

Kashif Saleem, PhD

Education

- Jul 2007 – Jun 2011* **Universiti Teknologi Malaysia**
Doctor of Philosophy, Electrical Engineering
Johor Bahru, Johor, Malaysia
- Jul 2005 – Jun 2007* **Universiti Teknologi Malaysia**
Master of Engineering, Electrical (Electronics & Telecommunication)
Johor Bahru, Johor, Malaysia
- Jul 1999 – Jun 2002* **Allama Iqbal Open University**
Bachelor of Sciences, Computer Science
Islamabad, Pakistan



Thesis

- Kashif Saleem; *Biological inspired self-organized secure autonomous routing protocol for wireless sensor networks*. 06/2011, Degree: Doctor of Philosophy, Supervisor: Prof. Dr. Norsheila Fisal
- Kashif Saleem; *QoS Provisioning for Real Time Services in MPLS, DiffServ aware IPv6 Network using IXP-2xxx (Intel® Network Processor)*. 06/2007, Degree: Masters of Engineering in Electrical (Electronics & Telecommunication), Supervisor: Munim Zabidi and Prof. Dr. Norsheila Fisal

Awards & Grants

- Jul 2008 – Jun 2011* Scholarship: Malaysian Technical Cooperation Programme Scholarship (MTCP) for Post Graduate Studies from Ministry of Higher Education, Malaysia
- Nov 2008* Award: Best Paper - "A Bio-Inspired Secure Routing Protocol for WSNs", 2008 Regional Student Conference on Research and Development (SCORED)
- Jan 2006 – May 2006* Teaching Assistantship, Universiti Teknologi Malaysia, Faculty of Electrical Engineering (FKE), Johor Bahru, Malaysia

Professional Education / Certifications

- "Cybersecurity: Technology, Application and Policy", 6-week Course, Professional Education, Massachusetts Institute of Technology – MIT, Boston, USA.
- "IPICS2015 - Intensive Programme on Information & Communication Security", held at Lesvos island, Greece, dated: 6th - 17th July, 2015.
- "LabVIEW Hands-on Workshop by Mr. Manick Kannappan, National Instruments", Thistle Hotel, Johor Bahru, Malaysia.
- "Artificial Immune Systems by Dr. Jonathan Ian Timmis", FSKSM, UTM, dated: 21st May 2008.
- "Fuzzy Humming Distance by Prof. Dr. Anca Ralescu", FSKSM, UTM, dated: 15th Jan, 2008.

“1st International workshop on Hybrid Soft Computing in Engineering by Prof. Dr. Ajit Abraham” Sofitel Palm Resort, Senai, Johor, Malaysia, dated: 3rd Dec, 2007.

“Fuzzy Sets based Soft Computing by Prof. Dr. Anca Ralescu”, FSKSM, UTM, dated: 15th Jan, 2008.

“Ant Colony Optimization by Prof. Dr. Martin Middendorf”, FKE, UTM, dated: 26th-28th Nov, 2007.

“Particle Swarm Optimization by Prof. Dr. Andries P. Engelbrecht”, FKE, UTM, dated: 1st-5th Nov, 2007.

“I.T. Security Awareness”, CICT, UTM, dated: 1st March 2007.

Matlab for Beginners/Intermediate, FSKSM, UTM, dated: 15 to 31 January 2007.

RF Filter Design using Microstrip Technology, WCC, UTM, Skudai, dated: 1st-2nd April 2006.

Wireless Communication Technology, Wireless Communication Centre (WCC), UTM, dated: 31/7/2005.

CCNA 3.0, Cisco Certified ID# CSCO10905985.

MCP 2003, Microsoft Certified ID# 3181755.

MCSE2000, Redhat Linux Certification2003, National Engineers Training services (NETS), Pakistan.

Experience

Mar 2012 – present **Assistant Professor**
King Saud University, Center of Excellence in Information Assurance
Riyadh, Saudi Arabia

Jul 2011 – Dec 2011 **Visiting Researcher**
Universiti Teknologi Malaysia, Faculty of Electrical Engineering (FKE)
Johor Bahru, Malaysia

Research Projects

Stakeholder of FI-STAR: Future Internet – Social and Technological Alignment Research (www.fi-star.eu), a project of the 7th Framework Programme (FP7).

