

PERSONAL INFO.

PROF. SALMAN ALI ALQAHTANI

Professor in Computer Science and Engineering
Dean, College of Computer and Information Sciences, King Saud University,
Director; National Center for New Emerging Wireless Tech.
Director; New Emerging Tech. and 5G and beyond networks Research Chair
Mobile: +966505225172
Google Scholar:
https://scholar.google.ca/citations?hl=en&user=1sJ9MOwAAAAJ&view_op=list_works&sortby=pubdate
E-mail: salmanq@ksu.edu.sa; alqahtani.s@gmail.com;
twitter: @DR_SAQ



EDUCATION

Ph.D. in Computer Science & Engineering Feb., 2007
King Fahd University of Petroleum & Minerals (KFUPM), Dhahran, Saudi Arabia

- Dissertation: "**Radio Resource Management and Operator Sharing in 3G and Beyond Multimedia Wireless Networks**"
- Areas of Concentration: Simulation and Modeling, Neural Networks, 5G & Beyond Mobile Wireless, Computer Architecture and Computer Networks
- Honors: G.P.A. is 4.0/4.0 and Dissertation Approved "with Distinction"

A **Postdoctoral Researcher**, Mobile Radio Resource Management and Sharing
University of Waterloo, Canada, 2011

Mobile Forensics Program, Mobile investigations and evidence collections
Canadian Police College, Ottawa, Canada, 2010

M.S. in Computer Engineering March, 2003
King Saud University, Saudi Arabia

- Thesis: "**Prioritized Handover and Call Admission Control Schemes for Multimedia Traffic in Cellular Mobile Wireless Networks**"
- Areas of Concentration: Simulation and Modeling, Neural Network, Computer Architecture and Computer Networks
- Honors: Highest Honors

High Diploma in Security Sciences March 1998
King Fahd Security College, Ministry of Interior, Riyadh, Saudi Arabia

B.S. Honors in Computer Engineering Jan., 1997
King Fahd University of Petroleum & Minerals (KFUPM), Dhahran, Saudi Arabia

- Areas of Concentration: Computer networks, Digital Design, Computer Science and Computer Architecture and networks
- Minor: Computer architecture and networks
- Honors: Highest Honors

Leadership Principles Program, Harvard Business School
University of Harvard, USA, 2020

FIELD OF SPECIALIZATION / INTEREST:

Include, but not limited to:

- Performance Analysis of Recent Advances in Technologies: Industry 4.0., Neural Networks, AI-based Network architecture, Advanced Mobile Wireless Technologies (5G & 6G), Internet of everything and its QoS issue, Software Defined Network (SDN)/ Network Function Virtualization (NFV), 5/6 G Network Slicing, Mobile Edge and fog Computing, Heterogeneous Wireless Networks, TETRA and Cognitive Radio networks.
- Smart Sustainable Nation and Cities, Network Integrated Services, Network Infrastructures and Data Center solutions
- Business Process Automation (BPA) and Digital Transformation Solutions
- Cyber Sovereignty, Security and Video Surveillance, and Digital Forensics and Investigations
- Advanced Algorithms; Software testing and Quality assurance

PROFESSIONAL EXPERIENCE

King Saud University, Computer Engineering Dept., Riyadh, Saudi Arabia

- Dean of College of Computer and Information Sciences, Jan. 2020–Now
- Supervisor of New Emerging Technologies and 5G&6G Research chair Jan. 2022–Now
- Director of National Center for Future Network Technologies Jan. 2022–Now
- Part Time Consultant, Council of Universities AFIARS May. 2023–Now
- Vice Dean of College of Computer and Information Sciences, June 2017 –Dec 2019
- Full Professor of Computer Engineering and Communication Networks (Oct. 2016)
- Chairman of Computer Engineering Dept. Dec 2013 –Feb. 2016
- Associate professor of Computer Networks Sept. 2012 – Oct. 2016
- Assistant professor of Computer Networks Sept. 2011 – Sept. 2012

King Fahd Security College, Ministry of Interior, Riyadh, Saudi Arabia

- Worked as an officer Engineer for more than 14 years 1998-2011
- Assistant professor of Computer and communication Networks 2007 - 2011
- Part time Assistant Professor – "ICT Department." 2011-2012
- Lecturer – "Computer information and security" 1998-2003
- Chairman of Computer Science Department 2007 – 2011
- Founder and Academic Advisor of Digital Forensic Investigations Diploma 2010 - 2012
- Chairman of Computer Networks Section 2007 - 2008
 - Administrated the college's networks, network maintenance and supports.
- Network administrator 2000 -2003
 - Administrated the college's networks, network maintenance and supports.
- Director, Deputy Manger office 1998 - 2000
 - Worked as director of the deputy manager office.

General Department of Saudi Prisons

- IT Consultant 2009 - 2012

Comprehensive vision center for ICT consulting (cvc4it), Riyadh

- Information & Communication Technology Consultant 2008 - 2010
 - Working as consultant for: IT strategy plan development, Building IT infrastructure, new communication technology solution, etc.

Saudi Unicom for Communication Technologies, Riyadh

- Information & Communication Technology Consultant 2008 - 2009
 - Working as consultant for: GPS Tracking system and video surveillance, live video streaming, developing communication solutions for security purposes, etc.
- General Manager of Saudi Unicom Company 2009 - 2010

Saudi ARAMCO, Dhahran, Saudi Arabia

- Network Engineer 1997 - 1998
 - Worked on the control room of oil factory in Jubail.
- Computer engineer Summer 1996
 - Provided network and system design to the field engineers.

France

- Air Defense Study 1991- 1992
 - Studied Basic air defense science and French language.

TEACHING AND ACADIMIC EXPERIENCE

King Saud University, Computer Engineering Dept., Riyadh, Saudi Arabia

- Taught courses (PhD level):
 - Personal Communication Systems (CEN 634)
 - Advanced Computer Networks (CEN 631)
 - Independent Research Study 2 (CEN 697)
- Taught courses (Master level):
 - Queuing Theories & Simulation (CEN501)
 - Wireless LAN & WAN (CEN538)
 - Computer Networks (CEN531)
 - LAN Protocols and Performance (CEN537)
- Taught courses (BS level):
 - Mobile & Wireless Networks (CEN491)
 - Senior Project (CEN492)
- Part time lecturer – Computer networks and network operating systems 1998-2003
 - Taught "computer networks (LAN) and network operating system lab".

