2011 13th International Conference on Advanced Communication Technology

(ICACT 2011)

Gangwon-Do, South Korea 13 – 16 February 2011

Pages 1-801



IEEE Catalog Number: ISBN: CFP11561-PRT 978-1-4244-8830-8



TABLE of CONTENTS

Session 01A : Wireless Communication Technology I1

- 1. Dependency of Jitter Variance on PLL Normalized Noise Bandwidth2 Lsamu Wakabayashi, Shun-ichi Urano, Masatoshi Sano (Tokyo University of Science, Japan)

- 5. A Road and Traffic-aware Routing Protocol in Vehicular Adhoc Network24 Pham Hong, Park Huynhee, Kang Chul-hee (Korea University, Korea)

- 4. Impacts of CEE and CBS on the Capacity of MIMO-OFDM Systems44 Yong-Quan JIANG, Li-Sheng Fan, Xue-Jiao Shu, Shuo Wang (Shantou University, China)

- 3. A Functional Architecture for User-Centric Multimedia Service on Mobile Station93 Kyeong Gon Ham, Kam Yong Kim, Seong Gon Choi (Chungbuk National University, Korea)
- 4. Application of Converged Communications in Smart Power Consumption Interactive
 Service
 99
 Bingzhen Zhao, Jianming Liu, Ning Li, Zichao Zhuang (SGIT, China)

Session 02A : Wireless Communication Technology II109

- Somayeh Mohammady, Roslina bt. Mohd Sidek, Pooria Varahram, Mohd Nizar b. Hamidon, Nasri Sulaiman (University Putra Malaysia, Malaysia)

- 3. Analyzing the TCP Performance on Mobile Ad-Hoc Networks ·······143 Pin-Chuan LIU, Wei-Cheng Sun (ITRI, Taiwan), Da-You CHEN, Chih-Lin HU (National Central University, Taiwan), Jen-Hwa LEE (National Cheng Kung University, Taiwan), Chung-Kuang CHOU (National Taiwan University, Taiwan), Wei-Kuan SHIH (National Tsing Hua University, Taiwan)

Ibrahim Al-Nomay (KACST, Saudi Arabia), Muhammed Alrabeiah (KSU, Saudi Arabia)

- A Hierarchical Structure based Reader Anti-Collision Protocol for Dense RFID Reader Networks
 164 Youngchang Kang, Minjae Kim, Hyuckjae Lee (KAIST, Korea)

 On Transmission Efficiency of the Multimedia Service over IEEE 802.15.4 Wireless Sensor Networks
 Mu-Sheng Lin, Jenq-Shiou Leu, Wen-Chi Yu, Min-Chieh Yu (NTUST, Taiwan), Jean-Lien Chen.

Wu (St. John's University, Taiwan)

- Analysis of Range-Based Localization Schemes in Wireless Sensor Networks: A Statistical Approach
 Sunita Chaurasia (Near Air Force Station-Hindon, India), Ashish Payal (Guru Gobind Singh Indraprastha University, India)

- A Sensor Utilization Scheme for the Coverage Guarantee Criteria in a Wireless Sensor Network

Niramol PHUNSEANTAVEEKUL, Teerasit KASETKASEM (Kasetsart University, Thailand)

Session	02E :	Poster	Session	Ι		21	2
---------	-------	--------	---------	---	--	----	---

