

# **THE 8th INTERNATIONAL CONFERENCE on ADVANCED COMMUNICATION TECHNOLOGY**

**Toward the Era of Ubiquitous Networks and Societies**



**Phoenix Park, Korea  
Feb. 20–22, 2006**

**PROCEEDINGS  
Volume 1 of 5**

**Host**  
Ministry of Information and Communication(MIC)

IEEE Catalog Number 06EX1209  
ISSN 1738-9445  
ISBN 89-5519-129-4

**Organizers**  
National Computerization Agency(NCA)  
Electronics and Telecommunications Research Institute(ETRI)

**Sponsors**  
IEEE Communications Society(IEEE ComSoc)  
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Name of Author(s), "Title of Paper," in The 8th International Conference on Advanced Communication Technology, Technical Proceedings, 2006, page numbers.

IEEE Catalog Number 06EX1209  
ISSN 1738-9445  
ISBN 89-5519-129-4

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Printed in Korea.



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| Mihui Kim, Inshil Doh, Kijoon Chae (Ewha Womans University, Korea) .....   | <b>1562</b> |

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| <b>1. A Service Template Authoring Environment for URC Service Composition</b>   |             |
| Sangseung Kang, Joochan Sohn (ETRI, Korea) .....   | <b>1569</b> |
| <b>2. A New Method for Ontology Merging based on Concept using WordNet</b>   |             |
| Miyoung Cho (Chosun University, Korea), Hanil Kim (Cheju University, Korea), Pankoo Kim (Chosun University, Korea) ..... | <b>1573</b> |
| <b>3. Palmprint Matching using Line Features</b>   |             |
| Fang Li, Maylor K. H. Leung, Xiaozhou Yu (Nanyang Technological University, Singapore) .....                             | <b>1577</b> |
| <b>4. Comparisons analysis of Security Vulnerabilities for Security Enforcement in IPv4/IPv6</b>                         |             |
| Hayoung Oh, Kijoon Chae (Ewha Womans University, Korea), HyoChan Bang, JungChan Na (ETRI, Korea) .....                   | <b>1583</b> |
| <b>5. Desktop Migration System Based on Dynamic Linking of Application Specific Libraries</b>                            |             |
| Taein Hwang, Hojin Park (ETRI, Korea), Jin Wook Chung (Sungkyunkwan University, Korea) .....                             | <b>1586</b> |

## Session 8G: Digital Broadcasting Technology (I)

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| <b>1. Authorization Refreshment Management Using ARL in DTV Broadcasting</b>  |             |
| Han-Seung Koo, O-Hyung Kwon, Soo-In Lee (ETRI, Korea), Sung-Woong Ra (Chungnam National University, Korea) .....  | <b>1591</b> |
| <b>2. Single Frequency Network Design of DVB-H (Digital Video Broadcasting –Handheld) System</b>  |             |
| Joo Chan Kim, Jin Young Kim (Kwangwoon University, Korea) .....   | <b>1595</b> |
| <b>3. The Effects of Human Hands on the Radiation Characteristics of Offset-fed Slot Antenna Embedded at the Back of Display of Notebook Computers for the Reception of Digital Terrestrial TV Broadcasting</b> |             |
| Muhammad Sajjadur Rahim, Tadahiko Maeda (Ritsumeikan University, Japan) .....   | <b>1599</b> |

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| <b>4. A Path Control Architecture for Receiving Various Multimedia Contents</b>       |             |
| Seong Yong Lim, Joo Myoung Seok, Han Kyu Lee (ETRI, Korea) .....                      | <b>1604</b> |
| <b>5. Extended DMB BWS for a User-Friendly Mobile Data Service</b>                    |             |
| Heejeong Kim, Sora Park, Bongho Lee, Chunghyun Ann, YoungSung Son (ETRI, Korea) ..... | <b>1608</b> |