King Fahd Security College, Riyadh, Saudi Arabia

- Taught courses:
 - Network and Information Security Courses.: 1998-2011
 - Digital Forensic Course 2010- 2012
 - Introduction to Communications 2007- 2011

Arab Open University, Riyadh, Saudi Arabia

- Part time Assistant Professor– "IT Department " 2007-2011
- Taught courses:
 - "Information and Communication Technologies Course" (T209): 2007-2009
 - "Digital Communication Technologies Course" (T305) : 2009-2010
 - "Keeping ahead in ICT Course" (T324) 2009-2011

Prince Naif University for Security Sciences, Riyadh, Saudi Arabia

- Part time Assistant Professor – "Police Studies" 2010-2011
- Teaching "Digital Forensic Evidence Course"

Prince Sultan University, Riyadh, Saudi Arabia

- Part time Assistant Professor – "Computer Science Department " 2007-2008

- Taught "Digital Design Course" (CS 151)

PUBLICATIONS AND TALKS

THESIS:

1. **Ph.D Dissertation:** "Radio Resource Management and Operator Sharing in 3G and Beyond Multimedia Wireless Networks", Feb. 2007.
2. **M.S. Thesis:** "Prioritized Handover and Call Admission Control Schemes for Multimedia Traffic in Cellular Mobile Wireless Networks", March 2003

BOOKS: (3 BOOKS)

1. **Salman A. AlQahtani**, "Digital Forensics Evidence: Concepts and Processing Techniques (In Arabic)", KFSC Research and studies center, Riyadh, 2011.
2. **Salman A. AlQahtani**, "Introduction to Wireless Communication Networks (In Arabic)", KSU, Riyadh, 2013.
3. **Salman A. AlQahtani**, "National Cyber Sovereignty and Smart Sustainable Country in the Age of Digital Transformation: Visions, Principles, Requirements and Challenges (In Arabic)", under press, Riyadh, 2018.

SELECTED JOURNAL PUBLICATIONS

Google Scholar:

https://scholar.google.ca/citations?hl=en&user=1sJ9MOwAAAAJ&view_op=list_works&sortby=pubdate

Selected ISI Journals:

1. Kumar, Mukesh, Monika Sethi, Shalli Rani, Dipak Kumar Sah, **Salman A. AlQahtani**, and Mabrook S. Al-Rakhami. "Secure Data Aggregation Based on End-to-End Homomorphic Encryption in IoT-Based Wireless Sensor Networks" *Sensors* 23, no. 13: 6181, 2023.
2. Ravikumar, Seelam, Ijaz Khan, Muhammad, **AlQahtani, Salman A.** and Eldin, Sayed M.. "Significance of heat and mass transport in peristaltic flow of Jeffrey material subject to chemical reaction and radiation phenomenon through a tapered channel" *Open Physics* 21, no. 1 (2023): 20220258, 2023.
3. Md. Golam Rabiul Alam, Abde Musavvir Khan, Myesha Farid Shejuty, Syed Ibna Zubayear, Md. Nafis Shariar, Meteb Altaf, Mohammad Mehedi Hassan, **Salman A. AlQahtani** & Ahmed Alsanad, "Ejection Fraction estimation using deep semantic segmentation neural network". *J Supercomput* 79, 27–50, 2023.
4. Shuo Li, Samreen, Saif Ullah, **Salman A. AlQahtani**, Sayed M. Tag, Ali Akgül, "Mathematical assessment of Monkeypox with asymptomatic infection: Prediction and optimal control analysis with real data application", *Results in Physics*, Volume 51, 106726, 2023.
5. Saleem, Ahmed, Abdul Basit, Muhammad Fahad Munir, Athar Waseem, Wasim Khan, Aqdas Naveed Malik, **Salman A. AlQahtani**, Amil Daraz, and Pranavkumar Pathak. "Alternating Direction Method of Multipliers-Based Constant Modulus Waveform Design for Dual-Function Radar-Communication Systems" *Entropy* 25, no. 7: 1027, 2023.
6. Y. Jiang, J. Liu, I. Humar, M. Chen, **S. A. Alqahtani** and M. S. Hossain, "Age of Information-Based Computation Offloading and Transmission Scheduling in Mobile Edge Computing-Enabled IoT Networks," in *IEEE Internet of Things Journal*, 2023.
7. **SA AlQahtani**, MS Al-Rakhami, RMA Shohib, MEM Alngar, P Pathak, "Dispersive optical solitons with Schrödinger–Hirota equation using the -model expansion approach", *Optical and Quantum Electronics* 55 (8), 701, 2023.