1.	Design of a Folded-cascode UWB Low Noise Amplifier with Low Power
	Consumption ······214
	Young Sung Lee, Nackgyun Seong, Yohan Jang, Jaehoon Choi (Hanyang University, Korea)
2.	Study on the Application of MIMO System218
	haiyang Fu, Weiwei Qian (Nanjing University of Posts and Telecommunications, China)
3.	The Effect of Measurement Error on the Estimation of Channel Parameters and a Novel
	Way to Prevent Estimation Failure222
	Bumsoo PARK, Byung-Jae KWAK , Myung Don Kim, Jae Joon Park, Hyun Kyu Chung (ETRI,Korea)
4.	A handover technology using wireless dongle over heterogeneous access network
	environment ······227
	KangWoon Hong, Hyun-Woo Lee (ETRI, Korea), Seung-ho Yeon (KT, Korea)
5.	Performance evaluation of MIMO schemes based on IEEE 802.16m technology233
	Seokki Kim, Kwangjae Lim, Chulsik Yoon (ETRI, Korea)
6.	Integrated Flow Management in Packet Transport System239
	Chang-Ho CHOI (ETRI, Korea), Whan-Woo KIM (Chungnam National University, Korea)
7.	Efficient High-Speed Optoelectronic Interconnects Parameter Extraction Based on 3D
	Field Simulation244
	Ikechi Augustine Ukaegbu, Tae-Woo Lee, Hyo-Hoon Park (KAIST, Korea)
8.	Circuit Implementation of OOK Modulation for Low-Speed Power Line Communication
	Using X10 standard ······248
	Chia-Hung WANG, Chia-Yu CHEN, Tai-Ping SUN (National Chi Nan University, Taiwan)
9.	A Real-Time HWIL Simulation Control System Architecture for Implementing Evaluation
	Environment of Complex Embedded Systems254
	WoonSik KIM, ByungSun LEE, KyungSoo KIM, TaeSoo Yang (ADD, Korea), SangHa KIM
	(ChungNam National University, Korea)

10. An Effective Privacy Protection Scheme for Cloud Computing ······260 I-Hsun Chuang, Syuan-Hao Li, Kuan-Chieh Huang, Yau-Hwang Kuo (National Cheng Kung University, Taiwan)

- 11. An e-Science Problem Solving Environment for Scientific Numerical Study266 Hyejeong Kang, Kyoung-a Yoon, Seoyoung Kim, Yoonhee Kim (Sookmyung Women's University, Korea), Chongam Kim (Seoul National University, Korea)
- - Kyung Woo Hur, Wan Yeon Lee, won vien park, Young Woong Ko, JIn Kim (Hallym University, Korea)
- 15. An Implementation of Mobile Desktop Manager for Mobile Web Devices ·······284 Kyung Hee Lee, Hadipurnawan Satria, Chaedeok Lim (ETRI, Korea), Kwan-jong Yoo (Chungnam National University, Korea)
- 16. Determining Saturation Point in Swarm Robot ------288 Somar Boubou, Yohishiko Tagawa (Kyushu Institute of technology, Japan)
- 18. A Dynamic CAP Allocation Algorithm using Directional Antenna in IEEE 802.15.3c WPANs ·296 Kiwan LEE, Kyung-Chul SHIN, Chul-Hee KANG, Junghyok Kwon (Korea University, Korea), Yongsun KIM (ETRI, Korea)

- An Adaptive Wideband Beamformer Using Kalman Filter with Spatial Signal Processing Characteristics.
 Mariel Rivas, Shuguo Xie, Donglin Su (Beijing University of Aeronautics and Astronautics, China)

- 5. Adaptive Resource Allocation Method for Mobile Network ·······350 Xi LIANG, Moo Wan KIM, Uno SHINTARO (Tokyo Joho University, Japan), Souichiro MIURA (Chuo University, Japan)

1.	Link-Disjoint Routing Algorithms with Link-Disjoint Degree and Resource Utilization
	Concern in Translucent WDM Optical Networks
	Tithra Chap, Xin Wang, Yoshiaki Tanaka (Waseda University, Japan), Sugang Xu (National
	Institute of Info. and Communication, Japan)
2.	Fair and Efficient Scheduling Algorithm for EPON
	Man Soo Han (Mokpo National Univ., Korea)
3.	Fundamental limitations on introducing low cost optical sources in hybrid
	40/100G
	Ahmed Dooguy KORA, Diallo M. DIOUF, Samuel OUYA (Ecole Sup. Multinationale des
	Telecommunications, Senegal), Jean-Pierre CANCES (ENSIL, University of Limoges, Senegal)
4.	Virtual Network Topology Management for Cross-Layer Provisioning in Multi-Layer
	Networks ····································
	Kim TaeYeon, Jeong YooHyeon, Song HoYoung (ETRI, Korea)
5.	Reconfigurable Optical CDMA Network Codecs Structured over M-Signatured
	Waveguide-Gratings
	Jen-Fa Huang, Ta-Chun Nieh, You-Da Dai (National Cheng Kung University, Taiwan)
Se	ession 03D: Distributed Computing Technologies I382
1.	Replication with State Using the Self-Organizing Map Neural Network
	Geofrey Cantara Soriano, Yoshiyori Urano (Waseda University, Japan)
2.	Application of PFTTH in Smart Grid
	Jianming Liu, Jiye Wang, Pengzhan Fan, Zichao Zhuang (SGIT, China)
3.	On-demand Check Pointing for Grid Application Reliability using Communicating Process
	Model
	Baghavathi Priya S (Jawaharlal Nehru Technological University, India), Chandrasekaran
	Subramaniam (Rajalakshmi Engineering College, India), Ravichandran T (Hindustan Institute of
	Technology, India)