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| <b>1. A Novel QAM Joint Frequency-Phase Carrier Recovery Method</b>  |             |
| Qijia Liu, Zhixing Yang, Jian Song, Changyong Pan (Tsinghua University, China) .....   | <b>1617</b> |
| <b>2. Simple Enhanced Overload Control Mechanism for Digital Exchange System</b>   |             |
| Bong Uk Bin, Kyu Chul Lee, Jong Hyup Lee (Inje University, Korea) .....  | <b>1622</b> |
| <b>3. Design of Traffic Conditioner using Marking Algorithm on DiffServ-over-MPLS</b>  |             |
| Sanghyun Park, Jinwoo Lee (Konkuk University, Korea), Jintae Kim (Fivetek. Co., LTD., Korea),<br>Inkap Park (Konkuk University, Korea) ..... | <b>1627</b> |
| <b>4. Extended Service Registry for Distributed Computing Support in OSGi Architecture</b>   |             |
| Kyuchang Kang, Jeunwoo Lee (ETRI, Korea), Hoon Choi (Chungnam National University, Korea) .....  | <b>1631</b> |
| <b>5. Challenges and Barriers in Implementing E-government: Investigation on NEIS of Korea</b>   |             |
| Yong Soon Kim (KERIS, Korea) .....   | <b>1635</b> |
| <b>6. A Log-based Flash Translation Layer for Large NAND flash memory</b>  |             |
| Soo-Young Kim, Sung-In Jung (ETRI, Korea) .....  | <b>1641</b> |
| <b>7. A Design and Implementation of ASIC for High-quality VoIP Terminal over Wireless LAN</b>   |             |
| Do Young Kim (ETRI, Korea), Jong Won Park (CNU, Korea) .....   | <b>1645</b> |
| <b>8. An Application Level Gateway for Traversal of SIP Transactions through NATs</b>  |             |
| Jae Cheon Han, Wook Hyun, Sun Ok Park, Il Jin Lee, Mi Young Huh, Shin Gak Kang (ETRI, Korea) ....  | <b>1649</b> |
| <b>9. Transmission Energy Efficiency in MIMO-OFDM based WLAN with HCCA</b>   |             |
| <i>Channel Access Scheme</i>   |             |
| Seungbeom Lee, Sin-Chong Park (ICU, Korea) .....   | <b>1653</b> |
| <b>10. Baseball-shaped Circular Microstrip Antennas for Miniaturization</b>  |             |
| Mi-ra Ryu (Konkuk University, Korea), Jong-Myung Woo (CNU, Korea),<br>Jung Hur (Konkuk University, Korea) .....                              | <b>1657</b> |
| <b>11. IPv6 Neighbor Discovery Protocol for Common Prefix Allocation in IEEE 802.16</b>  |             |
| Hongseok Jeon, Junghoon Jee (ETRI, Korea) .....  | <b>1661</b> |
| <b>12. Key Factors for E-Commerce Business Success</b>   |             |
| Jaekyung Choi, Jeongsuk Park, Jeehyung Lee, Kyungsuk Ryu (ETRI, Korea) .....   | <b>1664</b> |