The objective of the FI-STAR project is to establish early trials in the Health Care domain, building on Future Internet (FI) technology leveraging on the outcomes of FI-PPP Phase 1 projects.

“FPGA-based Space-Time MIMOOFDM Design for Wireless LANs”, as Research Assistant at University Technology Malaysia in 2007. (Completed)

“Low-cost and Secure framework for Machine to Machine (M2M) Communication”, funded by Research Center (RC) in College of Computer and Information Sciences (CCIS), King Saud University, Kingdom of Saudi Arabia. (Completed)

In this research we propose a low-cost and secure (LCS) framework for remote patient monitoring. To ensure data privacy the mechanism involves intelligent authentication based on random distributive key management scheme and modified realm Kerberos while handling dynamic assignment of doctors to specific patient. The proposed architecture will be further analyzed in terms to provide security against fake request attack, false attack and temper attack.

“Information Security Mechanisms for Real Wireless Mesh Network Scenario”, funded by National plan of Science, Technology and Innovation (MAARIFAH), King Abdulaziz City for Science and

Technology (KACST), Kingdom of Saudi Arabia, Award Number (12-INF2817-02), as Primary Investigator (PI).

In wireless mesh networks, the information security is the most difficult problem to tackle because of wireless medium that is open to enormous attacks. We are working on an Information Security Mechanism (ISMech) to ensure efficient and effective eHealthcare in a complete secure environment. The proposed security system will be tested on a real eHealthcare testbed that will be equipped with a set of servers (databases, authentication, application), advanced electronics, sensors, intelligent devices, intelligent firewalls, advanced threat analytics evaluators, and vulnerability scanners.

International Research Group (IRG) Project, "Security and Trust Management Schemes for Cognitive & Intelligent Communication", in collaboration with Intelligent Systems Group (Security & Trust) headed by Professor Mehmet A. Orgun, funded by Deanship of Scientific Research, King Saud University, Kingdom of Saudi Arabia, Award Number (IRG14-07B), as Primary Investigator (PI).

Activities & Skills

Teaching Summer Semester Classes, Organized at College of Computer and Information Sciences (CCIS), King Saud University, Kingdom of Saudi Arabia, since 2013.

- ✓ CEN444 – Computer Networks (emphasis on Data Link Layer)
- ✓ CEN445 - Computer Networks-2 (emphasis on Network Layer)
- ✓ CEN448 - Computer Network Security

Skills Routing, Networking, Computer Networking, Wireless Sensor Network, Network Performance Evaluation, Routing Protocols, Sensor Networks, Network, Information and Communication Technology, Network Security, Network Communication, Network Simulation, Mobility Management, Network Architecture, Network Programming, Wireless Computing, Network Performance Analysis, TCP, Network Management, LAN, Network technology, Security, Network Configuration, Network Engineering, Internet Architecture, WAN, CISCO Networking, Networking experience, Network Administration, Wireless Security, QoS, Algorithms, Network Processors, IPv6.

Professional Services Associate Editor of IEEE Access

Associate Editor of International Journal of E-Health and Medical Communications (IJEHMC)

Editorial Board Member of The International Journal of Cyber-Security and Digital Forensics (IJCSDF)

Committee Member of IEEE International Conference of eHealth, Networking, Application and Services (IEEE Healthcom)

Reviewer of numerous renowned Journals as IEEE Systems Journal, IEEE Sensors Journal, Journal of Network and Computer Applications (JNCA), International Journal of Autonomous and Adaptive Communications Systems (IJAACS), Computers in Human Behavior (CHB), International Journal of Distributed Sensor Networks (IJDSN), International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC), International Journal of Communication Systems, Security and Communication Networks, Telecommunication Systems Journal (TSJ), Electronics and Telecommunications Research Institute Journal (ETRI), Journal of Engineering and Computer Innovations (JECI), etc.

Technical Program Committee member of number of numerous renowned Conferences.

Organize International and local events as Reliability of eHealth Information Systems (ReHIS), Security and Privacy in Next Generation Networks (SPNGN).

