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SUMMARY

Dr. Ki Hyung Kim (http://ajou.ac.kr/~kkim86) has been working as a professor in School of Information and Computer Engineering, Ajou University, Korea since March 2005. He had been a visiting professor at the Department of Computer Science of Stony Brook University, New York under the hosting of Prof Samir R. Das (http://www.cs.sunysb.edu/~samir/) in his Wireless networking and simulation lab (WINGS lab) during 2011.8 ~ 2012.8. He received his Ph.D. and M.S. degrees from Electrical Engineering of KAIST (Korea Advanced Institute of Science and Technology) in 1996 and 1992, respectively. He got his B.S. degree from Han Yang University, Korea. His research interests include Wireless Sensor Networks, Internet of Things, Machine-to-Machine Communications (M2M), Embedded Software, and Information Security. He is leading a research lab (Internet Lab) in the graduate school of Ajou.

EDUCATION

3/1992-8/1996 **Ph.D.** **School of Electrical Engineering and Computer Science**
Korea Advanced Institute of Science and Technology (KAIST), Korea

3/1990-2/1992 **M.S.** **School of Electrical Engineering and Computer Science**
Korea Advanced Institute of Science and Technology (KAIST), Korea

3/1986-2/1990 B.S. Electronic Communication Engineering
Hanyang University, Korea

RESEARCH INTERESTS

- Internet of Things, Machine-to-Machine (M2M)
- ISA100.11a Industrial Wireless Sensor Networks (WSN)
- Wireless Sensor Networks, 6LoWPAN
- Distributed Discrete Event Simulation

PROFESSIONAL RESEARCH EXPERIENCE

1. Professor at Ajou University, Korea (March 2005 – Present)

Ajou University (www.ajou.ac.kr) is one of prominent universities in Korea. The university was ranked as 13th in Korean universities recently by a Korean daily newspaper, JoongangIlbo. The university has strong competitiveness in Engineering majors. Especially, computer engineering is one of the strongest major together with medical school within top 10 nation-wide ranking.

My major jobs at computer engineering department include teaching and researching. I have been a principal investigator for more than 10 research projects in this position. The summaries of the projects are described below. Also I have supervised more than 40 graduate students in Ph.D. and Master degrees.

2. Associate Professor at Yeungnam University, Korea (March 1997 – Feb 2005)

Yeungnam University (www.yu.ac.kr) is one of the largest universities in Korea with a vast campus. I worked as a tenured associate professor at the department of computer engineering. One of my main jobs is teaching some major courses including Operating Systems, Distributed Systems, Internet System Programming, and Mobile Programming. I had supervised more than 30 graduate students, including one Ph.D. graduate.

3. Senior Engineer at AdForce, Inc., Cupertino, CA, US (Dec 2000 – Aug 2001)

AdForce, Inc. was one of major Ad serving companies with DoubleClick, Inc. and 24/7. I was hired as a senior engineer with H1 visa status. My main job at AdForce, Inc. was analyzing and designing a new Ad Serving Engine for Mobile Advertisement Targeting. Unfortunately the company went into chapter 7 in August 2001.

PROFESSIONAL AFFILIATIONS

- Membership in Association for Computing Machinery (ACM)
- Membership in IEEE
- Organizing Committee Member of the Telecommunication and Networks Society in KICS (www.kics.or.kr), KISS (www.kiss.or.kr) , IEEK (www.ieek.or.kr)
- Editorial Board Member at Journal of Science and Technology, Pertanika Journals (http://www.pertanika.upm.edu.my/Pertanika%20EDITORIAL%20BOARD/EB%20-%20JST%2011.htm)
- Editorial Board Member at The Korean Institute of Information Scientists and Engineers (http://kiise.or.kr)
- Technology Working Group Chair of IP-USN Forum (Jan. 2007 ~ Aug. 2009)
- Standardization Working Group Chair of M2M / IoT Forum (Sep. 2009 ~ Dec. 2011)
- Vice Chair of M2M (Machine-to-Machine) PG (Project Group) 708 of TTA (www.tta.or.kr) (Dec. 2010 ~ Current)