- 5. Next Generation Multi-Tenant Virtualization Cloud Computing Platform405 Buddhika Siddhisena, Lakmal Warusawithana (Thinkcube Systems (Pvt.) Ltd., Sri Lanka), Mithila Mendis (Access Telecom Technologies, Sri Lanka)

- 3. Design of Non-Uniform Antenna Arrays Using Genetic Algorithm422 Murad Ridwan, Mohammed Abdo (Addis Ababa University, Ethiopia), Eduard Jorswieck (Dresden University of Technology, Ethiopia)

Session 04B : Mobile Communications IV438

- 2. Opportunistic Feedback with Adaptive Modulation over Multiuser Diversity Systems ····443 Chung-Woon Park, Taejoon Kim, Jae-Han Jeon, Young-Jun Cho, Jong-Tae Lim (KAIST, Korea)

Wenan Zhou, Bing Xie, Chenxi Hao (Beijing University of Posts & Telecommunications, China)

Session 04C: Optical Networking Technology II463

- Rafika Ida Mutia, Nayeema Sadeque, Jens Andersson (Lund university, Sweden), Andreas Johnsson (Ericsson Research, Sweden)

Session 04D: Distributed Computing Technologies II491

- 1. Distributed Pairing for File Sharing in Large-Scale Peer-to-Peer Networks492 Chih-Lin Hu, Da-You Chen (National Central University, Taiwan)
- 3. Resource Discovery in Wireless, Mobile and Adhoc Grids Issues and Challenges502 maniza hijab (Muffakham Jah College of Engg. & Tech, india), Damodaram AVULA (Jawaharlal Nehru Technological University, India)

- 8. Multi-level Intrusion Detection System and Log Management in Cloud Computing552 Jun-Ho Lee, Min-Woo Park, Jung-Ho Eom, Tai-Myoung Chung (Sungkyunkwan University, Korea)

Pardeep Kumar, Mangal Sain, Hoon Jae Lee (Dongseo University, Korea)

- 14. Multipath Channel Parameters based on Indoor Hotspot Channel Measurements at 3.7GHz 579 Myung-Don Kim, Heon Kook Kwon, Bum Soo Park, Jae Joon Park, Hyun Kyu Chung (ETRI, Korea)

Ji won Kim, Soo young Moon, Tae ho Cho (Sungkyunkwan Univ, Korea), Jin Myoung Kim, Won Tae Kim, Seung Min Park (ETRI, Korea)

Rajesh Kannan Megalingam, Ramesh Nair, Sai Prakhya (Amrita Vishwa Vidyapeetham, India)

- 2. A Simulink-Model of Specialized Processor on the Piecewise-Polynomial Bases616 Olim Hidayov (KAIST. Korea). Dhananjay Singh. Bakul Gohel (NIMS. Korea)

Session 05B : Mobile Communications V634

- 3. Position Responsive Routing Protocol (PRRP) -------644 Noor Zaman, Azween Abudllah (Universiti Tecknologi PETRONAS Malaysia)
- 4. A Software Framework to Provide Multiple MSISDN across Heterogeneous Networks …649 Dongcheul Lee, Seungyoul Lee (KT, Korea)

Leo Yi, Kai Miao, Adrian Liu (Intel China Research Center, China)

