# **Curriculum Vitae**

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# Status:

- Assistant Professor. Department of Software, Sungkyunkwan University, Republic of Korea
  - My research area is Cyber-Physical Systems (CPS) that are computing systems interacting with physical, real environments. My research includes (i) CPS supporting the safe and efficient driving in transportation systems (e.g., road networks) in real life and (ii) CPS protecting and monitoring efficiently transportation systems (e.g., road networks and subways) and people (e.g., drivers, passengers, and pedestrians) in emergency situations (e.g., wars, accidents, and disasters).
  - o I am leading CPS Laboratory at Sungkyunkwan University: http://cpslab.skku.edu

# Education:

- University of Minnesota, Minneapolis, MN Department of Computer Science and Engineering Ph.D. – December 2009, GPA: 3.772/4.0 Thesis Title - Wireless Sensor Networking for Intelligent Transportation Systems Advisor - Prof. David H.C. Du and Prof. Tian He
- Seoul National University, Seoul, Korea School of Electrical Computer Engineering M.S. – February 2001, GPA: 3.73/4.3 Thesis - Design and Implementation of One-way IP Performance Measurement Tool Advisor - Prof. Yanghee Choi
- Sungkyunkwan University, Suwon, Korea Department of Information Engineering B.S. – February 1999, GPA: 3.8/4.5 (Upper: 4.27/4.5) Thesis - Location Management for Searching in Mobile Communication Advisor - Prof. Youngik Eom

### **Research Experience:**

- 2010.1-2012.7: Brocade Communications Systems, Plymouth, MN, USA
  - **Engineering:** <u>IPsec Design and Implementation</u>. In this project, I worked for the design and implementation of IPsec in IPv4 and IPv6. Especially, I worked on the Cavium network protocol stacks to efficiently support the Internet Key Exchange for IPsec. Also, I worked for the Internet Standardization for IPv6 DNS Configuration in the IETF.
  - Research: <u>Vehicular Cyber-Physical Systems for Road Networks</u>. I researched on Vehicular Cyber-Physical Systems for Road Networks, such as Road Sensor Networks and Vehicular Networks. Especially, I worked for the trajectory-based multicast protocol for the efficient data sharing in vehicular networks. Traffic Control Center maintains the trajectories of the vehicles moving in road networks for the localization of vehicles. It allows the infrastructure nodes (i.e., APs and Relay Nodes) to be able to forward data packets to the moving multicast group vehicles with their trajectory information. Also, I worked for the delay-bounded-and-reliable data dissemination architecture for vehicular networks, based on Relay Nodes.