RECENT MAJOR RESEARCH GRANTS (OR PROJECTS)

- Development of ISA100 Management Tools : Industry Project from Samsung Mechatronics, Inc.
  Period: Sep. 2011 – April. 2013,
  Role: Principle Investigator in Charge
  Grants: USD 0.1 Million (KRW 120,000,000)
  Project Scope: As an Industry project from Samsung Mechatronics, the main goal of this project is to design a ISA100 management tool for deployment and management in monitoring and controlling testbeds of major oil refinement industries in Korea.

- Standardization of Machine-to-Machine (M2M) Device Platform
  Period: Mar. 2011 – Feb. 2013,
  Role: Principle Investigator in Charge
  Grants: USD 0.22 Million (KRW 250,000,000)
  Project Scope: The mission of this project is standardization of M2M technologies in international and domestic standardization bodies, such as ETSI of Europe and ISO (International standardization organization) and TTA of Korea.

- Brain Korea 21 (BK21) Project : Training of Students for ISA 100 Sensor Network Protocols
  Period: Mar. 2009 – Feb. 2013,
  Role: Principle Investigator in Charge
  Grants: USD 0.9 Million (KRW 1,000,000,000)
  Project Scope: As a major graduate students scholarship project of MES (Ministry of Education and Science), ISA100 research center was established. The main goal of this

BK21 project is training graduate students for ISA 100 sensor network domain. In the project, five professors (including myself) form a team in the center for collaboration.

- Development of ISA 100 Sensor Network Protocols for Industry Environments
  Period: June 2009 – May. 2011,
  Role: Principle Investigator in Charge
  Grants: USD 350,000 (KRW 450,000,000)
  Funded by: Small and Medium Size Company Support Agency (www.smba.go.kr) under MKE (Ministry of Knowledge Economy) Korea.
  Project Scope: This is a industry collaboration project. With DualI (www.duali.com), we are planning to build ISA 100 protocol suite for reliable sensor networks in industrial environments.

- Development of Nation-wide Mobility Support for Sensor Nodes
  Period: June 2009 – May. 2011,
  Role: Principle Investigator in one out of four sub-projects
  Major Members: ETRI, KETI, KT, Samsung, Korea University
  Grants: USD 170,000 (KRW 200,000,000)
  Funded by MKE, Korea
  Project Scope: This is a four-year project for nation-wide mobility support infrastructure for sensor nodes. It has just started from June 2009.

- Development of Core Technologies for IP-based Ubiquitous Sensor Networks (IP-USN)
  Period: Mar. 2007 – Feb. 2009
  Grants: About USD 1.9 Million (KRW: 2,110,000,000)
  Role: Principle Investigator in Charge
  Funded by: MIC (Ministry of Information and Communication), Korea
  Participants: Korea Telecom, Moda, Picosnet, SKTelecom
  Project Scope: Development of IP-USN architecture, Routing protocols, Sensor nodes, Routers, Gateway with Wibro/WiMAX and Ethernet connectivity, Testbeds, Related protocols, etc.

- Interoperable Ubiquitous Testbeds for Ubiquitous Fashionable Computers (UFC)
  Period: Mar. 2005 – Feb. 2008,
  Grants: About USD 0.5 Million (KRW 610,000,000)
  Role: Principle Investigator in Charge
  Funded by: MIC (Ministry of Information and Communication), Korea
  Project Scope: Development of sensor network testbed technologies for the Ubiquitous Fashionable Computers (UFC) a.k.a. Wearable Computers. A user can use a gesture or motion for commanding the UFC with the help of testbeds.

- Architecture Design of Surveillance and Reconnaissance Sensor Networks in Military Environments

Period: Nov. 2007 – Dec. 2008,
Role: Principle Investigator in Charge
Grants: USD 45,000 (KRW 50,000,000)
Funded by: ADD (Agency for Defense Development www.add.re.kr) under Ministry of Defense, Korea
Project Scope: Design and Evaluation of Core architecture of sensor networks in military environments. Main purpose of the networks is surveillance and Reconnaissance.