8. KK Ali, **SA AIQahtani**, MS Mehanna, A Bekir, “New optical soliton solutions for the $(2+ 1)$ Fokas system via three techniques”, *Optical and Quantum Electronics* 55 (7), 638, 2023.
9. M Muthukumar, R Rangasamy, I Hussain, **SA AIQahtani**, “Energy Efficient Green Routing for UAVs Ad-Hoc Network.”, *Intelligent Automation & Soft Computing* 37 (1), 2023.
10. NA Butt, H Gull, Z Ali, G Muhammad, **SA AIQahtani**, “A multi-prefecture study applying multivariate approaches for predicting and demystifying weather data variations affect COVID-19 spread”, *Information Systems and e-Business Management*, 1-35, 2023.
11. S Farid, S Ullah, R Nawaz, **SA AIQahtani**, S Li, AM Hassan, “A mathematical study unfolding the transmission and control of deadly Nipah virus infection under optimized preventive measures: New insights using fractional calculus”, *Results in Physics*, 106629, 2023.
12. Salman Khan, Muhammad Abbas Khan, Mukhtaj Khan, Nadeem Iqbal, **Salman A AIQahtani**, Mabrook S Al-Rakhami, Dost Muhammad Khan, “Optimized Feature Learning for Anti-Inflammatory Peptide Prediction Using Parallel Distributed Computing”, *Applied Sciences* 13 (12), 7059, 2023.
13. Muhammad Fahad Munir, Abdul Basit, Wasim Khan, Athar Wasim, Muhammad Mohsin Khan, Ahmed Saleem, **Salman A AIQahtani**, Amil Daraz, Pranavkumar Pathak, “Hybrid FSK–FDM Scheme for Data Rate Enhancement in Dual-Function Radar and Communication”, *Sensors* 23 (12), 5440, 2023.
14. Esraa Hassan, Samir Elmougy, Mai R Ibraheem, M Shamim Hossain, Khalid AlMutib, Ahmed Ghoneim, **Salman A AIQahtani**, Fatma M Talaat, “Enhanced Deep Learning Model for Classification of Retinal Optical Coherence Tomography Images”, *Sensors* 23 (12), 5393, 2023.
15. Waseem Akram, Rumaisa Zahid, Raja Muhammad Usama, **Salman Ali AIQahtani**, Mostafa Dahshan, Muhammad Abdul Basit, Muhammad Yasir, “Enhancement of Antibacterial Properties, Surface Morphology and In Vitro Bioactivity of Hydroxyapatite-Zinc Oxide Nanocomposite Coating by Electrophoretic Deposition Technique”, *Bioengineering* 10 (6), 693, 2023.
16. AA Alotaibi, **SA AIQahtani**, “Performance Analysis in Overlay-based Cognitive D2D Communications in 5G Networks”, *Journal of King Saud University-Computer and Information Sciences*, 101599, 2023.
17. **SA AIQahtani**, MEM Alngar, RMA Shohib, P Pathak, “Highly dispersive embedded solitons with quadratic χ (2) and cubic χ (3) non-linear susceptibilities having multiplicative white noise via Itô calculus”, *Chaos, Solitons & Fractals* 171, 113498, 2023.
18. **SA AIQahtani**, “Cooperative-Aware Radio Resource Allocation Scheme for 5G Network Slicing in Cloud Radio Access Networks”, *Sensors* 23 (11), 5111, 2023.
19. M Zakariah, **SA AIQahtani**, MS Al-Rakhami, “Machine Learning-Based Adaptive Synthetic Sampling Technique for Intrusion Detection”, *Applied Sciences* 13 (11), 6504, 2023.
20. **SA AIQahtani**, “An Evaluation of e-Health Service Performance through the Integration of 5G IoT, Fog, and Cloud Computing”, *Sensors* 23 (11), 5006, 2023.
21. Aftab Ur Rahman, Guangcheng Zhang, **Salman A. AIQahtani**, Hammad Tariq Janjuhah, Irshad Hussain, Habib Ur Rehman, Liaqat Ali Shah, “Geotechnical Assessment of Rock Slope Stability Using Kinematic and Limit Equilibrium Analysis for Safety Evaluation”, *Water* 15 (10), 1924, 2023.
22. **SA AIQahtani**, L Ahmad, IU Khan, P Pathak, “Local non-similar solution of radiative and magnetized flow of non-Newtonian liquid over a gravitationally affected porous surface with Newtonian heating effect”, *Journal of Engineering Research*, 100090, 2023.
23. GF Laghari, SA Malik, IA Khan, A Daraz, **SA AIQahtani**, H Ullah, “Fitness Dependent Optimizer Based Computational Technique for Solving Optimal Control Problems of Nonlinear Dynamical Systems”, *IEEE Access*, 2023.
24. I Khan, M Noor-ul-Amin, DM Khan, **SA AIQahtani**, M Dahshan, U Khalil, “Monitoring of Location Parameters with a Measurement Error under the Bayesian Approach Using Ranked-Based Sampling Designs with Applications in Industrial Engineering”, *Sustainability* 15 (8), 6675, 2023.

25. RA Roshdy, MH Dahshan, **SA AIQahtani**, A Emam, HM Kasem, MA Salem, "Methods for Simplifying Quasi-Deterministic Millimeter-Wave Channel Models", *IEEE Access* 11, 34529-34543, 2023.
26. KK Ali, **SA AIQahtani**, MS Mehanna, AM Wazwaz, "Novel Soliton Solutions for the (3+ 1)-Dimensional Sakovich Equation Using Different Analytical Methods", *Journal of Mathematics* 2023, 2023.
27. **SA AIQahtani**, "Performance Analysis of a Quality of Service-Aware Resource Allocation for Internet of Things", *Wireless Personal Communications* 129 (3), 1961-1982, 2023.
28. MM Hassan, **SA AIQahtani**, A Alelaiwi, JP Papa, "Lightweight neural architectures to improve COVID-19 identification", *Frontiers in Physics* 11, 1153637, 2023.
29. B Ullah, SA Al Qahtani, M Dahshan, HA Wahab, U Khan, "Numerical investigation of heat transfer in the presences of thermo-cross diffusion gradients on flow over a curved geometry", *ZAMM-Journal of Applied Mathematics and Mechanics*, 2023.
30. SI Nafisah, G Muhammad, MS Hossain, **SA AIQahtani**, "A Comparative Evaluation between Convolutional Neural Networks and Vision Transformers for COVID-19 Detection", *Mathematics* 11 (6), 1489, 2023.
31. MM Hassan, MS AlRakhami, AA Alabrah, **SA AIQahtani**, "An Intelligent Edge-as-a-Service Framework to Combat COVID-19 Using Deep Learning Techniques", *Mathematics* 11 (5), 1216, 2023.
32. Nasir Saleem, Muhammad Irfan Khattak, **Salman A AIQahtani**, Atif Jan, Irshad Hussain, Muhammad Naeem Khan, Mostafa Dahshan, "U-Shaped Low-Complexity Type-2 Fuzzy LSTM Neural Network for Speech Enhancement", *IEEE Access* 11, 20814-20826, 2023.
33. Anika Tahsin, Palash Roy, Md Abdur Razzaque, Md Mamun-Or-Rashid, Mohammad Siraj, **Salman A AIQahtani**, Md Rafiul Hassan, Mohammad Mehedi Hassan, "Energy Cooperation Among Sustainable Base Stations in Multi-Operator Cellular Networks", *IEEE Access* 11, 19405-19417, 2023.
34. Syed Tauhidun Nabi, Md Rashidul Islam, Md Golam Rabiul Alam, Mohammad Mehedi Hassan, **Salman A AIQahtani**, Gianluca Aloï, Giancarlo Fortino, "Deep Learning Based Fusion Model for Multivariate LTE Traffic Forecasting and Optimized Radio Parameter Estimation", *IEEE Access* 11, 14533-14549, 2023.
35. Md Golam Rabiul Alam, Mahmudul Haque, Md Rafiul Hassan, Shamsul Huda, Mohammad Mehedi Hassan, Fred L Strickland, **Salman A AIQahtani**, "Feature Cloning and Feature Fusion Based Transportation Mode Detection Using Convolutional Neural Network", *IEEE Transactions on Intelligent Transportation Systems* 24 (4), 4671-4681, 2023.
36. Poonam Dhiman, M Poongodi, Umesh Kumar Lilhore, **Salman A AIQahtani**, Amandeep Kaur, Celestine Iwendi, Kaamran Raahemifar, "PFDI: A Precise Fruit disease Identification Model based on Context Data Fusion with Faster-CNN in Edge Computing Environment", *An augmented SLAM method with a visual-lidar-equipped unmanned vehicle for detecting control measures against COVID-19*, 2023.
37. S Liang, M Xie, S Garg, G Kaddoum, MM Hassan, **SA AIQahtani**, "An augmented SLAM method with a visual-lidar-equipped unmanned vehicle for detecting control measures against COVID-19", *Human-Centric Computing and Information Sciences* 13, 2023.
38. MA Rabbani, MB Qureshi, **SA AI Qahtani**, MM Khan, P Pathak, "Enhancing MPPT Performance in Partially Shaded PV Systems under Sensor Malfunctioning with Fuzzy Control", *Energies* 16 (12), 4665, 2023.
39. **Salman A. AIQahtani** and Wojciech Sumelka Imad Khan, Muhammad Noor-ul-Amin, Dost Muhammad Khan, "Adaptive EWMA control chart using Bayesian approach under ranked set sampling schemes with application to Hard Bake process", *scientific reports*, 2023.
40. Md Harun-Ar-Rashid, Oindrila Chowdhury, Muhammad Minoar Hossain, Mohammad Motiur Rahman, Ghulam Muhammad, **Salman A AIQahtani**, Mubarak Alrashoud, Abdulsalam Yassine, M Shamim Hossain, "IoT-Based Medical Image Monitoring System Using HL7 in a Hospital Database", *Healthcare* 11 (1), 139, 2023.
41. JR Bhat, **SA AIQahtani**, M Nekovee, "FinTech enablers, use cases, and role of future internet of things", *Journal of King Saud University-Computer and Information Sciences* 35 (1), 87-101, 2023.