- Adaptive Rate Control Based on Statistical Modeling in Frame-layer for H.264/AVC …680 Myoung-Jin Kim, Min-Cheol Hong (Soongsil University, Korea)

- 1. Exploring Wireless Network Security in Auckland City through Warwalking Field Trials 685 Nurul Sarkar (AUT University, New Zealand), Abdul Abdullah (UTM, Malaysia)
- 3. Classification of LSB and MLSB Stego Images via Shift and Pixel Pairs Irrelevance ····695 Qian Zhang, Yuefei Zhu, Chunxiang Gu, Nan LIU (Zhengzhou Information Science and Technology Institute, China)
- 4. Automated Blocking of Malicious Code with NDIS Intermediate Driver700 Ling Chuan Lee (CyberSecurity Malaysia, Malaysia), Lee Yee Chan, Mahamod Ismail, Kasmiran Jumari (Universiti Kebangsaan Malaysia, Malaysia)

- 1. Design and Implementation of a Hardware-Constrained Cognitive Radio MAC Protocol ······712 Yi-Nan Xu, Ming-Kui Li (Yanbian University, China), Yihu Xu (Chonbuk National University, Korea) 2. Design of QAPM Modulation System with High Power Efficiency and SIMULINK Evaluation -----716 Jae-Hoon Choi. Heung-Gyoon Ryu (Chungbuk National University, Korea) 3. Performance Analysis of Decode-and-Forward scheme Multiple-Hop MIMO Relay PHAM Thanh Hiep. KOHNO Ryuji (Yokohama National University. Japan) 4. Performance Analysis of Modulation Schemes in Intra Vehicle Communications (IVC) Gulmira Khuandaga, Asif Iqbal, Kyung Sup Kwak (Inha University, Korea) 5. Power Allocation for Incremental-Selective Decode-and-Forward Cooperative Communications over Rician Fading Channels730 Rouhollah Aghajnai Renani (Islamic Azad University, Iran). Reza Saadat, ghasem Mirjalily (University of Yazd, Iran), Mohammad Reza Aref (Sharif University of Technology, Iran)
- 1. Performance Evaluation of nsclick Simulator for Mobile Ad Hoc Networks ------736 Viet Thi Minh Do, Lang Xie, Øivind Kure (Norwegian University of Science and Technology, Norway)
- 2. Q-PMIP: Query-based Proxy Mobile IPv6742 Jae-Wan Park, Ji-In Kim, Seok-Joo Koh (Kyungpook National University, Korea)

1.	Virtual Studio System for Augmented Reality & Chroma Key Processing762
	Seoksoo Kim (Hannam University, Korea)
2.	Various NMF Analyses for Emotion Recognition
	JeongMok HA, Jaiyoun SONG, Hong JEONG (POSTECH, Korea)
3.	Evaluation of online Signature Verification features
	Ghazaleh Taherzadeh, Roozbeh Karimi, Alireza Ghobadi (Multimedia University, Malaysia), Hossein
	Modaberan Beh (Soha, Malaysia)
4.	A Real-time 3D Image Refinement using Two-line Buffers
	Jong-hak Kim, Jun-dong Cho (Sungkyunkwan University, Korea)
5.	Digital Special Makeup by Onset Motion Capture782
	Jong-Sung Kim, Jae-Hean Kim (ETRI, Korea)

SANTOSH HARIHARAN, V NAVEEN KUMAR (Amrita Vishwa Vidyapeetham University, India), MRIGANK ROCHAN (Amrita School of Engineering, India)