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| <b>13. The Design and Implementation of MAC Security in EPON</b>   |             |
| Kyeong-Soo Han, Kwang-Ok Kim, Tae Whan Yoo, Yul Kwon (ETRI, Korea) .....   | <b>1673</b> |
| <b>14. An Improvement of Channel Efficiency for IEEE 802.15.3 High Rate WPAN</b>   |             |
| Ji Eun Kim, Young Ae Jeon, Sangjae Lee, Sang Sung Choi (ETRI, Korea) .....   | <b>1677</b> |
| <b>15. Critical Design of the Ka-Band On-board Switching Transponder for Communication, Oceanographic, and Meteorological Satellite (COMS)</b>                             |             |
| Yong Min Lee, Seong Pal Lee (ETRI, Korea) .....  | <b>1681</b> |
| <b>16. Consideration of Efficient Nearest Node Discovering Mechanisms for Key Infection</b>  |             |
| Jin-Bum Hwang, Young-Sik Hwang, Jong-Wook Han (ETRI, Korea) .....  | <b>1686</b> |
| <b>17. A Study for Providing Personal Contents using Open API Platform</b>   |             |
| Hyun-Woo Oh, Kee-Seong Cho (ETRI, Korea) .....   | <b>1690</b> |
| <b>18. Efficient VLSI Implementation of the List Sphere Decoder with Real-value Based Tree Searching Method</b>  |             |
| SangHo Seo, SinChong Park (ICU, Korea) .....   | <b>1694</b> |
| <b>19. A Study on User Data Management for SIP-based IMPP Services</b>   |             |
| IlJin Lee, Wook Hyun, ShinGak Kang (ETRI, Korea) .....   | <b>1698</b> |
| <b>20. Design and Performance Analysis of HomePNA 2.0 Transceiver Chip Circuit</b>   |             |
| Jong Won Kim, Jae Doo Huh (ETRI, Korea), Dae Young Kim (Chungnam National University, Korea) ·   | <b>1702</b> |
| <b>21. Design of SPI module in Large-Scale Network</b>   |             |
| Seungyong Yoon, Jintae Oh, Jongsoo Jang (ETRI, Korea) .....  | <b>1706</b> |
| <b>22. A Flexible Control Strategy on Workflow Modeling and Enacting</b>   |             |
| Jiantao Zhou, Ximeng Ye (Inner Mongolia University, China) .....   | <b>1712</b> |
| <b>23. Korean-English Named Entity Alignment for Machine Translation of Digital TV Closed Caption</b>  |             |
| Sanghwa Yuh (Kyungin Women's College, Korea), Jungyun Seo (Sogang University, Korea) .....   | <b>1717</b> |
| <b>24. Key Distribution Scheme Based on Two Cryptosystems for Hierarchical Access Control</b>  |             |
| Bing Hu, Wu Ye, Sui-Li Feng (South China University of Technology, China), Xiao-Liang Wang (JiNan University, China), Xing Xie (GuangDong Information Center, China) ..... | <b>1723</b> |
| <b>25. Paging Scheme for High-speed Portable Internet (HPi) System</b>   |             |
| Hyun Suk Roh, Sang-ho Lee (ETRI, Korea) .....  | <b>1729</b> |
| <b>26. Secure Discovery Method of Devices for a Home Network Middleware</b>  |             |
| Do-Woo Kim, Geon-Woo Kim, Jun-Ho Lee, Jong-Wook Han (ETRI, Korea) .....  | <b>1733</b> |
| <b>27. Performance Evaluation of Software Streaming Server Architecture for Massive Users</b>  |             |
| Sungjoo Kang, Kyong I Ku, Jeong Min Shim, Sung Jin Hur, Sang Hyun Ju, Wan Choi (ETRI, Korea) ···   | <b>1736</b> |

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| <b>28. Conversation Preference Profile for Mobile Web Service</b>   |             |
| Kangchan Lee, Wonsuk Lee, Jonghong Jeon, Seungyun Lee (ETRI, Korea), Jonghun Park<br>(Seoul National University, Korea) ..... | <b>1742</b> |
| <b>29. Recovery Policies on a Web Services-based Business Process for Minimizing Human Intervention</b>                       |             |
| Jinyoung Moon, Rockwon Kim, Yeonjun Kim, Daha Lee, Hyeonsung Cho (ETRI, Korea) .....  | <b>1745</b> |
| <b>30. Periodic Medium Reservation Timer Mechanism for VoIP in IEEE 802.11 Wireless LAN</b>                                   |             |
| Dae Ho Kim, Ki Jong Koo, Do Young Kim (ETRI, Korea) .....   | <b>1747</b> |
| <b>31. A Study on Heuristic Algorithms to construct the Local Loop Connection</b>   |             |
| Jeongtae Kim, Soyoung Park, Tchanghee Hyun (ETRI, Korea) .....  | <b>1751</b> |
| <b>32. A WDM-Ethernet hybrid Passive Optical Network Architecture</b>   |             |
| Jeong-Ju Yoo, Hyun-Ho Yun, Tae-Yeon Kim, Kang-Bog Lee, Mahn-Yong Park, Byoung-Whi Kim,<br>Bong-Tae Kim (ETRI, Korea) .....    | <b>1754</b> |
| <b>33. Storage structure and management skills for RDF Schema versioning in RDB environment</b>                               |             |
| ByungGon Kim (Bucheon College, Korea), YounHee Kim, Haechull Lim (Hongik University, Korea) ...                               | <b>1758</b> |