### • 2004.9-2009.12: Department of Computer Science, University of Minnesota, USA

- **2008.5-2009.12:** <u>Data Forwarding in Vehicular Ad-hoc Networks (VANET)</u> funded by National Science Foundation (NSF). In this project, I researched on a data forwarding in vehicular networks. I investigated a data forwarding using both individual vehicle trajectory and vehicular traffic statistics in road networks. This work was published in IEEE ICDCS'09 and IEEE Transactions on Parallel and Distributed Systems (TPDS) as Spotlight Paper. I worked for a data forwarding scheme for the infrastructure-to-vehicle data delivery, considering vehicle trajectory and vehicular traffic statistics. This work was published in IEEE ICDCS'10 and IEEE Transactions on Mobile Computing (TMC) as Spotlight Paper.
- **2006.5-2008.4:** <u>Sensor Networking Project for Intelligent Transportation Systems</u> funded by Digital Technology Center (DTC), University of Minnesota and National Science Foundation (NSF). In this project, I have researched on the sensor networking for the intelligent transportation systems, such as road networks. I designed and published the Autonomous Passive Localization system (called APL) for wireless sensors deployed on road networks. I proposed and published a vehicle tracking algorithm using minimal tracking area (called minimal contour) in order to save sensor energy. I also researched on a road surveillance system (called VISA) for the road networks using the characteristics of road networks. These three projects were published in IEEE Infocom conferences.
- 2005.5-2006.5: Intelligent Storage based on Object-based Storage Device (OSD), DISC <u>Project</u> - funded by US Industry (such as Sun Microsystems and StorageTek) and Korean Government Research Institute (i.e., ETRI). In this project, I implemented the communications and security modules (such as the security manager and policy manager) for OSD based on ISO T10 specification. The implementation has been publicly released in SourceForge.net (<u>http://sourceforge.net/projects/disc-osd/</u>) in 2007 and the paper related to the implementation has been published to a storage conference called MSST in 2006.
- 2004.8-2006.5: <u>Simulation and Modeling for Storage Area Network (SIMON)</u>, <u>SIMON</u> <u>Project</u> - funded by US Navy. In this project, I designed and implemented a simple version of SIMON simulator in 2004. With the simulation and real experiment, we proved the validity of the SIMON concept. We also worked for the hybrid simulation approach for the SIMON simulator.
- 2001.2-2004.8: Electronics and Telecommunications Research Institute (ETRI), Korea Research Staff Member Next Generation Internet Standards Research Team
  - 2002.1-2004.8: Project titled <u>IPv6 Auto-Configuration Networking Technology</u> <u>Standardization (6ANTS)</u>. In this project, we developed and implemented basic routing protocol and auto-configuration technology for auto-networking in IPv6 mobile environments, such as IPv6 mobile ad hoc network (MANET) and mobile network (NEMO). The auto-configuration technology consists of the IPv6 unicast address autoconfiguration, IPv6 multicast allocation, multicast DNS, and service discovery. Especially, I have led in the development of the auto-configuration technology and ad hoc routing protocols for IPv6 mobile ad hoc networks. Also, I have developed wireless mobile router based on MPC855T board and embedded linux with other company called CREWAVE for MANET testbed. The results of this project have been being standardized in IETF (Internet Engineering Task Force).
  - 2001.2-2001.12: Project titled <u>IPv6 Network and Application Testbed (6NEAT)</u>. In this project, we implemented IPv6 applications, such as videoconferencing tools and tested them over Trans-Eurasia Information Network (TEIN) with several European countries such as University College London (UCL). Also, we participated in 6WINIT project as one of the international partners, of which the purpose is to validate the introduction of the new mobile wireless internet in Europe. I designed and implemented <u>Active Measurement Tool (AMTv6)</u> for measuring one-way IP performance metrics in IPv6 network. I also managed the nation-wide IPv6 testbed network called 6Bone-KR and performed the test of our prototype implementation in this network.

- **1999-2000: Department of Computer Engineering, Seoul National University, Korea** Research Assistant – Multimedia & Computer Communications Lab., Prof. Yanghee Choi
  - 2000.5-2000.11: Project titled <u>Development of One-way IP Performance Measurement</u> <u>Tool, Active Measurement Tool (AMT)</u>. In this project, we developed and implemented one-way IP performance measurement tool for Korea Telecom commercial Internet, KORNET. I designed and implemented main modules of control and measurement systems of AMT.
  - 1999.3-1999.12: Project titled <u>A High-quality Multimedia Distribution Service over the Internet (SmartNET)</u>. In this project, we implemented a high-quality multimedia distribution service based on MPEG-1 video/audio over the Internet, namely VoD service. I implemented the user interface based on MFC in this project.

# Intern:

- 2007.5.14-2007.8.31: SGI, Eagan, MN, USA
  - Engineering Work: CXFS Project for the SGI's Cluster File System for High-<u>Performance Computing</u>. In this project, I extended the Wireshark that is one of popular network analysis tools. Given Interface Description Language (IDL) files for CXFS message protocol, the Wireshark is required to be automatically updated in order to capture packets related to new interfaces specified in the IDL files. I designed and implemented Parsers based on Lex/Yacc to allow both the automation of Wireshark update and the display of IDL interface parameters, given the IDL files.