- USN Interconnection Technologies for Media Transmission Protocols
  Period: July. 2007 – June. 2008,
  Role: Principle Investigator in Charge
  Grants: USD 50,000 (KRW 60,000,000)
  Funded by: TTA (Telecommunication Association) under MKE (Ministry of Knowledge Economy), Korea
  Project Scope: Design and Standardization of Media transmission protocols for USN in ITU-T.

- Web-based SNMP Manager and ASP Systems for IP-USN Management
  Period: Aug. 2007 – July. 2008,
  Role: Principle Investigator in Charge
  Grants: USD 37,000 (KRW 43,000,000)
  Funded by: Korea Research Foundation under MES (Ministry of Education and Science), Korea
  Project Scope: This is an international collaboration project with NUST (National University of Science and Technology), Pakistan. We developed a service discovery framework for IP-USN in a joint team.

Patents

* US Patents

1. METHOD FOR CONNECTING IP-BASED USN WITH CONVENTIONAL IP NETWORK, SW Yoo, BH Roh, HJ Ha, KH Kim, US Patent App. 12/525,639
2. IP-USN WITH MULTIPLE AND COMMUNICATION METHOD, KH Kim, WD Jung, AH Akbar, US Patent App. 12/525,665
3. LoWMob and DLoWMob SYSTEM, KH Kim, B Gargi, SW Yoo, MT Raza, US Patent App. 12/841,233
4. ADDRESS ASSIGNMENT METHOD AND TRANSMISSION METHOD OF MOBILE OF MOBILE NODES FOR HIERARCHICAL ROUTING IN LOWPANS, KH Kim, CS Lim, US Patent App. 12/525,666

* Korea Patents

1. 1010595170000 (20070912) - Sensor Network System Having A Plurality Of Gateways
2. 1009781200000 (20100819) - Method And System Of Using A Sensor Network Including At Least One Sensor To Manage HACCP
3. 1009413960000 (20100202) - Sensor Network Management System, Method Of Managing A Sensor Network, And Storage Medium Storing Instructions Performing The Same
4. 1007664570000 (20071005) - Hierarchical Routing Method Over 6LoWPAN
5. 1007673940000 (20071009) - Gateway And Interoperability Method Of 6LoWPAN
6. 1009378530000 (20100113) - Sensor Network System
7. 1009039830000 (20090615) - Sensor Portal System
8. 1009007960000 (20090527) - Sensor Node
9. 1008976140000 (20090507) - Method And Device Of Configuring Mobile Nodes
10. 1009262910000 (20091104) - Method And System Of Transmitting Sensing Data Outputted From A Sensor Within A Sensor Network, And Storage Medium Storing Instructions Executing The Same
11. 1009245620000 (20091026) - Method And System Of Setting Configuration Information Of A Sensor Network
12. 1007542780000 (20070827) - Method For Transmitting Error Message In Wireless Network And Apparatus There-Of
13. 1007542790000 (20070827) - Routing Metric Method Of The Ad-Hoc On-Demand Distance Vector Routing Over Wireless Networks
14. 1010188260000 (20110223) - Home Sensor Network Server
15. 1010100200000 (20110114) - Home Sensor Network Service Apparatus
16. 1009740940000 (20100729) - Robot Game System
17. 1020100083622 (20100722) - (Open To Public) Method And Device For Deploying Relay Node, Computer Recordable Medium
18. 1009646010000 (20100610) - Sensor Network Communication Method And Apparatus
19. 1020090027599 (20090317) - (Open To Public) Sensor Network System Having A Plurality Of Gateways
20. 1009247030000 (20091027) - Method And Apparatus Of Managing An Occupation Status Of An Object Commonly Used By A Plurality Of People, Usable For Seat Management Of A Library
21. 1008781920000 (20090106) - Method For Automatically Assigning Ipv6 Address In Sensor Network Based Ipv6
22. 1008706570000 (20081120) - Wireless Personal Area Network System Supporting Transmission Between Different Sensor Nodes
23. 1008706550000 (20081120) - Gateway And Method For Transforming A Packet Using The Same
24. 1008706510000 (20081120) - Method For Hierarchically Assigning Address In Sensor Network
25. 1008546790000 (20080821) - Simple Service Location Protocol Network System And Agent Included In The Same
26. 1008436450000 (20080627) - Method Of Controlling Quality Of Service (Qos) Of A

