRI, Korea); Jeong-Woo Lee and Hyun Seo Oh (ETRI, Korea)
- [P1-4] Performance Analysis of WAVE Communication for Emergency Broadcasting in Metro Environments
Seong-Keun Jin, Soo Hyun Jang, Dae Kyo Shin, Sang Hun Yoon and Han-Gyun Jung (Korea Electronics Technology Institute, Korea)
- [P1-5] A Quality Selection Mechanism Using a Deep Q-Network for Seamless Video Streaming Services
Iseul Kim, Seongjun Hong and Sungwook Jung (School of Computer Science and Engineering, Kyungpook National University, Korea); Kyungshik Lim (Kyungpook National University, Korea)
- [P1-6] Indoor Localization Using Digital Auto Zoom of a Smart-phone Camera and Integrated Sensors
Yoonsung Chae, Nguyen Duy Thong, Sangcheol Park and Youngil Park (Kookmin University, Korea)
- [P1-7] A Hybrid Optical Wireless Systems for Simultaneous Service of VLC and OCC
Nguyen Duy Thong, Yoonsung Chae, Sangcheol Park and Youngil Park (Kookmin University, Korea)
- [P1-8] Performance Improvement of Optical Satellite Communications by Interleaved IEEE 802.11

LDPC

Nguyen Duy Thong and Youngil Park (Kookmin University, Korea)

[P1-9] Delay Analysis of Fixed Multi-Thread Algorithm for DBA in Long Reach PON

Nguyen Khac Binh, Byeong ho Kang and Su-il Choi (Chonnam National University, Korea)

[P1-10] Diversity-Controlled Multi-User Superposition Transmission for Uplink Cellular Networks

Jeong Seon Yeom (Chungnam National University, Korea); Han Seung Jang (Korea Advanced Institute of Science and Technology, Korea); Bang Chul Jung (Chungnam National University, Korea)

[P1-11] Validation of MPTCP Performance Enhancement Algorithm in Real PS-LTE Environment

Byunggoo Lee (Yonsei University, Korea); Seungbeom Song (Yonsei University & Electrical & Electronic Engineering, Korea); Seok Ryu and Jaiyong Lee (Yonsei University, Korea)

[P1-12] Low Complexity Beam Searching Algorithm Using Asymptotic Property of Massive MIMO Systems

Heeyoung Kim and Jaemin Jung (University of Yonsei, Korea); Seongbae Han (Yonsei University, Korea); Seokki Kim and SeungKwon Baek (ETRI, Korea); Sooyong Choi (Yonsei University, Korea)

[P1-13] Support for Edge Computing in the 5G Network

Young-il Choi and Noik Park (ETRI, Korea)

[P1-14] A Physical Layer Security-based Transmit Antenna Selection Scheme for NOMA Systems

Kyusung Shim and HyukChun Oh (Hongik University, Korea); Tri Nhu Do (Hongik University, Sejong Campus, Korea); Beongku An (Hongik University, Korea)

[P1-15] Narrow-Band Interference Removing Filter for Mobile Communication Systems

Hoon Kang and Jong-Seon No (Seoul National University, Korea)

[P1-16] Achievable Rate Evaluation by System Level Simulation for mmWave Based Backhaul Network Adopting In-Band Full-Duplex

Seongbae Han (Yonsei University, Korea); Jaemin Jung and Heeyoung Kim (University of Yonsei, Korea); Seokki Kim and SeungKwon Baek (ETRI, Korea); Sooyong Choi (Yonsei University, Korea)

[P1-17] Study on the Effect of LTE on the Coexistence of NB-IoT

JungHoon Oh (ETRI, Korea)

[P1-18] Uplink Scheduling Technique for the LTE System to Improve the Performance of the NB-IoT System

Hyungjin Kim, Seong Chul Cho, JungHoon Oh and Gweondo Jo (ETRI, Korea)

[P1-19] Determination of Optimum Threshold Values for NPRACH Preamble Detection in NB-IoT System

Seong Chul Cho, Hyungjin Kim and Gweondo Jo (ETRI, Korea)

[P1-20] EGE: A New Energy-Aware GPU Based Erasure Coding Scheduler for Cloud Storage Systems

Cloud Computing and Networks; Storage Networking Protocols; Internet of things (IoTs)

[P1-21] User Space Customized Recommendation Service Platform System in Mobile Edge Environment

Eung Ha Kim (ETRI, Korea)

[P1-22] Efficient Slice Allocation for Novel 5G Services

Lee Minkyung (Kyung Hee University, Korea)