# • 2006.6.1-2006.8.31: McData, Plymouth, MN, USA

• Engineering Work: Dana Project for the McDATA second generation switch (called <u>iWSM</u>) for SAN Internetworking. In this project, I set up the testbed and extended the testing tool program for testing the iWSM boxes. The first work was to set up the testbed for testing the IPsec implementation in the iWSM using Ixia's IxANVL that is one of the most popular protocol testing tools. Also, I designed the extension of the IxANVL tool for the iWSM IPsec testing. The second work was to extend the windows-based testing program (called MessageBox) for testing the iWSM box. The program is implemented using Visual C++ and WinBatch. Especially, I extended the user-interface functions (such as the window resizing and text-coloring for debugging) and the character caret control in the terminal that is used to provide Command Line Interface (CLI).

# **Teaching:**

- Lecturer: Introduction to Computer Engineering (ICE2010), Department of Software, Sungkyunkwan University, Spring 2013. Undergraduate level course to introduce computer science, such as computer hardware and software.
- Lecturer: **Introduction to Algorithms (SWE3001-41)**, Department of Software, Sungkyunkwan University, Fall 2012. Undergraduate level course to cover the design and analysis of algorithms, such as Dynamic Programming and Greedy Algorithms.
- Teaching Assistant: Introduction to Computer Networks (CSCI-4211), Computer Science and Engineering, University of Minnesota, Fall 2009. Undergraduate level course on the introduction to the computer networking from Data-link layer to Application layer.
- Teaching Assistant: Wireless Sensor Networks (CSCI-5980), Computer Science and Engineering, University of Minnesota, Spring 2006. Graduate level course on the introduction to the wireless sensor networks.
- Teaching Assistant: **Data Communications and Computer Networks** (CSCI-5211), Computer Science and Engineering, University of Minnesota, Fall 2005. Graduate level course on the introduction to the data communication and computer network for understanding the Internet.
- Teaching Assistant: **Electronic Circuit 1**, Computer Engineering, Seoul National University, Fall 2000. Sophomore level course on introduction to the Electronic Circuit.
- Lecturer: Windows Programming (MFC) and UNIX Network Programming, BIT Training Center (BTC) (<u>http://www.bit.co.kr/english/product/441.htm</u>), 1999-2000. – BTC is a subsidiary

IT Institute of BIT Computer (<u>http://www.bit.co.kr/english/Index.htm</u>) to educate and deliver highly skilled programmers to the industry.

# **Related Courses:**

### Graduate Courses

- Ph.D. Courses: Data Communications and Computer Networks (CSCI-5211), Advanced Algorithms and Data Structures (CSCI-5421), Advanced Computer Networks and Their Applications (CSCI-8211), Numerical Analysis (CSCI-5302), Artificial Intelligence I (CSCI-5511), Probability and Statistics Theory (MATH-5651), New Trends in Database Systems (CSCI-5980), Prediction and Filtering Theory (MATH-5654), Machine Learning (CSCI-5525), Introduction to Stochastic Processes (MATH-5652), Graph Theory and Non-Enumerative Combinatorics (MATH-5707), Statistical Analysis (STAT-5021).
- **M.S. Courses:** Advanced Multimedia, Computer Communication Networks, Security in Computer Systems, Advanced Computer System Performance Evaluation, Topics in Internet, Advanced Operating Systems, Advanced Database, Advanced Programming Language.
- Undergraduate Courses
  - Simulation Engineering, Theory of Computation, Computer Networks, Electronics Circuits, Communication Theory, Information Theory I & II, Data Communications, Signal and Systems, Digital Signal Processing, Introduction to Statistics, etc.

# **Technical/Special Skills:**

- **OS:** Cavium, Windows, Unix (Solaris, Linux, FreeBSD).
- **Programming:** C/C++, Perl, MFC, Java, Java Script, Tcl/Tk, Lisp, Scheme, Lex/Yacc, Fortran, Latex and HTML.
- Network Simulation and Math Package: ns-2, SMPL, Matlab, Statistix (Statistics Tool).
- Protocols:
  - Network: IEEE 802.11 a/b/g/p, Cloud Computing, TCP/IP, IPv6, IPsec, MIPv6, NEMO, MANET, MPLS, ATM, etc.
  - Storage: Cloud Storage, FCIP, iSCSI, OSD, FC-AL, CXFS, etc.