Data Packet Transmitted From A First Network To A Second Network, And Apparatus Thereof

27. 1008546800000 (20080821) - Method For Managing Security In Wireless Network And Apparatus For Performing The Same
28. 1008546810000 (20080821) - Gateway And Method Of Interoperating Between Internet Protocol-Ubiquitous Sensor Network And Simple Network Management Protocol Network

RESEARCH PUBLICAION

Books (Including Book Chapters)

- Taqi Raza, Fatima M. Anwar, Seung Wha Yoo, Ki-Hyung Kim, Book chapter "Requirements and Design Architectures of Sensor Service Portal (SSP) in Ubiquitous Pervasive Environment" in "Handbook of Research on Mobile Software Engineering: Design, Implementation, and Emergent Applications", IGI Global, ISBN-13: 978-1466616103, May 31, 2012.
- Hamid Muhktar, Ali Hammad Akbar, Shafique Ahmad Chaudhry, Ki-Hyung Kim, Seung-Wha Yoo, Book chapter "Network Management in Wireless Sensor Networks" in "RFID and Sensor Networks: Architectures, Protocols, Security, and Integrations (Wireless Networks and Mobile Communications)", CRC Press, ISBN-13: 978-1420077773, Nov. 4, 2009. page 1, 2, 3, 4, 5, 6.
- Minkoo Kim, We Duke Cho, Jae Ho Lee, Rae Woon Park, Hamid Mukhtar, Ki-Hyung Kim, Book Chapter "Ubiquitous Korea Project" in "Handbook of Ambient Intelligence and Smart Environments", Springer, ISBN-13: 978-0387938073, October 21, 2009. page 1, 2, 3, 4.
- Rabia Riaz, Ki-Hyung Kim, "A Unified Security Framework for IP Based Wireless Sensor Networks" [Paperback], VDM Verlag Dr. Müller (December 4, 2009) Language: English ISBN-13: 978-3639212754 ISBN-10: 3639212754
- My Ph.D Thesis, "Parallel and Distributed Simulation Methodology based on System Theoretic Formalism: An Asynchronous Approach", 1996, KAIST

Papers in International Journal

1. Ali Tufail, Adil Mehmood Khan, Ki-Hyung Kim, Reliable and Secure Hybrid Key Management Scheme for WSNs, Vol.16, No.4, p629-642, Journal of Internet Technology, July 31, 2015
2. Faraz Idris Khan, Taeshik Shon, Taekkyeun Lee andKi-Hyung Kim, Merkle tree-based wormhole attack avoidance mechanism in low power and lossy network based networks, May 13, 2014, DOI: 10.1002/sec.1023 Security and Communication Networks (IF: 0.311) Online ISSN: 1939-0122
3. Ali Tufailemail, Arslan Qamaremail, Adil Mehmood Khanemail, Waleed Akram

Baigemail and Ki-Hyung Kim, WEAMR — A Weighted Energy Aware Multipath Reliable Routing Mechanism for Hotline-Based WSNs, Sensors, Vol.13, No.5 May, 2013