[P1-23] A Study on D2D Caching Systems with Mobile Helpers

Soyi Kim and Eulhyeon Go (Dongguk University, Korea); YoonSeok Song and Hyung Joon Cho (University of Dongguk, Korea); Minjoong Rim (Dongguk University, Korea); Chung G. Kang (Korea University, Korea)

[P1-24] Threshold Secret Sharing Transmission Against Passive Eavesdropping in MIMO Wireless Network

Jungho Myung (Electronics and Telecommunications Research Institute, Korea); Taehong Kim (Chungbuk National University, Korea)

[P1-25] Performance Test of LTE-R Railway Wireless Communication at High-Speed (350 km/h) Environments

Sung-hun Lee (Kwangwoon University, Korea); Mahn-suk Yoon (Gumi Electronics & Information Technology Research Institute, Korea); Chang-Kyo Lee (Gumi Electronics and Information Technology Research Institute, Korea); Soo-Hyun Cho (Gumi Electronics & Information Technology Research Institute, Korea); Wan-jin Ko (Gumi Electronics and Information Technology Research Institute, Korea)

[P1-26] Performance Comparison of Acoustic Features for Sound Classification on Ubiquitous

Environment

Nacwoo Kim, Jungi Lee, HyunYong Lee, Seok-Kap Ko and Byung Tak Lee (ETRI, Korea)

Poster Session 2 (11:10-12:40, Conference Exhibition)

- [P2-1] Mobility Modeling and Analysis in Mobile Communication Networks
Hee-Seon Jang (Pyeongtaek University, Korea)
- [P2-2] Efficient Data Delivery Protocol Using Vehicle Mobility Information in VANETs
Yongje Shin, Hyunseok Choi, Youngju Nam and Euisin Lee (Chungbuk National University, Korea)
- [P2-3] Design and Development of a WAVE Simulator Interoperable with Traffic Simulators
Won-hwa Lee, Tae Hoon Kwon, Minjin Baek and Sang-Sun Lee (Hanyang University, Korea)
- [P2-4] Reservation-Based Cooperative Intersection Crossing Scheme for Autonomous Driving in the Intersection
Myungwhan Choi and Areeya Rubenecia (Sogang University, Korea); Hyo Hyun Choi (Inha Technical College, Korea)
- [P2-5] Maximal Ratio Combining for Long-Range Underwater Acoustic Communication in East Sea
Hyeonsu Kim (Hanyang, Korea); Sunhyo Kim (University of Hanyang, Korea); Kang-Hoon Choi and Jee Woong Choi (Hanyang, Korea); Ho Seuk Bae (Agency for Defense Development, Korea)
- [P2-6] Underwater Acoustic Communication Using Vector Sensor in KOREX-17
Sunhyo Kim (University of Hanyang, Korea); Hyeonsu Kim, Kang-Hoon Choi and Jee Woong Choi (Hanyang, Korea); Su-Uk Son (Agency for Defense Development, Korea)
- [P2-7] Investigating Influence of North Korea Threat Events on Attractiveness of South Korea for Foreign Visitors
Kyung Jin Cha, Elizaveta Srednik and Hwa Jong Kim (Kangwon National University, Korea)
- [P2-8] NFV-Based Mobile Edge Computing for Lowering Latency of 4K Video Streaming
Linh Van Ma (Chonnam National University, Korea); Van Quan Nguyen (Chonnam National University & SMMC Lab, Korea); Jaehyung Park and Jinsul Kim (Chonnam National University, Korea)
- [P2-9] Semantic Ontology-based NFV Service Modeling
Sang il Kim (KwangWoon University, Korea); Hwasung Kim (Kwangwoon University, Korea)
- [P2-10] Viewport Prediction Method of 360 VR Video Using Sound Localization Information
Eunyoung Jeong, Dongho You and ChangJong Hyun (Seoul National University of Science

and Technology, Korea); Bong-Seok Seo (Seoul National University of Science and Technology, Korea); Namtae Kim and Dong Ho Kim (Seoul National University of Science and Technology, Korea); Ye Hoon Lee (Seoul National University of Technology, Korea)

[P2-11] MPEG-DASH MPD for Tile-based Hybrid Stereoscopic 360-Degree Video Streaming
Dongho You, Eunyoung Jeong and Dong Ho Kim (Seoul National University of Science and Technology, Korea)

[P2-12] LED Color Detection of Visual-MIMO System Using Boosting Neural Network Algorithm
Partha Pratim Banik, Rappy Saha, Tae-Ho Kwon and Ki-Doo Kim (Kookmin University, Korea)