Publication Highlights

[authors]: [title]. [details]

Book Chapters

Kashif Saleem, Zhiyuan Tan, and William Buchanan. *Security for Cyber-Physical Systems in Healthcare*. In: Health 4.0: How Industry 4.0 and Virtualization are Revolutionizing Healthcare, 2017, Springer International Publishing Switzerland, ISBN 978-3-319-47616-2

Kashif Saleem , Zahid Farid, and Mohammad Ghulam Rahman; *Mobile IPv6 based Autonomous Routing Protocol (MARP) For Wireless Sensor*. In: Building Next-Generation Converged Networks: Theory and Practice, Edited by Al-Sakib Khan Pathan, Muhammad Mostafa Monowar, Zubair Md. Fadlullah, 1/2013; CRC Press., ISBN: 9781466507616

Kashif Saleem, Norsheila Fisal, Sharifah Hafizah, Syed Ariffin, Sharifah Kamilah, Syed Yusof, Rozeha A Rashid; *Biological Inspired Autonomously Secure Mechanism for Wireless Sensor Networks*. In: Security of Self-Organizing Networks: MANET, WSN, WMN, VANET, Edited by Al-Sakib Khan Pathan, 10/2010; CRC Press., ISBN: 9781439819197

Journal Publications

M. Ikram Ullah Lali, Raza Ul Mustafa, Kashif Saleem, M. Saqib Nawaz, Tehseen Zia, and Basit Shahzad. "Finding Healthcare Issues with Search Engine Queries and Social Network Data." International Journal on Semantic Web and Information Systems (IJSWIS) 13, no. 1 (2017): 48-62. DOI:10.4018/IJSWIS.2017010104

Muhammad Umair Aslam, Abdelouahid Derhab, Kashif Saleem, Haider Abbas, Mehmet Ali Orgun, Waseem Iqbal, and Baber Aslam; "A Survey of Authentication Schemes in Telecare Medicine Information Systems", Journal of Medical Systems, (2017) 41: 14. DOI:10.1007/s10916-016-0658-3

Guanglou Zheng, Rajan Shankaran, Mehmet Orgun, Li Qiao, and Kashif Saleem. "Ideas and Challenges for Securing Wireless Implantable Medical Devices: A Review." IEEE Sensors Journal (2016). DOI:10.1109/JSEN.2016.2633973

Ahmad, Raja Wasim, Abdullah Gani, Siti Hafizah Ab Hamid, Mohammad Shojafar, Abdelmuttlib Ibrahim Abdalla Ahmed, Sajjad A. Madani, Kashif Saleem, and Joel JPC Rodrigues. "A survey on energy estimation and power modeling schemes for smartphone applications." International Journal of Communication Systems. vol. 2016, Article ID 4853924, 19 pages, 2016. DOI: 10.1002/dac.3234

Rooh ul Amin, Irum Inayat, Basit Shahzad, Kashif Saleem, and Li Aijun; *An empirical study on acceptance of secure healthcare service in Malaysia, Pakistan, and Saudi Arabia: a mobile cloud computing perspective*, annals of telecommunications - annales des télécommunications, vol. 2016, 1-12 pages, November 2016. DOI: 10.1007/s12243-016-0553-4

Kashif Saleem and Amjad Gawanmeh; *Special Issue on Reliability and Security of e-Health Information Systems*, Scalable Computing 17(3) · August 2016. DOI:10.12694/scpe.v17i3.1177

Shaker Alanazi, Kashif Saleem, Jalal Al-Muhtadi, and Abdelouahid Derhab; *Analysis of Denial of Service Impact on Data Routing in Mobile eHealth Wireless Mesh Network*, Mobile Information Systems, vol. 2016, Article ID 4853924, 19 pages, 2016. DOI:10.1155/2016/4853924