4. Syed Muhammad Asad Zaidi, Waleed Akram Baig and Ki-Hyung Kim, Using Channel Diversity to Defend Against Wormhole Attacks in Wireless Sensor Networks, pp.2031-2042, Information-iii Vol.15, No.5, May, 2012
5. Syed Muhammad Zaidi, Jiun Jung, Minsoo Kang, Byunghun Song, and Ki-Hyung Kim, Remote Industrial Sensor Network Monitoring using M2M based Ethical Sniffers, International Journal of Distributed Sensor Networks, Hindawi Publishing Corp. Nov. 2012, pp1-9, SCI IF:0.203
6. Soobok Shin, Kangsuk Kim, Hongjin Yeh, and Ki-Hyung Kim, A Remote User Authentication Scheme with Anonymity for Mobile Devices, International Journal of Advanced Robotic Systems, April 2012, vol 9, pp1-7 (SCI/E)
7. Ritwik Majumder, GargiBag, and Ki-Hyung Kim, Power, Sharing and Control in Distributed Generation With Wireless Sensor Networks, IEEE TRANSACTIONS ON SMART GRID, pp. 1 - 17, 13 February 2012, doi:10.1109/TSG.2011.2173360 [pdf]
8. Ali Tufail, Syed Ali Khayam, Muhammad Taqi Raza, Amna Ali and Ki-Hyung Kim, An Enhanced Backbone-Assisted Reliable Framework for Wireless Sensor Networks, Sensors 2010, 10(3), 1619-1651; doi:10.3390/s100301619 [pdf]
9. Gargi Bag, Muhammad T. Raza, Ki-Hyung Kim and Seung-Wha Yoo, LoWMob: Intra-PAN Mobility Support Schemes for 6LoWPAN, Sensors 2009, 9(7), 5844-5877; doi:10.3390/s90705844 [pdf]

10. Muhammad Taqi Raza, Seung-Wha Yoo, Ki-Hyung Kim, Seong-Soon Joo and Wun-Cheol Jeong, Design and Implementation of an Architectural Framework for Web Portals in a Ubiquitous Pervasive Environment, Sensors 2009, 9(7), 5201-5223; doi:10.3390/s90705201 [pdf]
11. Taqi Raza, Gargi Bag, Ki-Hyung Kim, Seung Wha Yoo, Dead Reckoning based Target Tracking in Wireless Sensor Networks, ACM SIGBED Review 2009, Vol 21, No. 6 [pdf]
12. Rabia Riaz,Ayesha Naureen, Attiya Akram, Ali Hammad Akbar, Ki-Hyung Kim, H. Farooq Ahmed: A unified security framework with three key management schemes for wireless sensor networks.Computer Communications 31(18): 4269-4280 (2008) [pdf]
13. Shafique AhmadChaudhry, Ali Hammad Akbar, Kim Ki-Hyung, "On the Interplay of Proximity and Ubiquity," IEICE Transactions on Communications 2007 [pdf]
14. Ki-Hyung Kim, Tag Gon Kim, Kyu Ho Park: Hierarchical partitioning algorithm for optimistic distributed simulation of DEVS models. Journal of Systems Architecture 44(6-7): 433-455 (1998) [pdf]
15. Ki-Hyung Kim, Yeong Rak Seong, Tag Gon Kim, Kyu Ho Park: Ordering of simultaneous events in distributed DEVS simulation Simulation Practice and Theory 5(3): 253-268 (1997) [pdf]
16. Ki-Hyung Kim, Yeong Rak Seong, Tag Gon Kim, Kyu Ho Park, "Distributed simulation of hierarchical DEVS models: Hierarchical scheduling locally and time warp globally," Transactions of the Society for Computer Simulation, 1996, 9.