## Session 9A: CDMA & Wireless Communications (IX)

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| <b>1. Spectral Correlation Based Signal Detection Method for Spectrum Sensing in IEEE 802.22 WRAN Systems</b>                         |             |
| Ning Han, SungHwan Shon, Jae Hak Chung, Jae Moung Kim (Inha University, Korea) .....  | <b>1765</b> |
| <b>2. A Mixed-Radix 4-2 Butterfly with Simple Bit Reversing for Ordering the Output Sequences</b>                                     |             |
| Young-jin Moon, Young-il Kim (ETRI, Korea) .....  | <b>1771</b> |
| <b>3. Asynchronous Uplink MC-CDMA with Multiuser Detection and Frequency Offset</b>   |             |
| Won Mee Jang, Moon Woo Lee (University of Nebraska, USA) .....  | <b>1775</b> |
| <b>4. General Expression for the Error Probability of Arbitrary Two-Dimensional Signaling with I/Q Amplitude and Phase Unbalances</b> |             |
| Jaeyoon Lee, Dongweon Yoon, In Chul Im (Hanyang University, Korea) .....  | <b>1781</b> |
| <b>5. Novel Techniques of a List Sphere Decoder for High Throughput</b>   |             |
| Jin Lee, Sin-Chong Park (ICU, Korea) .....  | <b>1785</b> |

## **Session 9B: Mobile Communications (IX)**

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| <b>1. A Handover Framework for Seamless Service Support between Wired and Wireless Networks</b>   |             |
| Ok Sik Yang (ICU, Korea), Seong Gon Choi (CBNU, Korea), Jun Kyun Choi (ICU, Korea), Jung Soo Park, Hyoung Jun Kim (ETRI, Korea) .....                       | <b>1791</b> |
| <b>2. Communication Technologies for Collaborative Sensing and Control in Vehicular Ad-Hoc Networks</b>   |             |
| Evtim Peytchev, Taha Osman, David Al-Dabass, Michael Thomas, Shi Zhi (Nottingham Trent University, United Kingdom) .....                                    | <b>1797</b> |
| <b>3. Considerations of Multiple Network Interface for a Mobile node</b>  |             |
| Yong-Geun Hong, Jung-Soo Park, Hyoung-Jun Kim (ETRI, Korea) .....   | <b>1800</b> |
| <b>4. The Framework for Mobility and Multihoming Using Overlay Network</b>  |             |
| Taewan You, Seungyun Lee (ETRI, Korea) .....  | <b>1803</b> |
| <b>5. A New Backoff Scheme of IEEE 802.11 Wireless Local Area Networks</b>  |             |
| Il-Young Moon (Korea University of Technology and Education, Korea), Hwi-Jin Ye, Sung-Joon Cho (Graduate School of Hankuk Aviation University, Korea) ..... | <b>1807</b> |

## **Session 9C: Multimedia and Internet Systems and Services (IX)**

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| <b>1. The Design of the Ontology Retrieval System on the Web</b>                                     |             |
| Myunggwon Hwang, Hyunjang Kong, Pankoo Kim (Chosun University, Korea) .....                          | <b>1815</b> |
| <b>2. PEAQ-based Psychoacoustic Model for Perceptual Audio Coder</b>                                 |             |
| Xiaopeng Hu, Guiming He, Xiaoping Zhou (Wuhan University, China) .....                               | <b>1819</b> |
| <b>3. Gesture Analysis for Human-Robot Interaction</b>   |             |
| Kye Kyung Kim, Keun Chang Kwak, Su Young Chi (ETRI, Korea) .....                                     | <b>1824</b> |
| <b>4. RLS Algorithm Based Sub-Band Decomposition Low Memory Multimedia Applications</b>              |             |
| Suprava Patnaik, Yogananda Patnaik, Anamika Upadhyay (National Institute of Technology, India) ..... | <b>1828</b> |
| <b>5. Packet Control Mechanism for Seamless Multimedia Streaming Service in Wireless Network</b>     |             |
| Hyung Su Lee, Hee Young Youn (Sungkyunkwan University, Korea), Hye Dong Jung (KETI, Korea) ...       | <b>1833</b> |

## **Session 9D: Digital Home Technology (II)**

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| <b>1. A Scheme Using OPES for Real-Time Translation Services in Digital Home Networks Based on Delivery Management Systems</b> |             |
| Il-Woo Lee, Ho-Jin Park, Kwang-Roh Park (ETRI, Korea), Younghwan Choi, Sang-Ha Kim (Chungnam National University, Korea) ..... | <b>1841</b> |