- João Santos, Joel J.P.C. Rodrigues, João Casal, Kashif Saleem, Victor Denisov; *Intelligent Personal Assistants Based on Internet of Things Approaches*. IEEE Systems Journal 05/2016.
DOI:10.1109/JSYST.2016.2555292
- Kashif Saleem, Abdelouahid Derhab, Mehmet A Orgun, Jalal Al-Muhtadi, Joel J P C Rodrigues, Mohammed Sayim Khalil, Adel Ali Ahmed; *Cost-Effective Encryption-Based Autonomous Routing Protocol for Efficient and Secure Wireless Sensor Networks*. Sensors 03/2016; 16(4):460.
DOI:10.3390/s16040460
- Anam Sajid, Haider Abbas, Kashif Saleem; *Cloud-Assisted IoT-Based SCADA Systems Security: A Review of the State of the Art and Future Challenges*. 03/2016. DOI:10.1109/IEEE ACCESS.2016.2549047
- Guanglou Zheng, Gengfa Fang, Rajan Shankaran, Mehmet Orgun, Jie Zhou, Li Qiao, Kashif Saleem; *Multiple ECG Fiducial Points based Random Binary Sequence Generation for Securing Wireless Body Area Networks*. IEEE Journal of Biomedical and Health Informatics 03/2016.
DOI:10.1109/JBHI.2016.2546300
- Abdelouahid Derhab, Kashif Saleem, Jalal Al-Muhtadi, Mehmet A. Orgun; *Leveraging adjusted user behavior in the detection and prevention of outgoing malicious SMSs in Android devices*. Computers in Human Behavior 06/2016; 59(March 2016):9-17. DOI:10.1016/j.chb.2016.01.023
- João Santos, Joel J.P.C. Rodrigues, Bruno M.C. Silva, João Casal, Kashif Saleem, Victor Denisov; *An IoT-based Mobile Gateway for Intelligent Personal Assistants on Mobile Health Environments*. Journal of Network and Computer Applications 03/2016. DOI:10.1016/j.jnca.2016.03.014
- Abdelouahid Derhab, Kashif Saleem, Ahmed Youssef, Mohamed Guerroumi; *Preventive Policy Enforcement with Minimum User Intervention Against SMS Malware in Android Devices*. ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING 02/2016; 41(2):479-493. DOI:10.1007/s13369-015-1665-2
- Joao A. F. F. Dias, Joel J. P. C. Rodrigues, Neeraj Kumar, Kashif Saleem; *Cooperation Strategies for Vehicular Delay-Tolerant Networks*. IEEE Communications Magazine 12/2015; 53(12):88-94.
DOI:10.1109/MCOM.2015.7355571
- Bruno M.C. Silva, Joel J.P.C. Rodrigues, Isabel de la Torre Díez, Miguel López-Coronado, Kashif Saleem; *Mobile-Health; A Review of Current State in 2015*. Journal of Biomedical Informatics 06/2015; 56(August 2015):265–272. DOI:10.1016/j.jbi.2015.06.003
- Mohammed Abazeed, Kashif Saleem, Abdelouahid Derhab, Mehmet A Orgun, Norsheila Fisal, Jalal Al-Muhtadi, Suleiman Zubair; *A Review of Secure Routing Approaches for Current and Next-Generation Wireless Multimedia Sensor Networks*. International Journal of Distributed Sensor Networks 06/2015; 2015(2015):22. DOI:10.1155/2015/524038
- Kashif Saleem, Abdelouahid Derhab, Jalal Al-Muhtadi, Basit Shahzad, Mehmet A. Orgun; *Secure transfer of environmental data to enhance human decision accuracy*. Computers in Human Behavior 02/2015; 51.
DOI:10.1016/j.chb.2015.01.023
- Sohail Jabbar, Abid Ali Minhas, Muhammad Imran, Shehzad Khalid, Kashif Saleem; *Energy Efficient Strategy for Throughput Improvement in Wireless Sensor Networks*. Sensors 02/2015; 15(2):2473-95.
DOI:10.3390/s150202473
- Kashif Saleem, Abdelouahid Derhab, Jalal Al-Muhtadi, Mehmet A. Orgun; *Analyzing ant colony optimization based routing protocol against the hole problem for enhancing user's connectivity experience*. Computers in Human Behavior 12/2014; 51. DOI:10.1016/j.chb.2014.11.030
- Kashif Saleem, Abdelouahid Derhab, Jalal Al-Muhtadi, Basit Shahzad; *Human-oriented design of secure Machine-to-Machine communication system for e-Healthcare society*. Computers in Human Behavior 11/2014; 51. DOI:10.1016/j.chb.2014.10.010
- Kashif Saleem, Norsheila Fisal, Jalal Al-Muhtadi; *Empirical Studies of Bio-Inspired Self-Organized Secure Autonomous Routing Protocol*. IEEE Sensors Journal 07/2014; 14(7):2232-2239.
DOI:10.1109/JSEN.2014.2308725