Papers in Lecture Note Series

1. Ki-Hyung Kimand Ali Hammad Akbar, "Are Low PANs a PAN or An Internet of PANs?," ADVANCES IN GRID AND PERVASIVE COMPUTING, Lecture Notes in Computer Science, 2006, Volume 3947/2006, 527-536, DOI: 10.1007/11745693_52 (Grid and Pervasive Computing Conference GPC2006 (LNCS SPRINGER VERLAG), Taiwan 3-5 May 2006)
2. Ali HammadAkbar, Ki-Hyung Kim, Seung-Jin Bang, Waleed Mansoor, and Won-Sik Yoon, "Availability Considerations for Wireless Sensor Grids," Grid and Pervasive Computing Conference GPC2006 (LNCS SPRINGER VERLAG), Taiwan 3-5 May 2006 .
3. Ali HammadAkbar, Ahmad Ali Iqbal, and Ki-Hyung Kim, "Binding Multiple Applications on Wireless Sensor Networks," Grid and Pervasive Computing Conference GPC2006 (LNCS SPRINGER VERLAG), Taiwan 3-5 May 2006
4. Ali HammadAkbar, Ki-Hyung Kim, Shaokai Yu, and Won-Sik Yoon, "On the Effect of Heterogeneous Traffic Sources on the Network Availability for Wireless Sensor Grids," International Conference on Computational Science ICCS2006 (LNCS SPRINGER VERLAG), UK 28-31 May 2006
5. Ali HammadAkbar, Ki-Hyung Kim, Won-Do Jung, Ali Kashif Bashir, and Seung-Wha Yoo, "GARPAN: Gateway-Assisted Inter-PAN Routing for 6LoWPANs," The 2006 International Conference on Computational Science and its Applications ICCSA 2006 (LNCS SPRINGER VERLAG), Scotland, 8-11 May, 2006
6. Shoaib Mukhtar,Ali Hammad Akbar, Shafique Ahmad Chaudhry, Won-Sik Yoon, Ki-Hyung Kim, and Suk-Kyo Hong, "Mitigating Broadcast Storms in Stateless Address Auto-Configuring MANETs," The 2006 International Conference on Computational Science and its Applications ICCSA 2006 (LNCS SPRINGER VERLAG), Scotland, 8-11 May, 2006
7. Ali HammadAkbar, Ahmad Ali Iqbal, Waleed Mansoor, Shafique Ahmad Chaudhry, and Ki-Hyung Kim, "Longevity Enhancing Measures for Sensor Grids," KNOM Review (Korean Institute of Communications Sciences), Vol. 8, No. 2, February 2006, pp. 26-31.
8. Shafique AhmadChaudhry, Won Do Jung, Ali Hammad Akbar, and Ki-Hyung Kim , "Proxy-based Service Discovery and Network Selection in 6LoWPAN," The 2006 International Conference on High Performance Computing and Communications HPCC-06, (LNCS SPRINGER VERLAG) 13th-15th Sep, 2006 .
9. Shafique AhmadChaudhry,Won-Do Jung, Chaudhary Sajjad Hussain, Ali Hammad Akbar, and Ki-Hyung Kim, "A Proxy-Enabled Service Discovery Architecture to Find Proximity-Based Services in 6LoWPAN," International Conference on Embedded And Ubiquitous Computing (EUC'2006), (LNCS SPRINGER VERLAG) Aug. 01-04, 2006 [pdf]
10. ShafiqueChaudhry, Faisal Siddiqui, Ali Hammad Akbar, Ki-Hyung Kim, "NETSAQ: Network State Adaptive QoS Provisioning for MANETs," 9th Asia-Pacific Network Operations and Management Symposium (APNOMS), (LNCS SPRINGER VERLAG)

Sep, 27th-29th, 2006

11. Shafique AhmadChaudhry, Ali Hammad Akbar, Faisal Siddiqui, and Ki-Hyung Kim, "Autonomic Network Management for Wireless Mesh and MANETs," International Workshop on Self-Organizing Systems (IWSOS), (LNCS SPRINGER VERLAG), Sep., 18th-20th 2006
12. Shafique AhmadChaudhry, Ali Hammad Akbar, Ki-Hyung Kim, Suk-Kyo Hong, and Won-Sik Yoon, "HYWINMARC: An Autonomic Management Architecture for Hybrid Wireless Networks," International Conference on Embedded And Ubiquitous Computing (EUC'2006), (LNCS SPRINGER VERLAG) Aug. 01-04, 2006