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| <b>2. Augmented Interface Table based on Fingertip Recognition for Embedded Devices</b>                             |             |
| Sung-Ho Ahn, Ji-Yong Kim, Ji-Young Kwak (ETRI, Korea), Jee In Kim, Doo Hyun Kim<br>(Konkuk University, Korea) ..... | <b>1845</b> |
| <b>3. Integrate LonWorks and UPnP devices by OSGi gateway and Universal Remote Console</b>                          |             |
| Yu-Hsiang Sheng, Wen-Wei Lin, Chia-Shou Tu, Kuen-Ming Lee (Industrial Technology Research Institute, Taiwan) .....  | <b>1848</b> |
| <b>4. Context-Aware based Mobile Service for Ubiquitous Home</b>  |             |
| Hyunjeong Lee, Jongwon Kim, Jaedoo Huh (ETRI, Korea) .....  | <b>1851</b> |
| <b>5. The DLNA Proxy System Architecture for Sharing In-Home Media Contents via Internet</b>                        |             |
| Yeon-Joo Oh, Hoon-Ki Lee, Jung-Tae Kim, Eui-Hyun Paik, Kwang-Roh Park (ETRI, Korea) .....                           | <b>1855</b> |

## Session 9E: ASP, WAS, P2P, CDN, and XML Technologies

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| <b>1. Performance evaluation of Open Source Native XML databases – A Case Study</b>  |             |
| Ntima Mabanza, Jim Chadwick, G.S.V.R.Krishna Rao (University of Fort Hare, South Africa) .....   | <b>1861</b> |
| <b>2. P2MVOD: Peer-to-Peer Mobile Video On-Demand</b>  |             |
| Katsuhiko Sato (Japan Radio Co., Ltd., Japan), Michiaki Katsumoto (National Institute of Information and Communications Technology, Japan), Tetsuya Miki (The University of Electro-Communications, Japan) ... | <b>1866</b> |
| <b>3. The Index Organizations for RDF and RDF Schema</b>   |             |
| YounHee Kim (Hong-Ik University, Korea), ByungGon Kim (Bucheon College, Korea), HaeChull Lim (Hong-Ik University, Korea) .....   | <b>1871</b> |
| <b>4. An Overlay Resource Monitor System</b>   |             |
| Chih-Chen Wang, Yung-Mu Chen, Cheng-Hao Weng, Tein-Yaw Chung (Yuan Ze University, Taiwan) ...  | <b>1875</b> |
| <b>5. Contents Conversion Service Network</b>  |             |
| Heang-Suk Oh, Teak-Yong Nam (ETRI, Korea) .....  | <b>1880</b> |

## Session 9F: IT Service Technology (IV)

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| <b>1. Design and Implementation of Session Management for n-to-n Multicast</b>         |             |
| Okjo Jung, Juyoung Park, ShinGak Kang (ETRI, Korea) .....                              | <b>1887</b> |
| <b>2. Modeling of Heart Phantom using the Multidipole Current Source</b>               |             |
| Dal-Hwan Yoon, Sun Hyo Lee, Dong Ju Bae, Ho Kyun Kim (Semyung University, Korea) ..... | <b>1891</b> |
| <b>3. 3D Sound Localization Cues using HRTF Database Built with Dummy Head</b>         |             |
| Alexander Ovcharenko, Ui-Pil Chong (University of Ulsan, Korea) .....                  | <b>1895</b> |

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| <b>4. Design and Implementation of Real-Time Security Guard Robot using CDMA Networking</b>   |             |
| Je-Goon Ryu (Korea Polytechnic University, Korea), Hyeon-Min Shim, Se-Kee Kil (Korea Polytechnic University, Korea), Eung-Hyuk Lee (Korea Polytechnic University, Korea), |             |
| Heung-Ho Choi (Inje University, Korea), Seung-Hong Hong (Inha University, Korea) .....  | <b>1901</b> |
| <b>5. A study on the Service Process Generation System for Intelligent Robot</b>  |             |
| Cheonshu Park, Joochan Sohn (ETRI, Korea) .....   | <b>1907</b> |