1. Adaptive Tone-Reservation PAPR Technique with Optimal Subcarriers Allocation Awareness for Multi-User OFDMA Systems814 PATTAMA PHOOMCHUSAK, Chaiyod Pirak (KingMongkut University of Technology North Bangkok, Thailand) 2. High Inductance LTCC Based Spiral Inductor with Small Area and High Quality Factor ------819 Ikechi Augustine Ukaegbu, Jamshid Sangirov, Tae-Woo Lee, Hyo-Hoon Park(KAIST, Korea). Kwang-Seong Choi (ETRI) 3. A Study of Bilateral Settlement Game for Differentiated Qualitative Services Networks ······824 Ying-Ren Chien (NTU, Taiwan), Chien-Sheng Chen (Tainan University of Technology, Taiwan). Wen-Hsiung Liu (Aletheia University, Taiwan) 4. The Method for IP Layer Link Aggregation using Flow Information in a Vehicle Mobile Router ------829 Hyeonsik Yoon, Byungjun Ahn (ETRI, Korea) 5. A Fast Automatic Gain Control Scheme for Initial Cell Search in 3GPP LTE TDD System .833 Jun-Hee Jang, Hyung-Jin Choi (Sungkyunkwan University, Korea) Sung-Il Hong, Hyen-Sik Lyu, Dal-Hwan Yoon, Chi-Ho Lin (Semyung University, Korea) 7. A scheme to provide Number Portability to Mobile IPTV843 Young Sic Jeong, Shin Gak Kang (ETRI, Korea) 8. Seamless Handover Scheme based on SIP in Wireless LAN847 Kam Yong Kim, Kyeong Gon Ham, Seong Gon Choi (Chungbuk National University, Korea), Kee Seong Cho (ETRI, Korea) Hongli Zhang, Zhimin Gu (Beijing Institute of Technology, China), ZhenQing Tian (Inner Mongolia Normal University ,China) 10. Distributed and Parallel Processing of Noise Information for 3D GIS in a U-city II

Hyun Kyu Park, Yong Woo Lee, Jong Won Park, Chang Ho Yun (University of Seoul, Korea)

Mohammad Reza Norouzian, Sobhan Merati (Institute for Advanced Studies in Basic Sciences, Iran)

Awais Yousaf, Asim Loan (University of Engineering and Technology, Parkistan)

Session 07A : Wireless Communication Technology VII901

- 2. PNS Algorithm and FPGA Design of Wireless OFDM System ······906 Chisato Iramina (University of the Ryukyus, Japan), Tomohisa Wada (University of the Ryukyus, Japan), Heung-Gyoon Ryu (Chungbuk National University, Korea)
- 3. Distributed Uplink Power Control Algorithm for QoS enhancement911 Jongrok Park, Hojae Lee, Seonghyun Kim, Sanghoon Lee (Yonsei University, Korea)
- 5. Slot Antenna For Frequency Switchable Active Antenna ······921 Harish Kumar, V Kumar Sharma (Bhagwant institute of technology, India), Navdeep Singh, Sarabjeet Singh (Ambedkar National Institute of Technology, India)

Kiung JUNG, Jin Woo HONG, Jong Soo LIM, Hokyom Kim (ETRI, Korea)

- 5. A New Source Routing Mechanism in Mobile Ad- Hoc Network ·······948 Arash Dana, Mohamad Hadi Babaie Rochi (Islamic Azad University Tehran Branch, Iran), Mahshid Ziyaee (Islamic Azad University Karaj Branch, Iran)

- 3. Design and Implementation of Low power Wireless IPv6 Routing for NanoQplus966 Jongsoo Jeong, Jaeseok Kim (UST, Korea), Pyeongsoo Mah (ETRI, Korea)

- 2. Audio Forensic marking using Quantization in DWT-SVD Domain -------988 De Li (Yanbian University, China), JongWeon Kim (Sangmyung University, Korea)

- 5. An Intra-Gateway for Entertainment Contents in Digital Home1001 Jihyun Park, Jeonghyun Kim, Seongmin Kim, Dowon Nam (ETRI, Korea)

Session 08A : Wireless Communication Technology VII1006

- 3. Application of Exponential Window to Design a Digital Nonrecursive FIR Filter1015 Vikas Soni, Pankaj Shukla, Mithilesh Kumar (Rajasthan Technical University, India)
- 5. Transmit Power Control Scheme for TV White Space Wireless System1025 Sang Yun Lee, Mee Kyung Kwon, Seung Hun Lee (Korea Radio Promotion Agency, Korea)