Papers in International Conference

1. Fatima Muhammad Anwar Bhatti, Ki-Hyung Kim, Seung Wha Yoo, Survey on Service discovery for Wireless Sensor Networks, International Conference on Ubiquitous and Future Networks (ICUFN) 2010
2. Bilal Zafar, S.M. Saif Shams, Muhammad Ikram, Waleed Akram Baig, Ki-Hyung Kim, Seung-Wha Yoo, "On improved relay nodes placement in two-tiered wireless sensor networks," MILCOM'09
3. Hamid Mukhtar,Kang-Myo Kim, Shafique Ahmad Chaudhry, Ali Hammad Akbar, Ki-Hyung Kim,Seung-Wha Yoo: LNMP- Management architecture for IPv6 based low-power wireless Personal Area Networks (6LoWPAN). NOMS 2008: 417-424
4. Yong-Hoon Jung, Ki-Hyung Kim, Seung-Wha Yoo, Time Slot Schedule based Minimum Delay Graph in TDMA Supported Wireless Industrial System, CISIM 2010
5. Chang-Hwan Kwon, Ki-Hyung Kim, Seung-Wha Yoo, A Zigzag Scheduling Scheme for Properties of Sensor Task based on OGC Sensor Planning Service, Conference on Ubiquitous Information TEchnologies & Applications (CUTE) 1010
6. Fatima Muhammad Anwar Bhatti, Ki-Hyung Kim, Seung Wha Yoo, ENUM based Service Discovery Architecture for 6LoWPAN, IEEE WCNC 2010
7. Ali Tufail, Ali Amna, Ki-Hyung Kim, A Reliable Key Management Scheme for Wireless Sensor Networks, The 9th International Conference on Optical Internet (COIN 2010)
8. Woo-Seok Ahn, Ki-Hyung Kim, Seung Wha Yoo, Study on Robustness Middleware using Integrating Sensor Observation Service in Sensor Web Enablement, ICACT 2010
9. Jae-Teak Ryu, Tae-Kwon Moon, Bilal Zafar, Ki-Hyung Kim, Seung Wha Yoo, The efficient DA placement Method in SLP, ICACT 2010
10. Ayesha Naureen,Attiya Akram, Tariq Maqsood, Rabia Riaz, Ki-Hyung Kim, H. Farooq Ahmed: Performance and Security Assessment of a PKC Based Key Management Scheme for Hierarchical Sensor Networks. VTC Spring 2008: 163-167
11. Ali Tufail,Mike Fraser, Ali Hammad Akbar, Ki-Hyung Kim, Seung-Wha Yoo: An empirical study to analyze the feasibility of WIFI for VANETs. CSCWD 2008: 553-558
12. Muhammad TaqiRaza H. M., Ali Hammad Akbar, Shafique Ahmad Chaudhry, Gargi Bag, Seung-wha Yoo, and Ki-Hyung Kim, "A Yaw Rate Aware Sensor Wakeup Protocol (YAP) for Energy Efficient Target Tracking in Sensor Networks," Milcom 2007.
13. Rabia Riaz, AliHammad Akbar, Mustafa Hasan, Ki-Hyung Kim, Kyungsuk Lhee, Hafiz

Farooq Ahmed, “Key Management Scheme for Sensor Networks with Proactive Key Revocation and Sleep State Consideration,” ATNCTA Workshop in IFIP NPC2007, China, Sep. 2007.