## Session 9G: Digital Broadcasting Technology (II)

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| <b>1. High Speed MPEG-2 TS Scrambling System with DVB-Common Scrambling Algorithm</b>  |             |
| Joon-Young Jung, O-Hyung Kwon, Soo-In Lee (ETRI, Korea) .....  | <b>1913</b> |
| <b>2. Performance Enhancement of a DBS receiver using Hybrid Approaches in a Real-Time Environment</b>   |             |
| Sung-Hoon Kim (ETRI, Korea), Yeong Rak Seong, Kyeong Hoon Jung, Dong Wook Kang, Ki-Doo Kim (Kookmin University, Korea) .....                             | <b>1917</b> |
| <b>3. Nonlinear Filtering for Rejection ISI in FSK Modulation</b>  |             |
| Mohammad Reza Tarihi, Asghar Taheri (Malek Ashtar University of Technology, Iran), Kamal Mohamed-Pour (K. N. Toosi University of Technology, Iran) ..... | <b>1921</b> |
| <b>4. The Interactive Contents Authoring System for Terrestrial Digital Multimedia Broadcasting</b>  |             |
| Won-Sik Cheong, Jihun Cha, YeSun Joung, Kyuheon Kim (ETRI, Korea) .....  | <b>1926</b> |
| <b>5. An Efficient Method of Personalized Broadcasting on the Interactive Broadcast Network</b>  |             |
| Joo-Myoung Seok, Seong Yong Lim, Heekyung Lee, Han-Kyu Lee (ETRI, Korea) .....   | <b>1931</b> |

## Session 10A: CDMA & Wireless Communications (X)

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| <b>1. Low Complexity MMSE-QRD-based ML Decoder for Quasi-Orthogonal STBC scheme in MIMO Wireless Communications Systems with Four-Transmit Antennas</b> |             |
| Van-Su Pham, Minh-Tuan Le, Linh Mai, Giwan Yoon (ICU, Korea) .....  | <b>1937</b> |
| <b>2. Low-Complexity Generalized Layered Space-Time MIMO Detection</b>  |             |
| Yuhei Nagao, Masayuki Kuroasaki, Hiroshi Ochi (Kyushu Institute of Technology, Japan) .....   | <b>1940</b> |
| <b>3. The Optimization of the Collision Resolution Algorithm for Broadband Wireless Access Network</b>  |             |
| Sung-Min Oh, Jae-Hyun Kim (Ajou University, Korea) .....  | <b>1944</b> |

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| <b>4. A Robustness Analysis of a Practical Contention Resolution Algorithm under Misbehaved users in Wireless Communication Systems</b> | <b>1949</b> |
| Chalotorn Chanasong, Warakorn Srichavengsup, Lunchakorn Wuttisittikulkij (Chulalongkorn University, Thailand) .....                     | 1949        |
| <b>5. A Optimal CF-Poll Piggyback Scheme in IEEE 802.11e HCCA</b>   | <b>1954</b> |
| Hyun-Jin Lee, Jae-Hyun Kim (Ajou University, Korea) .....   | 1954        |

## Session 10B: Mobile Communications (X)

|  |             |
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| <b>1. Keep-Alive Algorithm based Periodic Ranging Code Group for detecting abnormal SS in WiBro System</b>   | <b>1963</b> |
| Sook-Jin Lee (ETRI, Korea), Whan Woo Kim (Chung-Nam National University, Korea) .....  | 1963        |
| <b>2. Energy-based Route Discovery Mechanism in Mobile Ad Hoc Networks</b>   | <b>1967</b> |
| Jirasak Kanjanarot, Kowit Sithi, Chaiyachet Saivichit (Chulalongkorn University, Thailand) .....   | 1967        |
| <b>3. Intermediary based Architecture for Mobile Web Services</b>  | <b>1973</b> |
| Wonsuk Lee, Kangchan Lee, Seungyun Lee (ETRI, Korea) .....   | 1973        |
| <b>4. The Applicability of SCTP to Mobile Ad Hoc Networks</b>  | <b>1979</b> |
| Dongkyun Kim, Jeomki Song, Joungsik Kim, Hongseok Yoo (Kyungpook National University, Korea), Jungsoo Park (ETRI, Korea), Juan-Carlos Cano (Polytechnic University of Valencia, Spain) ..... | 1979        |
| <b>5. Route Optimization Using RIPng Protocol in Nested Network Mobility</b>   | <b>1985</b> |
| Sung Hei Kim, Yoon Young Ahn (ETRI, Korea), Sang Ha Kim (ChungNam National University, Korea), Tae Il Kim (ETRI, Korea) .....  | 1985        |