# **Professional Activities:**

- **2002.1-Present:** IETF Standardization, especially in IPv6 WG (Working Group), 6MAN WG, DNSOP WG, Autoconf WG and NEMO WG
- 2001.1-2001.12: Secretariat in IPv6 Forum Korea
- 2001.3-2001.12: Chair of Measurement WG in APAN-KR
- 1999.1-2000.12: Member of Video WG and Measurement WG in APAN-KR

# **Professional Services:**

- **Technical Program Committee:** International Workshop on Mobile Systems and Applications (MoSA 2011), IEEE International Workshop on Internet and Distributed Computing Systems (IDCS'09, IDCS'11)
- University Committee Service: UMN Computer Science DGS Advisory Committee (2007.9-2008.4)
- Conference Paper Review: ICOIN'13, IEEE Infocom'12, IEEE WCNC'12, IEEE VTC'12 Spring, IEEE MASS'09, IEEE ICDCS'09, ACM/ IEEE IPSN'09, IEEE Infocom'09, IEEE ICOIN'09, ACM MobiHoc'08, IEEE ICDCS'08, IEEE MASS'08, IEEE Milcom'08, IEEE Globecom'08, IEEE ICNP'07, IEEE ICC'06, IEEE Workshop on Wireless Local Networks'05.

• Journal Paper Review: Ad Hoc Networks'11, IEEE Transactions on Vehicular Technology (TVT), IEEE Transactions on Wireless Communications (TWC), IEEE Transactions on Mobile Computing (TMC), IEEE Transactions on Intelligent Transportation Systems (T-ITS), IEEE Intelligent Transportation Systems Magazine, WINET'10, Ad Hoc Networks'10, SENSORS'10, IEEE Communications Letters'09, IJOPCM'09, COMNET'09, SENSORS'09, TIIS'09, IJSNet'06.

# **Community Services:**

- 2008.3-2012.7: Teacher at Taekwondo (Korean Martial Art) Class, The 3rd Dan Black Belt, MN, USA.
- 2009.8: Coach at Commonwealth Terrace Cooperative (CTC) Youth Soccer Class, MN, USA.
- 2007.9-2008.6: Teacher at Sunday School of Catholic Church, Saint Andrew Kim, MN, USA
- 1996.2-2001.1: Teacher at Sunday School of Catholic Church, Chang4-dong, Seoul, Korea
- **1993.11-1996.1:** Military Service in Korea Army

# **Grants:**

- **Research Grant** from Daegu Gyeongbuk Institute of Science and Technology (DGIST) in Korea: December 2012 – May 2013, "Vehicular Networking in Cyber-Physical Systems for Intelligent Transportation Systems".
- **Research Grant** from Electronics and Telecommunications Research Institute (ETRI) in Korea: December 2012 June 2013, "Research on e-Bus Routing Scheme in Smart e-Bus Framework".
- Travel Grant for Illinois Wireless Summer School: UIUC, Illinois, August 2009.
- NSF Travel Grant for INFOCOM'07: Anchorage, Alaska, May 2007.

# Awards:

- Spotlight Paper in IEEE Transactions on Mobile Computing, October 2012, "Trajectory-Based Statistical Forwarding for Multihop Infrastructure-to-Vehicle Data Delivery".
- Spotlight Paper in IEEE Transactions on Parallel and Distributed Systems, May 2011, "Trajectory-Based Data Forwarding for Light-Traffic Vehicular Ad-Hoc Networks".
- **Computer Engineering Scholarship:** Seoul National University, 1999.
- Information Engineering Scholarship: Sungkyunkwan University, 1997-1998.