42. C Mangla, S Rani, S Garg, MM Hassan, **SA AIQahtani**, "HLSAQ: Hybrid Security Model for Quantum Networks", *IEEE Network* 36 (6), 269-276, 2022.
43. SA Haider, YB Zikria, S Garg, S Ahmad, MM Hassan, **SA AIQahtani**, "AI-Based Energy-Efficient UAV-Assisted IoT Data Collection with Integrated Trajectory and Resource Optimization", *IEEE Wireless Communications* 29 (6), 30-36, 2022.
44. D Zhai, C Wang, H Cao, S Garg, MM Hassan, **SA AIQahtani**, "Deep neural network based UAV deployment and dynamic power control for 6G-Envisioned intelligent warehouse logistics system", *Future Generation Computer Systems* 137, 164-172, 2022.
45. MM Hassan, **SA AIQahtani**, A Alelaiwi, JP Papa, "Explaining COVID-19 diagnosis with Taylor decompositions", *Neural Computing and Applications*, 1-14, 2022.
46. A Taneja, S Rani, S Garg, MM Hassan, **SA AIQahtani**, "Energy aware resource control mechanism for improved performance in future green 6G networks", *Computer Networks* 217, 109333, 2022.
47. A Almogahed, M Omar, NH Zakaria, G Muhammad, **SA AIQahtani**, "Revisiting Scenarios of Using Refactoring Techniques to Improve Software Systems Quality", *IEEE Access*, 2022.
48. M Saqlain, U Zada, G Muhammad, **SA AIQahtani**, Z Ali, W Hussain, "Assessment of a Fast Proxy of Vs30 (Vs30m)", *Sustainability* 14 (20), 13668, 2022.
49. KK Singamaneni, G Dhiman, S Juneja, G Muhammad, **SA AIQahtani**, ..., "A novel QKD approach to enhance IIOT privacy and computational knacks", *Sensors* 22 (18), 6741, 2022.
50. F Ahmad, A Ahmad, I Hussain, G Muhammad, Z Uddin, **SA AIQahtani**, "Proactive Caching in D2D Assisted Multitier Cellular Network", *Sensors* 22 (14), 5078, 2022.
51. H Cao, S Garg, G Kaddoum, MM Hassan, **SA AIQahtani**, "Secure and intelligent slice resource allocation in vehicles-assisted cyber physical systems", *Computer Communications* 191, 386-394, 2022.
52. H Cao, S Garg, G Kaddoum, MM Hassan, **SA AIQahtani**, "Intelligent virtual resource allocation of QoS-guaranteed slices in B5G-Enabled VANETs for intelligent transportation systems", *IEEE Transactions on Intelligent Transportation Systems* 23 (10), 19704-19713, 2022.
53. H Babbar, S Rani, **SA AIQahtani**, "Intelligent Edge Load Migration in SDN-IIoT for Smart Healthcare", *IEEE Transactions on Industrial Informatics* 18 (11), 8058-8064, 2022.
54. G Rathee, S Garg, G Kaddoum, BJ Choi, MM Hassan, **SA AIQahtani**, "TrustSys: Trusted decision making scheme for collaborative artificial intelligence of things", *IEEE Transactions on Industrial Informatics* 19 (1), 1059-1068, 2022.
55. A Lakhan, MA Mohammed, S Kadry, **SA AIQahtani**, MS Maashi, ..., "Federated learning-aware multi-objective modeling and blockchain-enable system for IIoT applications", *Computers and Electrical Engineering* 100, 107839, 2022.
56. M Abutaha, I Amar, **SA AIQahtani**, "Parallel and practical approach of efficient image chaotic encryption based on message passing interface (MPI)", *Entropy* 24 (4), 566, 2022.
57. Sharif, MR Islam, MZ Hasan, MA Kabir, ME Hasan, **SA AIQahtani**, G Xu, "Analyzing the impact of demographic variables on spreading and forecasting COVID-19", *Journal of Healthcare Informatics Research*, 1-19, 2022.
58. Nasser Alshammari, Md Nazirul Islam Sarker, MM Kamruzzaman, Madallah Alruwaili, Saad Awadh Alanazi, Md Lamiur Raihan, **Salman Ali AIQahtani** "Technology-driven 5G enabled e-healthcare system during COVID-19 pandemic", *IET Communications* 16 (5), 449-463, 2022.
59. J Ahmed, MA Razzaque, MM Rahman, **SA AIQahtani**, MM Hassan, "A Stackelberg game-based dynamic resource allocation in edge federated 5G network", *IEEE Access* 10, 10460-10471, 2022.
60. Ramachandran Manikandan, Victor Hugo C de Albuquerque, Prayag Tiwari, **Salman Ali AIQahtani**, M Shamim Hossain "Quality of Service-Aware Resource Selection in Healthcare IoT Using Deep Autoencoder Neural Networks", *Human-centric Computing and Information Sciences* 12 (36), 1-16, 2022.
61. R Agrawal, A Kumar, **SA AIQahtani**, M Maashi, OI Khalaf, THH Aldhyani, "Cache Memory Design for Single Bit Architecture with Different Sense Amplifiers", *CMC-Computers Materials & Continua*, 2022.
62. Salman A. AqlQahtani, at et. "Analysis of the Shortest Path in Spherical Fuzzy Networks Using the Novel Dijkstra Algorithm", *Mathematical Problems in Engineering*, 2021.
63. Salman A. AqlQahtani, at et. "YOLOv2PD: An Efficient Pedestrian Detection Algorithm Using Improved YOLOv2 Model", *CMC-COMPUTERS MATERIALS & CONTINUA*, 2021.
64. Salman A. AqlQahtani, at et. "Analyzing the Impact of Demographic Variables on Spreading and Forecasting COVID-19", *Journal of Healthcare Informatics Research*, 2022.