- Suleiman Zubair, Norsheila Fisal, Yakubu S Baguda, Kashif Saleem; *Assessing Routing Strategies for Cognitive Radio Sensor Networks*. *Sensors* 10/2013; 13(10):13005-13038. DOI:10.3390/s131013005
- Mohammed S. Khalil, Fajri Kurniawan, Kashif Saleem; *Authentication of fingerprint biometrics acquired using a cellphone camera: A review*. *International Journal of Wavelets Multiresolution and Information Processing* 09/2013; 11(05):17. DOI:10.1142/S0219691313500331
- F. Yunus, N-S.N. Ismail, S.H. Syed Ariffin, A.A. Shahidan, S.K. Syed Yusof, N. Fisal, K. Saleem, A.A. Ahmed; *Proposed technique for transport protocol in wireless sensor network (WSN) for multimedia application*.
- Kashif Saleem, Norsheila Fisal, Muhammad Sharil Abdullah, Sharifah Hafizah Syed Ariffin; *Biological inspired secure autonomous routing mechanism for wireless sensor networks*. *International Journal of Intelligent Information and Database Systems* 07/2011; 5(4):313-337. DOI:10.1504/IJIDS.2011.041321
- Kashif Saleem, Norsheila Fisal, M. Ariff Baharudin, Adel Ali Ahmed, Sharifah Hafizah, Sharifah Kamilah; *Ant colony inspired self-optimized routing protocol based on cross layer architecture for wireless sensor networks*. *WSEAS Transactions on Communications* 10/2010; 9(10):669-678.
- K Saleem, N Fisal, S Hafizah, S Kamilah, R A Rashid; *A Self-Optimized Multipath Routing Protocol for Wireless Sensor Networks*. *International Journal of Recent Trends in Engineering (IJRTE)*, 2009; 1(2):93-97.
- Kashif Saleem, Norsheila Fisal, Sharifah Hafizah Syed Ariffin, Sharifah Kamilah Syed Yusof, Rozeha A. Rashid; *Ant based Self-organized Routing Protocol for Wireless Sensor Networks*. *International Journal of Communication Networks and Information Security* 01/2009; 1(2):42-46.
- Kashif Saleem, Norsheila Fisal, Muhammad Mun'im Ahmad Zabidi; *Utilizing IXP-2400 to Provision QoS for Real Time Services on IPv6 DiffServ Network*. *Elektrika Journal of Electrical Engineering*, 2008; 1(10):49-53.

Conference Proceedings

- Kashif Saleem, Haider Abbas, Jalal Al-Muhtadi, Mehmet Ali Orgun, Rajan Shankaran, and Zheng Guanglou; *Empirical Studies of ECG Multiple Fiducial-points Based Binary Sequence Generation (MFBSG) algorithm in E-Health Sensor Platform*, The 41st IEEE Conference on Local Computer Networks (LCN2016), Dubai, UAE, November 2016.
- Zeb, Khan, Kashif Saleem, Jalal Al Muhtadi, and Christoph Thuemmler. "U-prove based security framework for mobile device authentication in eHealth networks." In *IEEE 18th International Conference on e-Health Networking, Applications and Services (Healthcom)*, 2016, Munich, Germany, 2016.
- Moreira, Mário WL, Joel JPC Rodrigues, Antonio MB Oliveira, Kashif Saleem, and Augusto V. Neto. "An inference mechanism using Bayes-based classifiers in pregnancy care." In *IEEE 18th International Conference on e-Health Networking, Applications and Services (Healthcom)*, 2016, Munich, Germany, 2016.
- Saleem, Kashif, Khan Zeb, Abdelouhid Derhab, Haider Abbas, Jalal Al-Muhtadi, Mehmet A. Orgun, and Amjad Gawanmeh. "Survey on cybersecurity issues in wireless mesh networks based eHealthcare." In *IEEE 18th International Conference on e-Health Networking, Applications and Services (Healthcom)*, 2016, Munich, Germany, 2016.
- José V. V. Sobral, Joel J. P. C. Rodrigues, Kashif Saleem, Juan F. de Paz, Juan M. Corchado; *A composite routing metric for wireless sensor networks in AAL-IoT*, 9th IFIP Wireless and Mobile Networking Conference (WMNC2016), Colmar, France; 7/ 2016.
- José V. V. Sobral, Joel J. P. C. Rodrigue, Kashif Saleem, Jalal Al-Muhtadi; *Performance evaluation of LOADng routing protocol in IoT P2P and MP2P applications*. *International Multidisciplinary Conference on Computer and Energy Science (SpliTech2016)*, Split, Croatia; 7/ 2016