# **Publications:**

- Vehicular Networks for Cyber-Physical Systems
  - "Travel Prediction-based Data Forwarding for Light-Traffic Vehicular Networks", Jaehoon Jeong, Fulong Xu, Shuo Guo, Yu Gu, Qing Cao, Ming Liu and Tian He, Under Major Revision in Elsevier Computer Networks, June 2013.
  - "Trajectory-Based Multi-Anycast Forwarding for Efficient Multicast Data Delivery in Vehicular Networks", Jaehoon Jeong, Tian He and David Du, Elsevier Computer Networks (in preprint), May 2013.
  - 3. "Trajectory-Based Statistical Forwarding for Multihop Infrastructure-to-Vehicle Data Delivery", Jaehoon Jeong, Shuo Guo, Yu Gu, Tian He and David Du, IEEE Transactions on Mobile Computing (TMC), **Spotlight Paper**, Vol. 11, No. 10, October 2012.
  - 4. "Vehicle Trajectory-Based Data Forwarding Schemes for Vehicular Ad Hoc Networks", Jaehoon (Paul) Jeong, KICS Information and Communications Magazine, Survey Paper, August 2012.
  - 5. "Utilizing Shared Vehicle Trajectories for Data Forwarding in Vehicular Networks", Fulong Xu, Shuo Guo, Jaehoon Jeong, Yu Gu, Qing Cao, Ming Liu and Tian He, IEEE Infocom'11 Miniconference, Shanghai, China, April 2011.
  - 6. "TSF: Trajectory-based Statistical Forwarding for Infrastructure-to-Vehicle Data Delivery in Vehicular Networks", Jaehoon Jeong, Shuo Guo, Yu Gu, Tian He and David Du, IEEE ICDCS'10, June 2010.

- "Trajectory-Based Data Forwarding for Light-Traffic Vehicular Ad-Hoc Networks", Jaehoon Jeong, Shuo Guo, Yu Gu, Tian He and David Du, IEEE Transactions on Parallel and Distributed Systems (TPDS), Spotlight Paper, Vol. 22, No. 5, May 2011.
- 8. "TBD: Trajectory-Based Data Forwarding for Light-Traffic Vehicular Networks", Jaehoon Jeong, Shuo Guo, Yu Gu, Tian He and David Du, IEEE ICDCS'09, June 2009.

#### • Wireless Sensor Networks for Cyber-Physical Systems

- 1. "Node Localization in Wireless Sensor Networks", Ziguo Zhong, Jaehoon Jeong, Ting Zhu, Shuo Guo and Tian He, Handbook on Sensor Networks, World Scientific Publishing Co., July 2010.
- 2. "Virtual Scanning Algorithm for Road Network Surveillance", Jaehoon Jeong, Yu Gu, Tian He and David Du, IEEE Transactions on Parallel and Distributed Systems (TPDS), Vol. 21, No. 12, December 2010.
- 3. "VISA: Virtual Scanning Algorithm for Dynamic Protection of Road Networks", Jaehoon Jeong, Yu Gu, Tian He and David Du, IEEE Infocom'09, April 2009.
- 4. "Autonomous Passive Localization Algorithm for Road Sensor Networks", Jaehoon Jeong, Shuo Guo, Tian He and David Du, IEEE Transactions on Computers (TC), Vol. 60, No. 11, November 2011.
- 5. "APL: Autonomous Passive Localization for Wireless Sensors Deployed in Road Networks", Jaehoon Jeong, Shuo Guo, Tian He and David Du, IEEE Infocom'08, April 2008.
- "MCTA: Target Tracking Algorithm based on Minimal Contour in Wireless Sensor Networks", Jaehoon Jeong, Taehyun Hwang, Tian He and David Du, IEEE Infocom'07 Minisymposia, May 2007.
- "Energy-Aware Scheduling with Quality of Surveillance Guarantee in Wireless Sensor Networks", Jaehoon Jeong, Sarah Sharafkandi and David Du, The 2nd ACM/SIGMOBILE Workshop on Dependability Issues in Wireless Ad Hoc Networks and Sensor Networks (DIWANS), September 2006.