65. Salman A. AqlQahtani, et al. "Barriers of managing cloud outsource software development projects: a multivocal study", *Multimedia Tools and Applications*, 2021.
66. Salman A. AqlQahtani, et al. "Deep learning-based multidimensional feature fusion for classification of ECG arrhythmia", *Neural Computing and Applications*, 2021.
67. Bhat, Jagadeesha R; **Salman A. AlQahtani**; " 6G Ecosystem: current status and future perspective", *IEEE Access*, 2021 [ISI]
68. **Salman A. AlQahtani**; "An Efficient MAC with Spectrum Handoff and Frame Fragmentation Strategies for Cognitive Radio Networks" *Arabian Journal for Science and Engineering*, 2021 [ISI]
69. Palas, Md Rajibul; Islam, Md Rakibul; Roy, Palash; Razzaque, Md Abdur; Alsanad, Ahmad; **Salman A. AlQahtani** ; Hassan, Mohammad Mehedi; " Multi-criteria handover mobility management in 5G cellular network," *Computer Communications*, 2021, [ISI]
70. Miao, Sheng; Zhou, Changliang; **Salman A. AlQahtani**; Alrashoud, Mubarak; Ghoneim, Ahmed; Lv, Zhihan; " Applying machine learning in intelligent sewage treatment: A case study of chemical plant in sustainable cities," *Sustainable Cities and Society*, 2021, [ISI]
71. Alshammari, Nasser; Sarker, Md Nazirul Islam; Kamruzzaman, MM; Alruwaili, Madallah; Alanazi, Saad Awadh; Raihan, Md Lamiur; **Salman A. AlQahtani**; "Technology-driven 5G enabled e-healthcare system during COVID-19 pandemic," *IET Communications*, 2021, [ISI]
72. Masud, Mehedi; Singh, Parminder; Gaba, Gurjot Singh; Kaur, Avinash; Alghamdi, Roobaea Alrobaea; Alrashoud, Mubarak; **Salman A. AlQahtani**; "CROWD: Crow Search and Deep Learning based Feature Extractor for Classification of Parkinson's Disease," *ACM Transactions on Internet Technology (TOIT)*, 2021, [ISI]
73. Muhammad, Ghulam; **Salman A. AlQahtani**; Alelaiwi, Abdullah; " Pandemic Management for Diseases Similar to COVID-19 Using Deep Learning and 5G Communications," *IEEE Network*, 2021, [ISI]
74. Mahmud, Md Tareq; Rahman, Md Obaidur; **Salman A. AlQahtani**; Hassan, Mohammad Mehedi; " Cooperation-Based Adaptive and Reliable MAC Design for Multichannel Directional Wireless IoT Networks." *IEEE Access*, 2021 [ISI]
75. **Salman A. AlQahtani**; " An efficient resource allocation to improve QoS of 5G slicing networks using general processor sharing-based scheduling algorithm", *International Journal of Communication Systems*, 33,4, 2020 [ISI]
76. Roy, Palash; Sarker, Sujun; Razzaque, Md Abdur; Hassan, Mohammad Mehedi; **Salman A. AlQahtani**; Aloj, Gianluca; Fortino, Giancarlo; " AI-enabled mobile multimedia service instance placement scheme in mobile edge computing", *Computer Networks*, 182, 2020 [ISI].
77. Alanazi, Saad Awadh; Kamruzzaman, MM; Alruwaili, Madallah; Alshammari, Nasser; **Salman A. AlQahtani**; Karime, Ali; " Measuring and preventing COVID-19 using the SIR model and machine learning in smart health care", *Journal of healthcare engineering* , 2020 [ISI]
78. Masud, Mehedi; Gaba, Gurjot Singh; **Salman A. AlQahtani**; Muhammad, Ghulam; Gupta, BB; Kumar, Pardeep; Ghoneim, Ahmed; " A lightweight and robust secure key establishment protocol for internet of medical things in COVID-19 patients care", *IEEE Internet of Things Journal*, 2020 [ISI]
79. **Salman A. AlQahtani**, "An efficient resource allocation to improve QoS of 5G slicing networks using general processor sharing-based scheduling algorithm," *International Journal of Communication Systems*, 2020. [ISI].
80. **Salman A. AlQahtani*** and Waseem A. Alhomiqani, "A Multi-Stage Analysis Of Network Slicing Architecture For 5G Mobile Networks," *Telecommunication Systems* 73 (2), pp. 205-221, 2020. [ISI].
81. **Salman A. AlQahtani** and Abdulaziz S. Altamrah, "Supporting QoS Requirements Provisions on 5G Network Slices Using an Efficient Priority-Based Polling Technique," *Wireless Networks* 25 (7), pp. 3825-3838, 2019. [ISI].
82. **Salman A. AlQahtani** and Ahmed AlOtaini, "A Route Stability-based Multipath QoS Routing Protocol in Cognitive Radio Ad Hoc Networks," *Wireless Networks*, Volume 25, Issue 5, pp. 2931–2951, July 2019. [ISI].
83. **Salman A. AlQahtani**, "Performance Evaluation of a Priority-Based Resource Allocation Scheme for Multiclass Services in IoT," *International Journal of Communication Systems* 32 (18), 2019. [ISI].