- Bruno Silva João Santos, Joel J. P. C. Rodrigues, João Casal, Kashif Saleem; *Internet of Things Mobile Gateway Services for Intelligent Personal Assistants*. 17th International Conference on E-health Networking, Application & Services (Healthcom2015), Boston, United States; 10/2015
- Amjad Gawanmeh, Hussam Al-Hamadi, Mahmoud Al-Qutayri, Shiu-Kai Chin, Kashif Saleem; *Reliability Analysis of Healthcare Information Systems: State of the Art and Future Directions*. 17th International Conference on E-health Networking, Application & Services (Healthcom2015), Boston, United States; 10/2015
- Shaker Alanazi, Jalal Al Muhtadi, Abdelouahid Derhab, Kashif Saleem, Afnan Alromi, Hanan Alholaibah, Joel J. P. C. Rodrigues; *On Resilience of Wireless Mesh Routing Protocol against DoS Attacks in IoT-based Ambient Assisted Living Applications*. 17th International Conference on E-health Networking, Application & Services (Healthcom2015), Boston, United States; 10/2015
- Haider Ali Khan Khattak, Haider Abbass, Ayesha Naeem, Kashif Saleem, Waseem Iqbal; *Security Concerns of Cloud-Based Healthcare Systems: A Perspective of Moving from Single-Cloud to a Multi-cloud Infrastructure*. 17th International Conference on E-health Networking, Application & Services (Healthcom2015), Boston, United States; 10/2015
- K. Saleem, A. Derhab, M.A. Orgun, J. Al-Muhtadi; *Analysis of the Scalability and Stability of an ACO Based Routing Protocol for Wireless Sensor Networks*. 12th International Conference on Information Technology: New Generations, ITNG 2015, Las Vegas, Nevada, USA; 05/2015
- A. Ghafoor, M. Sher, M. Imran, K. Saleem; *A Lightweight Key Freshness Scheme for Wireless Sensor Networks*. 12th International Conference on Information Technology: New Generations, ITNG 2015, Las Vegas, Nevada, USA; 05/2015
- Waleed Halboob, Ramlan Mahmod, Muhammad Abulaish, Haider Abbas, Kashif Saleem; *Data Warehousing Based Computer Forensics Investigation Framework*. 12th International Conference on Information Technology: New Generations, Las Vegas, Nevada, USA; 05/2015
- Mohamed Guerroumi, Abdelouahid Derhab, Kashif Saleem; *Intrusion detection system against SinkHole attack in wireless sensor networks with mobile sink*. 12th International Conference on Information Technology - New Generations, Las Vegas, NV, USA; 04/2015
- Kashif Saleem, Abdelouahid Derhab, Jalal Al-Muhtadi; *Low delay and secure M2M communication mechanism for eHealthcare*. 2014 IEEE 16th International Conference on e-Health Networking, Applications and Services, Healthcom 2014, Natal, Brazil; 01/2015
- Abdelouahid Derhab, Kashif Saleem, Ahmed Youssef; *Third line of defense strategy to fight against SMS-based malware in android smartphones*. 2014 International Wireless Communications and Mobile Computing Conference (IWCMC), Nicosia, Cyprus; 08/2014
- M Abazeed, K Saleem, S Zubair, N Faisal; *CARPM: Cross Layer Ant Based Routing protocol for Wireless Multimedia Sensor Network*. 'Multimedia Wireless adhoc Networks 2014, MWaoN 2014' conference; 06/2014
- Kashif Saleem, Mohammed Sayim Khalil, Norsheila Faisal, Adel Ali Ahmed, Mehmet Ali Orgun; *Efficient Random Key Based Encryption System for Data Packet Confidentiality in WSNs*. Trust, Security and Privacy in Computing and Communications (TrustCom), 2013 12th IEEE International Conference on; 07/2013
- Kashif Saleem, Norsheila Faisal; *Energy Efficient Information Assured Routing based on Hybrid Optimization Algorithm for WSNs*. Information Technology: New Generations (ITNG), 2013 Tenth International Conference on; 04/2013
- K. Saleem, N. Faisal; *Enhanced Ant Colony algorithm for self-optimized data assured routing in wireless sensor networks*. Networks (ICON), 2012 18th IEEE International Conference on; 01/2012
- K. Saleem, N. Faisal, M.A. Baharudin; *A real-time empirical study of BIOSARP based wireless sensor network testbed*. Sensors, 2012 IEEE; 01/2012