#### Mobile Ad-hoc Networks

- "Design and Implementation of IPv6 Address Autoconfiguration for AODV in Mobile Ad Hoc Networks", Youngmin Kim, Sanghyun Ahn, Youngju Lee, Jaehoon Jeong and Jaehwoon Lee, The 2005 US-Korea Conference on Science, Technology & Entrepreneurship (UKC 2005), University of California at Irvine, August 2005.
- "Name Directory Service based on MAODV and Multicast DNS for IPv6 MANET", Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, IEEE VTC 2004-Fall, Los Angeles, CA, USA, September 2004.
- "Auto-Networking Technologies for IPv6 Mobile Ad Hoc Networks", Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, ICOIN 2004, Busan, Korea, February 18-20, 2004. Reprinted in Lecture Notes in Computer Science (LNCS), Vol. 3090, October 2004.
- 4. "Name Service in IPv6 Mobile Ad-hoc Network connected to the Internet", Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, IEEE PIMRC 2003, Beijing, China, September 2003.
- 5. "Service Discovery based on Multicast DNS in IPv6 Mobile Ad-hoc Networks", Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, IEEE VTC 2003-Spring, Jeju, Korea, April 2003.
- "Name Service in IPv6 Mobile Ad-hoc Network", Jaehoon Jeong, Jungsoo Park, Hyoungjun Kim and Kishik Park, ICOIN 2003, Jeju, Korea, February 2003. Reprinted in Lecture Notes in Computer Science (LNCS), Vol. 2662, August 2003.
- 7. "NDR: Name Directory Service in Mobile Ad-Hoc Network", Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, ICACT 2003, Korea, January 2003.
- 8. "Autoconfiguration Technologies for IPv6 Multicast Service in Mobile Ad-hoc Networks", Jaehoon Jeong and Jungsoo Park, IEEE ICON 2002, Singapore, August 2002.
- 9. "Autoconfiguration Technology for IPv6-based Mobile Ad-hoc Network", Jaehoon Jeong and Jungsoo Park, ICIS 2002, Korea, August 2002.

### • IPv6 Wireless and Wired Networks

- 1. "DNS Configuration in IPv6: Approaches, Analysis and Deployment Scenarios", Soohong Park, Jaehoon Jeong and Choong Seon Hong, IEEE Internet Computing, Vol. 17, Issue 4, July 2013.
- "Dynamic Tunnel Management Protocol for IPv4 Traversal of IPv6 Mobile Network", Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, IEEE VTC 2004-Fall, Los Angeles, CA, USA, September 2004.

- "Route Optimization for Mobile Nodes in Mobile Network based on ND-Proxy", Jaehoon Jeong, Kyeongjin Lee, Jungsoo Park and Hyoungjun Kim, IEEE VTC 2004-Spring, Milan, Italy, May 2004.
- 4. "The Autoconfiguration of Recursive DNS Server and the Optimization of DNS Name Resolution in Hierarchical Mobile IPv6", Jaehoon Jeong, Kyeongjin Lee, Jungsoo Park, Heecheol Lee and Hyoungjun Kim, IEEE VTC 2003-Fall, Orlando, USA, October 2003.
- 5. "The Extended BGP4+ Algorithm for Multihoming", Jongwook Woo, Seunghyup Ryu, Jaiyong Lee, Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, ITC-CSCC2003, Korea, July 2003.
- 6. "Implementation of Service Location Protocol and Remote Device Control for IPv6 based Home Networking", Hyunwook Cha, Jungsoo Park, Jaehoon Jeong and Hyungjun Kim, ICACT 2003, Korea, January 2003.
- 7. "Design and Implementation of Multicast Name Resolution for DNS Service and Service Discovery in Unmanaged Network", (in Korean), Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, JCCI 2003, March 2003.
- "Design of IPv6-based NGI network over TEIN (TransEurasia Information network) between Korea and Europe", (in Korean), Seungyun Lee, Jaehoon Jeong, Kyeongjin Lee and Yongjin Kim, NCS 2001, December 2001.
- 9. "BGP Extension for Multihoming in IPv6", (in Korean), Jongwook Woo, Seunghyup Ryu, Jaiyong Lee, Jaehoon Jeong and Jungsoo Park, KIPS 2002-Fall, November 2002.
- 10. "Setup of IPv6 Multicast Networks through Examples", (in Korean), Jaehoon Jeong, Network Intelligence for Leading Networks (ontheNET) Magazine, IPv6 Technology, January 2004.
- "The Trend of Autoconfiguration Technology in IPv6 Mobile Ad-hoc Network", (in Korean), Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, Electronics and Telecommunications Trends, Vol. 18, No. 3, June 2003.
- "International Standardization Trends in IETF-56 Meeting: Focus on IPv6-related Working Groups", (in Korean), Jaehoon Jeong, Joochoul Lee, Jungsoo Park and Hyoungjun Kim, ETRI Weekly Technology Trends, May 2003.
- 13. "International Standardization Trends in IETF-55 Meeting: Focus on IPv6-related Working Groups", (in Korean), Jaehoon Jeong, Jungsoo Park, Myung-Ki Shin, Kyeongjin Lee, Joochoul Lee and Hyoungjun Kim, ETRI Weekly Technology Trends, Vol. 1087, March 2003.
- 14. "International Standardization Trends in IETF-54 Meeting: Focus on IPv6-related Working Groups", (in Korean), Jaehoon Jeong, Jungsoo Park and Myung-Ki Shin, ETRI Weekly Technology Trends, Vol. 1065, September 2002.
- 15. "International Standardization Trends in IETF-53 Meeting: Focus on IPv6-related Working Groups", (in Korean), Sookyoung Lee, Yongguen Hong, Jaehoon Jeong, Jungsoo Park and Yongjin Kim, ETRI Weekly Technology Trends, Vol. 1051, June 2002.
- 16. "IPv6 Trends and Prospect", (in Korean), Jaehoon Jeong and Yongjin Kim, ETRI Weekly Technology Trends, Vol. 1033, February 2002.