14. Mustafa Hasan,Ali Hammad Akbar, Rabia Riaz, Subir Biswas, Ki-Hyung Kim, Seung W. Yoo, Byeong-hee Roh, “Key Management in IP-based Ubiquitous Sensor Networks: Issues, Challenges and Solutions”, IEEE ICUT2007 Dubai, Feb 2007.
15. Ali HammadAkbar, Ahmad Ali Iqbal, Shafique Ahmad Chaudhry, Chaudhary Sajjad Hussain, and Ki-Hyung Kim, “A routing overlay for wireless sensor networks with multiple service support,” The Journal of Korean Institute of Next Generation Computing, ISSN 1738-8341 Vol. 1, No. 2.
16. Shafique Ahmad Chaudhry, Wondo Jung, Chaudhary Sajjad Hussain, Ali Hammad Akbar, and Ki-Hyung Kim, “A Proxy-Enabled Service Discovery Architecture to Find Proximity-Based Services in 6LoWPAN”, EUC'06 Proceedings of the 2006 international conference on Embedded and Ubiquitous Computing, 2006, ISBN:3-540-36679-2 978-3-540-36679-9, [pdf]
17. Shafique AhmadChaudhry, Ali Hammad Akbar, Ki-Hyung Kim, “On self management of wireless mesh and MANETs”, The Journal of Korean Institute of Next Generation Computing, ISSN 1738-8341 Vol. 2, No. 2.
18. Ki-Hyung Kim,Ali Hammad Akbar, “IPv6 over IEEE 802.15.4 : Bridging Over the Ubiquity Vision to Reality, “ Korean American Scientists and Engineers, Aug. 10th-13th, 2006, Teaneck, New Jersey, USA.
19. Ali HammadAkbar, Won-Sik Yoon and Jai-Hoon Kim, “Effect of transmission power adjustments on network availability,” Information Technology Journal 4(3): 271-273, 2005.
20. Ali HammadAkbar, Shafique Ahmad Chaudhary, Ali Kashif, and Ki-Hyung Kim, “Sustaining network availability of wireless sensor networks,” Technical Paper Collections, IT International Student Fair August 2005, South Korea.
21. Ali HammadAkbar, Ahmad Ali Iqbal, Shafique Ahmad Chaudhry, Chaudhary Sajjad Hussain, Ki-Hyung Kim, “A Routing Overlay for Wireless Sensor Networks with Multiple Services Support,” (Outstanding Paper Award) Korea International Next Generation Personal Computer Conference (KINGPC), Seoul, 3-4 Nov, 2005, pp. 171-175.
22. Ki-Hyung Kim,Ali Hammad Akbar, Ali Kashif Bashir, “Are Low Pans a Pan or an Internet of Pans?,” Korea International Next Generation Personal Computer Conference (KINGPC), Seoul, 3-4 Nov, 2005, pp. 182-186.
23. Ali HammadAkbar, Waleed Mansoor, Shafique Ahmad Chaudhry, Ali Kashif, and Ki-Hyung Kim, “Longevity techniques for sensor grids,” Korea International Next Generation Personal Computer Conference (KINGPC), Seoul, 3-4 Nov, 2005, pp 20-24.
24. ung Won-Do,Shafique Ahmad Chaudhry, Ali Hammad Akbar, Sohn Young-Do, and Ki-Hyung Kim, “Route Error Reporting Schemes for 6lowPANs,” Korea International Next Generation Personal Computer Conference (KINGPC), Seoul, 3-4 Nov, 2005, pp. 25-29.
25. Ali KashifBashir, Ali Hammad Akbar, Shafique Ahmad Chaudhry, Chauhdary Sajjad Hussain, and Ki-Hyung Kim, “Collaborative Detection and Agreement Protocol for

Routing Malfunctioning in Wireless Sensor Networks," IEEE International Conference on Advanced Communications Technology (ICACT), 20-22 Feb. 2006, pp. 327-332.

26. Ali HammadAkbar, Waleed Mansoor, Shafique Ahmad Chaudhry, Ali Kashif, and Ki-Hyung Kim, "Node-link-failure Resilient Routing Architecture for Sensor Grids," IEEE International Conference on Advanced Communications Technology (ICACT), 20-22 Feb. 2006, pp. 131-135.
27. Shafique AhmadChaudhary, Ali Hammad Akbar, Chaudhary Sajjad, and Kim Ki-Hyung, "Autonomic remote management architecture for smart homes," Technical Paper Collections, IT International Student Fair August 2005, Korea.