## Session 10C: IPv6 Technology (I)

|  |             |
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| <b>1. An Empirical Analysis of IPv6 Transition Mechanisms</b>  | <b>1991</b> |
| Myung-Ki Shin, Hyoung-Jun Kim (ETRI, Korea), Darrin Santay, Doug Montgomery (NIST, USA) .....          | 1991        |
| <b>2. Network Side Fast handover Support in Mobile IPv6</b>  | <b>1997</b> |
| HeeYoung Jung, HongSeok Jeon (ETRI, Korea) .....   | 1997        |
| <b>3. Design, Implementation and Evaluation of Source-Specific Multicast System over IPv6 Networks</b> | <b>2000</b> |
| Sangjin Jeong, Myung-Ki Shin, Hyoung-Jun Kim (ETRI, Korea) .....                                       | 2000        |
| <b>4. Protection Algorithm against Security Holes of IPv6 Routing Header</b>                           | <b>2004</b> |
| JaeDeok Lim, YoungKi Kim (ETRI, Korea) .....   | 2004        |

**5. An Efficient Mechanism for Multicast Deployment in IPv6**

Min-kyo In, Seung-yun Lee, In-dong Jang, Tae-wan You (ETRI, Korea) ..... 2008

**Session 10D: Communication Network Topology & Planning (I)**

**1. Comparison of Cost for Different Coverage Scenarios between Copper and Fiber Access Networks**

Michael Jensen, Rasmus Hjorth Nielsen, Ole Brun Madsen (Aalborg University, Denmark) ..... 2015

**2. Internet Topology Modeling which Reflects Hierarchical and Dynamic Characteristic of Internet**

Ju-hang Sohn, Jung-ryul Kim, Joo-seong Park, Hyo-jun Lee, Min-taig Kim (ETRI, Korea) ..... 2019

**3. Demonopolization of Russian Long Distance Communication Market using SS 7 Network**

Oleg Semanov (North-West Telecom, Russian Federation), Vladislav Pyattaev (FSUE LONIIS, Russian Federation), Vitaly Danilov (St. Petersburg State University of Telecommunications, Russian Federation) 2025

**4. Content-based Pattern Matching for Classification of Network Application**

Kwangjin Choi, Jun-kyun Choi (ICU, Korea), Sangyong Ha (NCA, Korea), Se Yun Ban (ICU, Korea) .. 2027

**5. Intrinsic Fitness and Preferential Attachment in Scale-free Networks**

Hongbo Liu, Jiaxin Wang (Tsinghua University, China) ..... 2030

**Session 10E: GRID, Distributed Computing Technologies & Services (I)**

**1. Work Packet Manager: Exploiting Heterogeneity in Cluster Computing**

KyuHo Lee, Jongsu Yi, JunSeong Kim (Chung-Ang University, Korea) ..... 2035

**2. Load Balancing of OLTP on Heterogeneous Database Cluster**

Weihua Gong, Yuanzhen Wang (Huazhong University of Science and Technology, China) ..... 2040

**3. A Method for Representing and Transporting CIM Operations using Binary XML in the WBEM Architecture**

Jong-Geun Park, Chang-Won Ahn, Hee-Nam Cho, Il-Soo Byun, Frederic Desmons, Seong-Woon Kim (ETRI, Korea) ..... 2046

**4. Implicit Information Load Sharing Policy for Grid Computing Environment**

Nathakrit Sanguandikul, Natawut Nupairoj (Chulalongkorn University, Thailand) ..... 2050

**5. Lifetime Maximization by Cross-Layer Interaction in Wireless Sensor Networks**

In-Yeup Kong (Pusan National University, Korea), Won-Joo Hwang (Inje University, Korea) ..... 2055

## Session 10F: Portable Internet and Internet Telephony

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