#### • Network Security and Privacy

- 1. "RAD: Recipient-Anonymous Data Delivery based on Public Routing Proxies", Hyoungshick Kim and Jaehoon Jeong, Elsevier Computer Networks, Vol. 55, Issue 15, October 2011.
- 2. "DNS Name Service based on Secure Multicast DNS for IPv6 Mobile Ad Hoc Networks", Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, ICACT 2004, Phoenix Park, Korea, February 2004.

#### • Internet Measurement

- 1. "Design and Implementation of One-way IP Performance Measurement Tool", Jaehoon Jeong, Seungyun Lee, Yongjin Kim and Yanghee Choi, ICOIN 2002, Jeju, Korea, January 2002. Reprinted in Lecture Notes in Computer Science (LNCS), Vol. 2343, July 2002.
- "Methodology for One-way IP Performance Measurement on Sub-path or Link in use of IPv6 Extension Header", Jaehoon Jeong, Jungsoo Park, Seungyun Lee and Yongjin Kim, ICACT 2002, Korea, February 2002.
- 3. "Design and Implementation of the Stable System for One-way IP Performance Measurement", (in Korean), Jaehoon Jeong, Seungyun Lee, Yongjin Kim, KICS 2001-Fall, November 2001.
- 4. "Operation and Use of MRTG", (in Korean), Jaehoon Jeong, Seungyun Lee and Yongjin Kim, Electronics and Telecommunications Trends, Vol. 17, No. 3, June 2002.

- "Design and Implementation of Active Measurement Tool for One-way IP Performance Measurement in IPv6 Internet", (in Korean), Jaehoon Jeong, Seungyun Lee, Kyeongjin Lee and Yongjin Kim, NCS 2001, December 2001.
- "Methodolgy and Systems for Internet Traffic Measurement", (in Korean), Jaehoon Jeong, Seungyun Lee and Yongjin Kim, Electronics and Telecommunications Trends, Vol. 16, No. 5, October 2001.

### • Multimedia

- 1. "QoS-guaranteed Mobile IPTV Service in Heterogeneous Access Networks", Soohong Park, Jaehoon Jeong and Choong Seon Hong, Under Review in Elsevier Computer Networks, April 2013.
- "Experiments on an Audio Conferencing Tool using MP3 Codec", (in Korean), Kyoungae Kim, Sooyeon Kim, Taewan You, Jeongkeun Lee, Youngseok Lee, Yanghee Choi, Jaehoon Jeong, Seungyun Lee, Yongjin Kim, KICS 2001-Fall, November 2001.
- "Development of High-Quality Audio Conference Tool Using Public mp3 Codec", (in Korean), Taewan You, Kyoungae Kim, Jeongkeun Lee, Sooyeon Kim, Youngseok Lee, Yanghee Choi, Jaehoon Jeong, Seungyun Lee, Youngjin Kim, KICS 2001-Fall, November 2001.
- 4. "Design and Implementation of an IPv6 Multicast based Audio Conferencing Tool using MP3 Codec", (in Korean), Jeongkeun Lee, Taewan Yoo, Kyoungae Kim, Sooyeon Kim, Youngseok Lee, Yanghee Choi, Jaehoon Jeong, Seungyoon Lee, Youngjin Kim, KICS 2001-Fall, November 2001.