Session 08B : Network Management I1030

- 3. Pre-Processing Directory Structure for Improved RSYNC Transfer Performance1043 Alireza Ghobadi, Ehsan Haji Mahdizadeh (Multimedia University, Malaysia), Yong Lee Kee, Li Kok Wei (Intel Microelectronics, Malaysia), Mohamad Hossein Ghods (SOHA, Malaysia)
- 4. Survivability Measure for Multichannel MANET-based Tactical Networks1049 Kwangsoo Kim, Byeong-hee Roh, Young-Bae Ko (Ajou University, Korea), Woo-Jin Choi, Eui Seung Son (KT, Korea)

Ping Wang, Mei Song, Yong Zhang, Li Wang (Beijing University of Posts and Telecommunications, China)

Session 08C: Next Generation Network Technology II1058

- Analysis of Vertical Handover Latency for IEEE 802.21-enabled Proxy Mobile IPv6 ...1059 Heecheol Song, Jongjin Kim, Jaeki Lee, Hwang Soo Lee (KAIST, Korea)

- 5. A Study on Implementation issues of Number Portability in IMS networks1080 Giseop Geum, Nakpo Kim, Yungha Ji, Taehyo Ahn (KT, Korea)

Session 08D: Network Security Technology1084

- 1. An Adaptive Cross-Layer Design Approach for Network Security Management1085 I-Hsun Chuang, Chou-Ting HSIEH, Yau-Hwang KUO (National Cheng Kung University, Taiwan)
- 3. A Secure and Practical Key Management Mechanism for NFC Read-Write Mode1095 Hsu-Chen Cheng, Tian-Yow Chi, Siao-Yun Wei (Chinese Culture University, Taiwan), Wen-Wei Liao (National Taiwan Normal University, Taiwan)
- 4. Dynamic Trust Model for Reliable Transactions in Multi-agent Systems1101 Anupam Das, M. Mahfuzul Islam (BUET, bangladesh), Golam Sorwar (Southern Cross University, Bangladesh)

EunJoo KWAK, GiEung KIM, JaeHyung YOO (KT, Korea)

- 1. Performance Analysis of a Hybrid SEC/MRC Diversity Scheme over Rayleigh Fading …1115 Hoyong Lee, Sang Kyu Park, Yujae Song (Hanyang University, Korea)
- An Efficient Adaptive FEC Algorithm for Short-Term Quality Control in Wireless
 Networks
 1124
 Jeng-Wei Lee, Yau-Hwang Kuo (National Cheng Kung University, Taiwan), Chao-Lieh Chen
 (NKFUST, Taiwan), Mong-Fong Horng (KUAS, Taiwan)

Wen-Ping LAI, En-Cheng LIOU (Yuan Ze University, Taiwan)

- 7. UAMDroid: A User Authority Manager Model for the Android Platform1146 Zemin Liu, Choon-Sung Nam, Dong Ryeol Shin (Sungkyunkwan University, Korea)

- 10. Android-based SoD Client for Remote Presentation1162 Kyuchang Kang, Kiryong Ha, Jeunwoo Lee (ETRI, Korea)

- 12. Multi-tenant Supporting Online Application Service System Based On Metadata Model 1173 Byeong-Thaek Oh. Hee-Sun Won. Sung-Jin Hur (ETRI, Korea)
- Level 2 SaaS Platform and Platform Management Framework1177
 Jihyun Lee, Sung Jin Hur (ETRI, Korea)
- 15. Enhancement of Trellis-Based Stereo Matching Algorithm Using Disparity of the Upper

Yong Gyu KANG, Won Suk LEE, Hong JEONG (POSTECH, Korea)

- 16. A Three-Layer View Model of OSS: Toward Understanding of Diversity of OSS1190 Toshihiko Yamakami (ACCESS, Japan)