[P2-13] An Effective Classifier for DoS Attacks in Wireless Sensor Networks
Thi-Thu-Huong Le and Taehwan Park (Pusan National University, Korea); Dongkeun Cho (Pusan National University in South Korea, Korea); Ho Won Kim (Pusan National University, Korea)

[P2-14] DDoS Mitigation: Decentralized CDN Using Private Blockchain
Kyoungmin Kim, Young In You, Mookyu Park and Kyungho Lee (Korea University, Korea)

[P2-15] Route Plan Exchange Scheme Based on Block Chain
Doyoung Chung and Hae Sook Jeon (ETRI, Korea)

[P2-16] Authentication Protocol for Wearable Devices Using Mobile Authentication Proxy
Doo-Hee Hwang, Jinmyeong Shin and Yoon-Ho Choi (Pusan National University, Korea)

[P2-17] Parallel Implementation of Simeck Family Block Cipher by Using ARM NEON
Taehwan Park (Pusan National University, Korea); Hwajeong Seo (Hansung University, Korea); Chanhui Park and Ho Won Kim (Pusan National University, Korea)

[P2-18] Detection and Countermeasure of DDoS Attacks in Cloud Computing
Mahmoud Said (Nile University, Egypt); Marianne Azer (National Telecommunication Institute + Nile University, Egypt)

[P2-19] A Low Overhead Feedback Scheme of Channel Covariance Matrix for Massive MIMO Systems
Youngrok Jang (Yonsei University, Korea); Dongheon Lee (Yonsei, Korea); Sooyong Choi (Yonsei University, Korea)

[P2-20] Pilot Study of the Wi-Fi Radio Signal Attenuation Passing Throughout Various Construction Materials (Obstacles)

Tatyana Golubeva, Yevgeniy Zaitsev and Sergey Konshin (Almaty University of Power Engineering and Telecommunications, Kazakhstan); Inkar Duisenbek (Almaty University of Power Engineering and Telecommunications, Kazakhstan)

[P2-21] A Novel Dimming Approach for Both TRIAC and Wall Switch LED Lighting Systems

Yuan-Ta Hsieh, Chi-Feng Su and Hann-Huei Tsai (National Chip Implementation Center, Taiwan); Ying-Zong Juang (Chip Implementation Center, National Applied Research Laboratories, Taiwan)

[P2-22] Design and Implementation of Mobile Application Using Audio Streaming Method

Hyenki Kim (Andong National University, Korea)

[P2-23] Efficient Deployment of Service Function Chains (SFCs) in a Self-Organizing SDN-NFV Networking Architecture to Support IOT

Kwangman Ko (Sangji University, Korea); Ali Mansoor (Universiti Malaya & Computer Science and IT, Malaysia); Rodina Ahmad (Universiti Malaya, Malaysia); Soongohn Kim (Joongbu University, Korea)

Poster Session 3 (14:00-15:30, Conference Exhibition)

[P3-1] Hop Count Measurement Between Autonomous Systems Using a Combination of Active and Passive Monitoring

Nematullo Rakhmatov, Hyeonwoo Kim, Essaid Maryam and Hong Taek Ju (Keimyung University, Korea); Wooguil Pak (Keimyung Univ, Korea)

[P3-2] Research on Estimation of Equipment Sizing for Network Deployment

Geunwoo Park, Sohee Jin, Haengin Kim, Chan-ju Lee and Moon-kil Lee (Telecommunications Technology Association, Korea)

[P3-3] Software Defined Radio Controller Using Bluetooth

Hyoseok Yoon, Saet-Byeol Yu and Se-Ho Park (Korea Electronics Technology Institute, Korea)

[P3-4] Free-viewpoint Relationship Description Based Streaming Systems for Arbitrary View Switching

Seulki Song (KETI, Korea); Yonghwan Kim (Korea Electronics Technology Institute, Korea); Yong-Suk Park (Korea Electronics Technology Institute & Yonsei University, Korea); JungWook Wee (Korea Electronics Technology Institute, Korea)

[P3-5] Encapsulation Methods for Stable Free-viewpoint Video Service

Minjae Seo and Jong Ho Paik (Seoul Women's University, Korea)

[P3-6] Initial Beam Selection Scheme Using Channel Correlation Matrix for mmWave Massive MIMO Systems

Jaemin Jung and Heeyoung Kim (University of Yonsei, Korea); Seongbae Han and Youngrok Jang (Yonsei University, Korea); Seokki Kim and SeungKwon Baek (ETRI, Korea); Sooyong Choi (Yonsei University, Korea)

[P3-7] Research on Pedestrian Detection Research on Pedestrian Detection Based on Faster R-CNN and Hippocampal Neural Network