### • Storage Networks

 "Experiences in Building an Object-Based Storage System based on the OSD T-10 Standard", David Du, Dingshan He, Changjin Hong, Jaehoon Jeong, Vishal Kher, Yongdae Kim, Yingping Lu, Aravindan Raghuveer and Sarah Sharafkandi, IEEE Conference on Mass Storage Systems and Technologies (MSST), March 2006.

#### • IETF (Internet Engineering Task Force) RFC and Internet Drafts

- 1. "IPv6 Router Advertisement Options for DNS Configuration", **RFC 6106**, Jaehoon Jeong, Soohong Daniel Park, Luc Beloeil and Syam Madanapalli, September 2010.
- 2. "IPv6 Router Advertisement Option for DNS Configuration", **RFC 5006**, Jaehoon Jeong, Soohong Daniel Park, Luc Beloeil and Syam Madanapalli, September 2007.
- 3. "IPv6 Host Configuration of DNS Server Information Approaches", **RFC 4339**, Jaehoon Jeong et al., February 2006.
- 4. "Ad Hoc IP Address Autoconfiguration", draft-jeong-adhoc-ip-addr-autoconf-02.txt, Jaehoon Jeong, Jungsoo Park, Hyoungjun Kim and Dongkyun Kim, July 2005.
- "Requirements for Ad Hoc IP Address Autoconfiuguration", draft-jeong-manet-addr-autoconfreqts-01.txt, Jaehoon Jeong, Jung-Soo Park, Kenichi Mase, Youn-Hee Han, Badis Hakim and Jean-Marie Orset, submitted to IETF-59 Meeting, Seoul, Korea, February 2004.
- "ND-Proxy based Route and DNS Optimizations for Mobile Nodes in Mobile Network", draftjeong-nemo-ro-ndproxy-02.txt, Jaehoon Jeong, Kyeongjin Lee, Jungsoo Park and Hyoungjun Kim, submitted to IETF-59 Meeting, Seoul, Korea, February 2004.
- "DNS Service for Mobile Ad Hoc Networks", draft-jeong-manet-dns-service-00.txt, Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, submitted to IETF-59 Meeting, Seoul, Korea, February 2004.
- "Ad Hoc IP Address Autoconfiguration for AODV", draft-jeong-manet-aodv-addr-autoconf-00.txt, Jaehoon Jeong, Jungsoo Park, Hyoungjun Kim and Dongkyun Kim, submitted to IETF-59 Meeting, Seoul, Korea, February 2004.
- "Route Optimization for Mobile Nodes in Mobile Network based on Prefix Delegation", draftleekj-nemo-ro-pd-01.txt, Kyeongjin Lee, Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, submitted to IETF-58 Meeting, Minneapolis, Minnesota, USA, October 2003.
- "The Autoconfiguration of Recursive DNS Server and the Optimization of DNS Name Resolution in Hierarchical Mobile IPv6", draft-jeong-hmipv6-dns-optimization-01.txt, Jaehoon Jeong, Jungsoo Park, Kyeongjin Lee and Hyoungjun Kim, submitted to IETF-57 Meeting, Vienna, Austria, July 2003.
- 11. "IPv6 Router Advertisement based DNS Autoconfiguration", draft-jeong-ipv6-ra-dns-autoconf-00.txt, Jaehoon Jeong, Byungyeob Kim, Jungsoo Park and Hyoungjun Kim, presented in IETF-57 Meeting, Vienna, Austria, July 2003.

- 12. "Unique DNS Name Generation", draft-jeong-name-generation-01.txt, Jaehoon Jeong, Jungsoo Park and Hyoungjun Kim, submitted to IETF-56 Meeting, San Francisco, CA, USA, March 2003.
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