84. **Salman A. AlQahtani**, "An Efficient Resource Allocation to Improve QoS of 5G Slicing Networks using General Processor Sharing based Scheduling Algorithm," *International Journal of Communication Systems* 33 (4), 2020. [ISI].
85. **Salman A. AlQahtani**, "Delay Aware Resource Allocation for M2M Communications over LTE-A Networks", *Arabian Journal for Science and Engineering*, Volume 44, Issue 4, pp 3639–3653, April 2019. [ISI]
86. **Salman A. AlQahtani**, "Analysis of an Adaptive Priority-Based Resource Sharing Scheme for Multiservice IoT Communications Over LTE-A Networks", *Arabian Journal for Science and Engineering*, Volume 44, Issue 4, pp 3457–3472, April 2019. [ISI]
87. **Salman A. AlQahtani**, "Analysis of a Hybrid Priority Scheme for Multiclass M2M Communications Over LTE-A Networks", *Arabian Journal for Science and Engineering*, Volume 43, Issue 12, pp 6981–6993, December 2018. [ISI]
88. **Salman A. AlQahtani**, "Modeling and Performance Analysis of Unlicensed Bands MAC Strategy in Multi-channel LTE-A Networks with M2M/H2H Coexistence," *Wireless Networks*, Volume 24, Issue 6, pp 1965–1978, August 2018. [ISI].
89. Ahmed M. AlOtaibi and **Salman A. AlQahtani**, "Routing Protocol for Cognitive Radio Ad Hoc Networks" *International Journal of Interdisciplinary Telecommunications and Networking (IJITN)* 9(3), 2017.
90. **Salman A. AlQahtani**, "Performance Analysis of Cognitive-Based Radio Access Strategy in Multi-channel LTE-A Networks with M2M/H2H Coexistence," *IET Communications*, Volume 11, Issue 5, 30 March 2017, p. 655 – 663, 2017. [ISI]
91. **Salman A. AlQahtani**, "Analysis and modelling of power consumption-aware priority-based scheduling for M2M data aggregation over long-term-evolution networks," *IET Communications*, Volume 11, Issue 2, p. 177 – 184, 26 January 2017. [ISI]
92. Aghus Sofwan and **Salman A. AlQahtani**, "Cooperative and Fair MAC Protocols for Cognitive Radio Ad-hoc Networks", *Wireless Network*, Volume 23, Issue 7, pp. 2289–2306, October 2017. [ISI].
93. **Salman A. AlQahtani**, "Delay Aware and Users Categorizing-Based Call Admission Control for Multi-Services LTE-A Networks," *Arabian Journal for Science and Engineering (AJSE)*, Volume 41, Issue 9, pp 3631–3644, September 2016. [ISI]
94. Hasan Ahmad and **Salman A. AlQahtani**, "Performance Evaluation of Joint Admission and Eviction Controls of Secondary Users in Cognitive Radio Networks," *Arabian Journal for Science and Engineering (AJSE)*, Vol. 40, Issue 12, P. 3469-3481, 2015. [ISI].
95. **Salman A. AlQahtani**, "Token Bucket Fair Scheduling Algorithm with Adaptive Rate Allocations for Heterogeneous Wireless Networks," *Wireless Personal Communications*, Vol. 84, Issue 2, P. 801-819, 2015. [ISI].
96. **Salman A. AlQahtani**, "Performance Analysis of Preemption-Based Call Admission Scheme for Macrocell Users in Multi-Operators LTE Pico-Macro Cellular Networks," *Arabian Journal for Science and Engineering (AJSE)*, Vol. 40, Issue 9, P. 2487-2501, 2015. [ISI].
97. Aghus Sofwan, Mourad Barkat, and **Salman A. AlQahtani**, "PN Code Acquisition Using Smart Antennas and Adaptive Thresholding for Spread Spectrum Communications," *Wireless Networks*, Vol. 22, Issue 1, P. 223-234, 2015. [ISI].
98. **Salman A. AlQahtani**, "Analysis of Resource Splitting Scheme with Cognitive Based Admission Control for Femto-WiFi Wireless Networks," *Wireless Networks*, Volume 20, Issue 8, pp 2307-2317, November 2014. [ISI].
99. **Salman A. AlQahtani**, "Analysis of an Adaptive Priority-Based Resource Allocation Control for LTE-Advanced Communications with Type I Relay Nodes," *Wireless Personal Communications, SPRINGERS*, Volume 77, Issue 4, pp 2699-2722, August 2014. [ISI].
100. **Salman A. AlQahtani** and Mohamed Alhassany, "Performance Modeling and Evaluation of Novel Scheduling Algorithm for LTE Networks," *Cyber Journals: Multidisciplinary Journals in Science and Technology, Journal of Selected Areas in Telecommunications (JSAT)*, Vol. 4, No. 1, pages 15-122, 2014.
101. **Salman A. AlQahtani**, "Performance Analysis of a New Packet Reservation Multiple Access with Adaptive Permission Probability," *Arabian Journal for Science and Engineering (AJSE)*, Vol. 39, No. 5, PP. 4023–4035, 2014. [ISI]