Biao Hao and Su-bin Park (Dong-A University, Korea); Dae-Seong Kang (University of Dong-A, Korea)

[P3-8] Indoor Localization with WiFi Fingerprinting Using Convolutional Neural Network

Jinwoo Jang and SongNam Hong (Ajou University, Korea)

[P3-9] Multi-Source Localization Using Linear DoA Sensor Network

Hyungsoo Lim (Electronics and Telecommunications Research Institute (ETRI), Korea);

Cheon-sig Shin (ETRI & Global Area Wireless Research Section, Korea)

[P3-10] A Study on the Traffic Light Identification and Guidance System for the Elderly Drivers

Myeon-gyun Cho and Zhafri Roslan (Semyung University, Korea)

[P3-11] Optical Spectrum Estimation Technique for Optical Interference Cancellation in High Speed Transmission MISO-OCVLC Environment

Doohee Han (Kyung Hee University, Korea); Kyujin Lee (Semyung University, Korea)

[P3-12] An Analysis of an RF Link Budget and RSSI Circuit Design for Long-Range Communications

Kyong Hee Lee (ETRI, Korea)

[P3-13] A Pilot-based Beam-Tracking Technique for OFDM-based Millimeter-Wave Cellular Systems

Yong Soo Cho (Chung-Ang University, Korea); Yeong Jun Kim (LG Electronics, Korea)

[P3-14] Optimization of CHAM Encryption Algorithm Based on Javascript

Chanhui Park and Taehwan Park (Pusan National University, Korea); Hwajeong Seo (Hansung University, Korea); Ho Won Kim (Pusan National University, Korea)

[P3-15] Service Mediation Gateway for Heterogenous IoT Services Harmonization

Seung Woo Kum (Korea Electronics Technology Institute, Korea); Jaewon Moon (Korea Electronics Technology Institute, Korea)

[P3-16] An Efficient WOLA Structured OQAM-FBMC Transceiver

JaeHoon Park (Soongsil University, Korea)

[P3-17] Compatibility of Heterogeneous Devices Based on 2.5G Base-T

So-Ki Jung (aSSIST & SKbroadband Company, Korea)

[P3-18] A Feature Based Content Analysis of Blockchain Platforms

Suntae Kim (Chonbuk National University, Korea); Sooyong Park (Sogang University, Korea); Young B Park (Dankook University, Korea); JeongAh Kim (Catholic Kwandong University, Korea); Young-Hwa Cho and Jae-young Choi (Sungkyunkwan University, Korea); Chin-Chol Kim (NIA(National Information Society Agency), Korea)

[P3-19] Adaptive ONU Energy-Saving via Software-Defined Mechanisms in TDMA-PON

Andrew Pakpahan (Yuan Ze University, Taiwan); I-Shyan Hwang (Yuan-Ze University, Taiwan)

[P3-20] Integration of Contourlet Transform and Canny Edge Detector for Brain Image Segmentation

Ayesha Akter Lata and Goo-Rak Kwon (Chosun University, Korea)

[P3-21] Color Medical Image Encryption Using Two-dimensional Chaotic Map and C-MLCA

Hyun Soo Jeong, Sung Jin Cho, Kyu-Chil Park and Seok Tae Kim (Pukyong National University, Korea)

[P3-22] Research of the Optimal Structure of Creation of an Autonomous System of Information Transmission for a Complex of Earth-Moving and Construction Machines

Tatyana Golubeva (Almaty University of Power Engineering and Telecommunications, Kazakhstan); Bahodir Yakubov (Almaty University of Power Engineering and Telecommunications, Kazakhstan); Sergey Konshin (Almaty University of Power Engineering and Telecommunications, Kazakhstan); Boris Tshukin, Sergey Leshchev and Natalia Mironova (National Research Nuclear University MEPhI, Russia)

[P3-23] Throughput Improvement by Using Dynamic Channel Selection in 2.4 GHz Band of IEEE 802.11 WLAN

Sandeep Agrawal (Centre For Development of Telematics, India)

[P3-24] A Parallel Artificial Neural Network Learning Scheme Based on Radio Wave Fingerprint for Indoor Localization

Yong-Hoon Choi (Kwangwoon University, Korea); Chan Uk Park (School of Robotics, Kwangwoon University, Korea)

Poster Session 4 (16:00-17:30, Conference Exhibition)

[P4-1] Consideration of Constraints in Communication Terminal Devices Due to an Installed Environment of Sensor Networks

Seokjin Lee, Hong-Soon Nam and Youn-Kwae Jeong (ETRI, Korea)