Session 09A: Wireless Communication Technology IX1205

- 1. Performance Analysis of Parallel Acoustic Communication in OFDM-based System1206 Junyeong Bok, Heung-Gyoon Ryu (Chungbuk National University, Korea)
- 2. Non-Linear Precoding for Next Generation Multi-User MIMO Wireless LAN Systems ·1211 Leonardo Lanante Jr., Masayuki Kurosaki, Hiroshi Ochi (Kyushu Insitute of Technology, Japan)
- 3. Improved DCM for PAPR Reduction in MB-OFDM Systems ······1217 Yunsung Kim, Sang Kyu Park, Mangue Choi (Hanyang University, Korea)
- 4. Performance Analysis of Dual-hop UWB System with Non-regenerative Relaying Scheme 1221 Zhiquan Bai, Yongjie Xu, Dongfeng Yuan (Shandong University, China), Bin Shen, Kyungsup Kwak (INHA University, Korea)

yoohee cho, yihan kim (KT, Korea)

Jae-Yong Yoo, JongWon Kim (Gwangju Institute of Science & Technology, Korea)

5. MRMT: An Algorithm of Matching Resources for Multi-Tasks1253 Min Yan, Jiantao Zhou (Inner Mongolia University, China)

Session 09C: Next Generation Network Technology III1258

- 1. A Multicast Scheme for provision of Seamless Service in Proxy Mobile IPv6 Networks 1259 Jongmin Kim, Hwasung Kim (Kwangwoon University, Korea), Ilkyeun Ra (University of Colorado Denver, USA)

Session 09D: VoIP Technology ·······1283

- 2. Solving Interoperability Problem of SIP, H.323 and Jingle with a Middleware ------1289 Rossi Kamal, Muhammad Siddiqui, Choong Hong (Kyung Hee University, Korea)

Session 10A : Wireless Communication Technology X1309

Session 10B : System & Software Engineering I1335

- 5. A Reliable Framework for Adaptive Scientific Workflow Management Systems Based on SOA …1358 Alireza Azimi (Islamic Azad University, Sari Branch, Iran), Saeed Parsa (iran university scinece and technology, Iran)

- Symbol Timing Synchronization for ISDB-T System in Multipath Fading Channel1365 Nico Surantha, Tatsumi UWAI, Yuhei Nagao, Masayuki Kurosaki, Hiroshi Ochi (Kyushu Institute of Technology, Japan)
- 2. A Low-Power Current-Reused Folded Cascode Harmonic Rejection Mixer for DVB-T Tuner 1370 Chang-Jin Jeong, Yang Sun, Dae-Young Yoon, Seok-Kyun Han, Sang-Gug Lee (KAIST, Korea)
- 4. A Multichannel Downstream Receiver Supporting Channel Bonding in HFC Network …1379 Jae Ho LEE, Dong Joon CHOI, Soo In LEE (ETRI, Korea), Whan Woo KIM (Chungnam National University, Korea)
- 5. DVB-S2 LDPC Finite-Precision Decoder ······1383 Sherif Welsen (Ain-Shams University, Egypt)

Session 10D : Greeen IT Technology1387

- 2. An Efficient Parallel SSHI Rectifier for Piezoelectric Energy Scavenging Systems1394 Xuan-Dien DO, Younghun KO, Huy-Hieu NGUYEN, Huy-Binh LE, Sang-Gug LEE (KAIST, Korea)
- 4. An Comparator Based Active Rectifier for Vibration Energy Harvesting Systems1404 Yang Sun. In-young Lee. Chang-jin Jeong. Sang-gug Lee. Seok-kyun Han (KAIST. Korea)

Session 11A : e-Commerce and m-Commerce1414

- 1. SMS Text Messaging: A Ubiquitous Tool for Cheaper Medicine in the Philippines1415 Simonette Alzona Nisperos, Yoshiyori Urano (Waseda University, Japan)
- 3. Secure Quick Response-Payment(QR-Pay) System using Mobile Device1424 jae-sik lee, chang-hyun cho, moon-seog jun (SoongSil University, Korea)

Session 11B : System & Software Engineering I1440

Jarallah Ghamdi (Ministry of Education, Saudi Arabia), Zeeshan Muzaffar (King Fahd University of Petroleum and Minerals, Saudi Arabia)

- 4. The Enterprise 2.0 adoption process: a participatory design approach1457 Anna Bruno (University of Salento, Italy), Palmalisa Marra, Leonardo Mangia (Links Management and Technology S.p.a., Italy)