102. Mahmoud M. Badawy and **Salman A. AlQahtani**, "Adaptive Terminal-Modality-Based Joint Call Admission Control for Heterogeneous Cellular Networks," *International Journal of Communications, Network and System Sciences (IJCNS)*, Vol. 6, No. 9, Sept. 2013.
103. **Salman A. AlQahtani**, "Radio Resource Management Scheme for Multi-agency TEDS Networks," *Arabian Journal for Science and Engineering (AJSE)*, Vol. 38, No. 9, 2013. [ISI]
104. **Salman Ali AlQahtani**" 'Performance Modeling and Analysis of Distributed-Based Polling Networks ", *International Journal of Computer Science Issues (IJCSI)*, Volume 8, Issue 5, 30th September 2011.
105. **Salman Ali AlQahtani**, Ahed Alshanyour, Ashraf Mahmoud," Performance of Random Contention PRMA: A Protocol for Fixed Wireless Access ", *International Journal of Communications, Network and System Sciences (IJCNS)*. Vol. 4, No. 7, pp. 417-423, July 2011.
106. **Salman Ali AlQahtani**," A Comparison and Performance of Different Optical Switching Architectures ", *International Journal of Communications, Network and System Sciences (IJCNS)*, Vol. 4, No. 8, PP. 514-522, August 2011.
107. **Salman A. AlQahtani**, "Adaptive Rate Scheduling for 3G networks with Shared Resources using the Generalized Process Sharing Performance Model," *Elsevier's Computer Communications Journal*, Volume 31, Issue 1, 15 January 2008, Pages 103-111. [ISI]
108. **Salman A. AlQahtani**, "Performance Analysis of two Throughput-Based Call Admission Control Schemes for 3G WCDMA Wireless Networks Supporting Multi-services," *Elsevier's Computer Communications Journal*, Volume 31, Issue 1, 15 January 2008, Pages 49-57. [ISI]
109. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "A Framework of Call Admission Control Procedures for Integrated Services Mobile Wireless Networks," *Arabian Journal for Science and Engineering (AJSE)*, Vol. 32, No. 1B, pp. 115-139, April 2007. [ISI]
110. **Salman A. AlQahtani**, Ashraf S. Mahmoud and Asrar U. Sheikh, "Adaptive Radio Resource with Borrowing for Multi-Operators 3G+ Wireless Networks with Heterogeneous Traffic," *Elsevier's Computer Communications Journal*, vol. 29, Issue 15, pp. 2945-2951, 5 Sept. 2006. [ISI]
111. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "Dynamic Radio Resource Allocation for 3G and beyond Mobile Wireless Networks," *Elsevier's Computer Communications Journal*, vol. 30, Issue 1, pp. 41-51, 2006. [ISI]
112. **Salman A. AlQahtani**, "A Simulation-Based Comparison of Multimedia Traffic Prioritization Schemes for High-Performance Input-Queued Packet Switches," *Journal of Computer Science*, Vol. 2 (4): 2006
113. **Salman A. AlQahtani**, "A Simulation-Based Comparison of Multimedia Traffic Prioritization Schemes for High-Performance Input-Queued Packet Switches," *Journal of Computer Science*, Vol. 2 (4): 2006.
114. **Salman A. AlQahtani** and Khalid Salah, "Performance Evaluation of Various Techniques for Handling Interrupts in Gigabit Networking Environment," *Journal of Applied Sciences* 6 (6): 1396-1403, 2006.
115. **Salman A. AlQahtani**, "A Dynamic Prioritization Scheme for High-Performance for Input-Queued Packet Switches Network," *International Journal of Computer Science and Network Security*, pp. 58-65, Jan. 2006.
116. **Salman A. AlQahtani**, Ashraf S. Mahmoud and Uthman Baroudi, "Prioritized Radio Resource Allocations for Multi-operators 3G/4G WCDMA with Heterogeneous Traffic," *International Journal of Computer Science and Network Security*, pp. 50-56, Dec. 2005.
117. **Salman A. AlQahtani**, Tarek Helmy, and Khalid Salah, "Performance Evaluation of a QoS-Aware Mechanism for Polling-Based High-Speed Network Interfaces," *Journal of Computer Science*, Vol. 1 (4): pp. 460-469, 2005.

CONFERENCES PUBLICATIONS

1. **Salman A. AlQahtani**, "An Efficient Multi-Servers Priority-Based Scheme for 5G Network Slices" *IEEE 18th Wireless Telecommunications Symposium (WTS 2019)*; 04/2019, New York, USA.
2. **Salman A. AlQahtani**, "QoS-Based Resource Allocation Scheme for Multiclass Services in IoT" *IEEE 168th Wireless Telecommunications Symposium (WTS 2019)*; 04/2019,, New York, USA.

3. **Salman A. AlQahtani**, "Cognitive-Based Resource Allocation Scheme in LTE-A Networks with M2M/H2H Coexistence" IEEE 16th Wireless Telecommunications Symposium (WTS 2017); 03/2017, Chicago, USA.
4. Ahmed M. AlOtaibi and **Salman A. AlQahtani**, "Routing Protocol for Cognitive Radio Ad Hoc Networks" IEEE 16th Wireless Telecommunications Symposium (WTS 2017); 03/2017, Chicago, USA.
5. Aghus Sofwan and **Salman A. AlQahtani**, "Cooperative Fair Multichannel MAC Protocol for Cognitive Radio Ad Hoc Network" The 2nd International Conference on Information Technology, Computer, And Electrical Engineering (ICITACEE 2015), Oct. 2015, Diponegoro University, Semarang, Indonesia.
6. Aghus Sofwan and **Salman A. AlQahtani**, "Cooperative Multichannel MAC Protocol for Cognitive Radio Ad Hoc" IEEE Global Communications Conference (GLOBECOM) 2015; 012/2015, San Diego, USA.
7. Aghus Sofwan and **Salman A. AlQahtani**, "MC-MAC: An Efficient Multichannel MAC Protocol for Cognitive Radio Ad Hoc Networks" IEEE 82nd Vehicular Technology Conference: (VTC) 2015 Fall; 09/2015, Boston, USA.
8. **Salman A. AlQahtani**, and Nasser M. Ahmed, "Call Admission Control for Two-Tier LTE Macro/Pico Cellular Networks," Lecture Notes in Engineering and Computer Science: Proceedings of The World Congress on Engineering and Computer Science 2015, 21-23 October, 2015, San Francisco, USA, pp733-737
9. Mahmoud M. Badawy and **Salman A. AlQahtani**, "Adaptive Joint Call Admission Control for Heterogeneous Mobile Networks," Proceedings of the World Congress on Engineering and Computer Science 2014 Vol II, WCECS 2014, 22-24 October, 2014, San Francisco, USA.
10. **Salman A. AlQahtani**, "Study of an Admission Control with Adaptive Probability in Relay Enhanced LTE-Advanced Networks," 11th IEEE International Conference on Networking, Sensing and Control, Miami, FL, USA, April 2014.
11. **Salman A. AlQahtani** and Hassan Ahmad, "An Admission Control Scheme for Secondary Users in Cognitive Radio Networks," 11th IEEE International Conference on Networking, Sensing and Control, Miami, FL, USA, April 2014.
12. **Salman A. AlQahtani** and Mohammed A. Alhassany, "Performance Modeling and Evaluation of a Novel Scheduling Algorithm for LTE Networks," The 12th IEEE International Symposium on Network Computing and Applications (IEEE NCA 2013), Cambridge –MA, USA, August, 2013.
13. **Salman A. AlQahtani** and Mohammed A. Alhassany, "Comparing Different LTE Scheduling Schemes," The 9th International Wireless Communications and Mobile Computing Conference (IEEE IWCMC 2013)), Sandinia - Italy, July, 2013.
14. **Salman A. AlQahtani** and Mohammed AlOraini "Resolving Wireless Security Limitations Using a New Wi-Fi Secure Access", The 12th IEEE International Conference on Computer and Information Technology (CIT2012) , Chengdu, China, Oct. 27 - Oct. 29, 2012.
15. **Salman A. AlQahtani**, "Adaptive Packet Reservation Multiple Access Protocol for Fixed Wireless Communications", The IEEE 8th International Wireless Communications and Mobile Computing Conference (IWCMC 2012), Limassol, Cyprus, August 27-31, 2012.
16. **Salman A. AlQahtani**, "Radio Resource Sharing in Multi-agency TEDS Networks" *The 17th IEEE Symposium on Computers and Communications (ISCC'12), July 1 - 4, 2012, Cappadocia, Turkey.*
17. **Salman A. AlQahtani**, "Adaptive Resource Allocation Scheme for TETRA Networks with Multi-operators," The Second International Conference on Access Networks (ACCESS 2011), Luxembourg, June 19-24, 2011.
18. Ahmed S. Atteih, **Salman A. AlQahtani**, Ayman Nazmy, "Emergency Management Information System: Case Study", The 5th National GIS Symposium in Saudi Arabia, Al-Khobar City, April 26 – 28, 2010.
19. **Salman A. AlQahtani**, "Packet Scheduling Schemes for Mobile Service Providers with Heterogeneous Traffic," The 2008 International Conference on High Performance Computing, Networking and Communication Systems (HPCNCS-08), Orlando, FL, USA, July 7-10 2008.
20. **Salman A. AlQahtani**, "Resource Allocation Schemes for 3G Mobile Service Providers with Heterogeneous Traffic," 5th IEEE International Conference on Networks ICON2007, Adelaide, South Australia, 19-21 November 2007.
21. **Salman A. AlQahtani**, "A Novel Hybrid Scheme of Interrupt Enabling -Disabling and Polling (EDP) for High-Speed Computer Networks," the 7th International Symposium on Communications and Information Technologies (ISCIT 2007), Sydney, Australia, October 16 - 19, 2007.