- Kashif Saleem, Norsheila Fisal, Sharifah Hafizah; *BIOSARP: biological inspired self-organized secure autonomous routing protocol for wireless sensor network*. Proceedings of the 11th WSEAS international conference on Applied computer science; 10/2011
- Kashif Saleem, Norsheila Fisal, Sharifah Hafizah Syed Ariffin, Rozeha A. Rashid; *An Intelligent Information Security Mechanism for the Network Layer of WSN: BIOSARP*. Computational Intelligence in Security for Information Systems - 4th International Conference, CISIS 2011, Held at IWANN 2011, Torremolinos-Málaga, Spain, June 8-10, 2011. Proceedings; 01/2011
- Ansar Jamil, Sharifah H. S. Ariffin, A.A. Abdullah, Norsheila Fisal, Kashif Saleem, Sharifah K. Syed-Yusof; *Optimal Forwarding Routing Protocol in IPv6-Based Wireless Sensor Networks*. Communications (MICC), 2009 IEEE 9th Malaysia International Conference on; 01/2010
- Kashif Saleem, Norsheila Fisal, Sharifah Hafizah, Sharifah Kamilah, Rozeha Rashid; *Biological Inspired Self-Optimized Routing Algorithm for Wireless Sensor Networks*. Communications (MICC), 2009 IEEE 9th Malaysia International Conference on; 01/2010
- Kashif Saleem, Norsheila Fisal, Sharifah Hafizah, Sharifah Kamilah, Rozeha Rashid; *Autonomously Intelligent WSN Routing Protocol based on Ant Colony Optimization*. 2009 International Conference on Robotics, Vision, Signal Processing and Power Applications (RoViSP 2009), Awana Porto Malai, Langkawi, Malaysia.; 12/2009
- K. Saleem, N. Fisal, S. Hafizah, S. Kamilah, R. Rashid, Y. Baguda; *Self-optimized autonomous routing protocol for wireless sensor networks with cross layer architecture*. Industrial Electronics & Applications, 2009. ISIEA 2009. IEEE Symposium on; 11/2009
- K. Saleem, N. Fisal, M.S. Abdullah, A.B. Zulkarmwan, S. Hafizah, S. Kamilah; *Proposed Nature Inspired Self-Organized Secure Autonomous Mechanism for WSNs*. Intelligent Information and Database Systems, 2009. ACIIDS 2009. First Asian Conference on; 05/2009
- Kashif Saleem, Norsheila Fisal, Sharifah Hafizah, Sharifah Kamilah, Rozeha Rashid, Yakubu Baguda; *Cross layer based biological inspired self-organized routing protocol for wireless sensor network*. TENCON 2009 - 2009 IEEE Region 10 Conference; 02/2009
- Y.S. Baguda, N. Fisal, S.K. Yusof, S.H. Syed, R. Rashid, K. Saleem; *Cross layer error-control scheme for video quality support over 802.11b wireless LAN*. TENCON 2009 - 2009 IEEE Region 10 Conference; 02/2009
- K. Saleem, N. Fisal; *Bio-inspired self-organized secure autonomous routing protocol for WSN*. RF and Microwave Conference, 2008. RFM 2008. IEEE International; 01/2009
- Kashif Saleem, Norsheila Fisal; *A Bio-Inspired Secure Routing Protocol for WSNs*. 2008 Regional Student Conference on Research and Development (SCORED), Universiti Teknologi Malaysia UTM Skudai, Johor, Malaysia; 11/2008
- K. Saleem, N.Bt. Fisal, M.M.B. Ahmad Zabidi; *QoS provisioning for real time services on DiffServ aware IPv6 optical network using IXP-2400 Intel Network*. Wireless and Optical Communications Networks, 2008. WOCN '08. 5th IFIP International Conference on; 06/2008
- K. Saleem, N. Fisal, M.M. Zabidi, A. Mohd; *QoS provisioning for real time services for IPv6 DiffServ network using IXP-2400 intel network processor*. Telecommunications and Malaysia International Conference on Communications, 2007. ICT-MICC 2007. IEEE International Conference on; 06/2007