Session 11C : IPTV Technology ·······1468

- Demand Forecasting and Strategies for the Successfully Deployment of the Smart TV in Korea
 MoonKoo Kim, JongHyun Park (ETRI, Korea)
- 3. An efficient group rekey scheme for P2P IPTV DRM system ······1479 Yuan ZHANG, Yongfeng HUANG, Jian YUAN (Tsinghua University, China)
- 4. A Study on Frame Encryption for Protecting IPTV Contents1484 Boseung Kim, Jongseok Choi, Jeongjai Kim, Yongtae Shin (Soongsil University, Korea)
- 5. Delivering a personalized video service using IPTV1489 Zelalem Shibeshi, Shange Ndakunda, Alfredo Terzoli, Karen Bradshaw (Rhodes University, South Africa)

Session 11D : ITS and LBS Technologies1495

- 5. ETC development pushes combination of RFID and ITS1515 Wei Du, Wei Chen (Southwest Jiaotong University, China)

Session 11E : Poster Session V1519

- Multipath Characteristics of MIMO Channel at the UHF band for Wireless System in the Urban Area
 Myoung-Won Jung, Young Keun Yoon, Jong Ho Kim, Heon Jin Hong (ETRI, Korea)
- 3. Trends in Rain Attenuation Model in Satellite System ······1530 Kyung soo Choi, Jae Hoon Kim, Do-Seob Ahn (ETRI, Korea), Jeong Ki Pack, Nam Ho Jeong (Chungnam National University, Korea)
- 4. An Improved Scheme for Reducing Handover Latency in Heterogeneous Networks1534 Myoung Ju Yu, Seong Gon Choi (Chungbuk National University, Korea), Hwa Suk Kim, Kee Seong Cho (ETRI, Korea)

Hyun Jong Kim, Seong Gon Choi (Chungbuk National University, Korea)

- 8. A Bayesian Network Model for User's Preference Estimation of Personalized TV Service 1555 Han-kyu Lee, Jihun Cha (ETRI, Korea), Munchurl Kim (KAIST, Korea)
- 9. Event-driven Open Service Platform Based Remote Healthcare System ·······1559 Jin-Neng Wu, Ping-Yu Chen, Nien-Chin Wu, Yu-Chang Chao (Industrial Technology Research Institute, Taiwan)
- 11. Design a Computer Adaptive Cubic Enumeration Test based on Virtual Item Bank Theory 1569 Wen-Wei Liao, Rong-Guey Ho (National Taiwan Normal University, Taiwan)

Hsu-Chen Cheng, Slao-Yun wei (Chinese Culture University, laiwan), wen-wei Llao (National Taiwan Normal University, Taiwan)

MoonKoo Kim, JongHyun Park (ETRI, Korea), JongHyun Paik (TTA, Korea)

- 15. Advanced Network Based Wireless, Single PMS for Multiple-Patient Monitoring1587 Rajesh Kannan Megalingam, Akhil Sudhakaran, Denny Jacob, Vineeth Radhakrishnan, Deepak Unnikrishnan (Amrita Vishwa Vidyapeetham, India)
- 16. Compositive Context Information Design and Model Approach for Adaptive Service

Sukyoung Kim, Eung-Ha Kim, YoungIl Choil (ETRI, Korea)

- 17. Generations of OSS in Evolutionary Paths: Toward an Understanding of where OSS is

Toshihiko Yamakami (ACCESS, Japan)

Jinwuk Seok, Kisong YOON, Bumho Kim, Jeong-Woo Lee (ETRI, Korea)

- 20.Multi-Frequency Scenario within UMTS/3G ······1614 Muhammad Arshad, N M Saad, Nasrullah Armi, M Shuja uddin (Universiti Teknologi PETRONAS, Malaysia), Farhan Ahmed Siddqui (University of Karachi, Pakistan)

Pankaj Gupta, Vijay Shankar Pendluri (Wipro Technologies, India)

22. DESIGN and IMPLETATION of KEYSTREAM GENERATOR with IMPROVED SECURITY ·1626 Vijay Shankar Pendluri, Pankaj Gupta (Wipro Technologies, India)