[P4-2] Demand Response Operation Method on Energy Big Data Platform

Tai Yeon Ku (ETRI, Korea)

[P4-3] Korean Sign Language Translation Using Machine Learning

Angela Caliwag, Stephen Ryan Angsanto and Wansu Lim (Kumoh National Institute of Technology, Korea)

[P4-4] A Novel Resource Sharing Mechanism for Device-to-Device Communications Underlying LTE-A Uplink Cellular Networks

Devarani Devi Ningombam, Suk-seung Hwang and Seokjoo Shin (Chosun University, Korea)

[P4-5] A Study of Analyzing and Mitigating Vulnerabilities in uC/OS Real-Time Operating System

Myeonggeon Lee, Gwangjun Choi, Junsang Park and Seong-je Cho (Dankook University, Korea)

[P4-6] Situational Awareness Framework for Cyber Crime Prevention Model in Cyber Physical System

Minhee Joo, Junwoo Seo, Junhyoung Oh, Mookyu Park and Kyungho Lee (Korea University, Korea)

[P4-7] Spectrogram-Based Automatic Modulation Recognition Using Convolutional Neural Network

Sinjin Jeong, UHhyeon Lee and Suk Chan Kim (Pusan National University, Korea)

[P4-8] hyperCache: A Hypervisor-Level Virtualized I/O Cache on KVM/QEMU

Jaechun No and Taehoon Kim (Sejong University, Korea); Sung Soon Park (Anyang University, Korea); Seungho Choi (Sejong University, Korea)

[P4-9] Link Level Simulation of MHN-E System

Sung Woo Choi (ETRI, Korea); Ilgyu Kim (ETRI of KOREA, Korea)

[P4-10] Design & Implementation of Real-time Parallel Image Processing Scheme on Fire-Control

System

Chang Bae Moon, Byeong Man Kim and Dong Seong Kim (Kumoh National Institute of Technology, Korea)

[P4-11] Development of Visual Inspection System for Assembly Machine

Jeonghong Kim (Kyungpook National University, Korea)

[P4-12] Convolution Neural Network-based Spectrum Sensing for Cognitive Radio Systems Using USRP with GNU Radio

Gyu Hyung Lee (University of Ulsan Korea, Korea); Youngdu Lee and Insoo Koo (University of Ulsan, Korea)

[P4-13] Convolutional Autoencoder-based Sensor Fault Classification

Jae Wan Yang (University of Ulsan Korea, Korea); Youngdu Lee and Insoo Koo (University of Ulsan, Korea)

[P4-14] Video Surveillance System Based on 3D Action Recognition

Sungjoo Park (KETI, Korea); Dongchil Kim (Korea Electronics Technology Institute (KETI), Korea)

[P4-15] A Study on Face Masking Scheme in Video Surveillance System

Dongchil Kim (Korea Electronics Technology Institute (KETI), Korea); Sungjoo Park (KETI, Korea)

[P4-16] Learning Through Adverse Event for Collision Avoidance: A Self-Learning Approach

Hyunjun Han, Jusung Kang, Muhammad Asif Raza and Heung-No Lee (Gwangju Institute of Science and Technology, Korea)

[P4-17] Malicious Activity on a HPC Service Environment Exhibits a Power-Law-Like Frequency Distribution

Jae-Kook Lee, Sung-Jun Kim, Taeyoung Hong, Minsu Joh and Huiseung Chae (Korea Institute of Science and Technology Information, Korea)

[P4-18] Design and Comparison of Discrete Wavelet Transform Based OFDM (DWT-OFDM) System

Heung-Gyoon Ryu (Chungbuk National University, Korea)

[P4-19] Outdoor Demonstration of 5Gbps MHN Enhanced System

Dae-Soon Cho (ETRI, Korea)

[P4-20] A Cluster-based Content Management Framework for Information-Centric Networking
Seong-Ho Jeong (Hankuk University of Foreign Studies, Korea)

[P4-21] Classification of Radar Signals Using Convolutional Neural Networks
SeokJun Hong and Bo-Seok Seo (Chungbuk National University, Korea)

[P4-22] An Automated System Recovery Using BlockChain
SuHwan Bae and Yongtae Shin (Soongsil University, Korea)

[P4-23] Study on Simplified Test Bench for QoS Analysis Using Traffic Models of Pre-5G Service
Sung-hun Lee (Kwangwoon University, Korea); Mahn-suk Yoon, Soo-Hyun Cho and Hyun-Kyu Cho (Gumi Electronics & Information Technology Research Institute, Korea)