22. **Salman A. AlQahtani**, "Performance Evaluation of Handling Interrupts Schemes in Gigabit Networks," IEEE 7th International Conference on Computer and Information Technology (CIT), University of Aizu, Fukushima Japan, October 16 - 19, 2007.
23. **Salman A. AlQahtani**, Ashraf S. Mahmoud and Asrar U. Sheikh, "Performance Analysis of an Adaptive Rate Scheduling for 3G WCDMA Networks with Multi-Operators," The IEEE International Conference on Communications (ICC 2007), 24-28 June, Glasgow, UK, 2007.
24. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "3G WCDMA network sharing: Infrastructural sharing solutions, economical rational and network managements Issues," 2nd International Conference on Modeling Simulation and Applied Optimization, Abu Dhabi, U.E.A, March 2007.
25. **Salman A. AlQahtani**, Ashraf S. Mahmoud and Asrar U. Sheikh, "Simulation Based Study of Adaptive Rate Scheduling for Multi-Operator 3G Mobile Wireless Networks," IEEE 65th Vehicular Technology Conference, 23-25 April, Dublin, Ireland, 2007.
26. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "Performance Evaluation and Analytical Modeling of a Novel Dynamic Call Admission Control Scheme for 3G WCDMA," ACS/IEEE International Conference on Computer Systems and Applications, AICCSA '2007, Amman, Jordan, May 13-16, 2007.
27. Alshanyour, Ashraf Mahmoud, Tarek Sheltami, and **Salman A. AlQahtani**, "Packet Reservation Multiple Access (PRMA) with Random Contention," ACS/IEEE International Conference on Computer Systems and Applications, AICCSA '2007, Amman, Jordan, May 13-16, 2007.
28. **Salman A. AlQahtani**, Ashraf S. Mahmoud and Asrar U. Sheikh "Performance Evaluation of Uplink CAC for 3G WCDMA Networks with Multiservices", 10th IEEE Conference on Communications Systems (ICCS06), 30th Oct.-1 Nov, Singapore, 2006.
29. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "Radio Resource Management with Dynamic Behaviour for 3G and Beyond Wireless Networks with Heterogeneous Traffic," 14th IEEE International Conference on Networks (ICON2006), Sept 13-15, Singapore, 2006.
30. **Salman A. AlQahtani** and Uthman Baroudi, "An Uplink Admission Control for 3G and Beyond Roaming Based Multi-Operator Cellular Wireless Networks with Multi-Services," 4th ACS/IEEE International Conference on Computer Systems and Applications, Dubai/Sharjah, UAE, pp. 725-729, March 8-11, 2006.
31. **Salman A. AlQahtani** and Uthman Baroudi, "An Uplink Performance Evaluation for Roaming-Based Multi-Operator WCDMA Cellular Networks," 4th ACS/IEEE International Conference on Computer Systems and Applications, Dubai/Sharjah, UAE, pp. 376-380, March 8-11, 2006.
32. **Salman A. AlQahtani**, Ashraf S. Mahmoud Tarek R. Sheltami, and Mohamed El-Tarhuni, "Adaptive Radio Resource Management for Multi-Operator WCDMA Based Cellular Wireless Networks with Heterogeneous Traffic," 17th Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'06), Sept 9-13, Helsinki, Finland, 2006.
33. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "Analytical Modeling of Two Call Admission Control Schemes for Multiclass Traffic 3G Mobile Wireless Networks," 15th IST Mobile & Wireless Communications Summit 2006, Myconos, Greece, 4-8 June, 2006.
34. **Salman A. AlQahtani**, Ashraf S. Mahmoud, Uthman Baroudi and Asrar U. Sheikh, "A Study on Network Sharing and Radio Resource Management in 3G and Beyond Mobiles Wireless Networks Supporting Heterogeneous Traffic," 2nd IEEE International Conference On Information & Communication Technologies: From Theory To Applications, Damascus, Syria., April 24 - 28, 2006.
35. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "Uplink Call Admission Schemes for 3G and Beyond Mobiles Wireless Networks Supporting Heterogeneous," 2nd IEEE International Conference on Information & Communication Technologies: From Theory to Applications, Damascus, Syria, April 24 - 28, 2006.
36. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "Radio Resource Management Issues for 3G and Beyond Cellular Wireless Networks," 3rd IEEE Gulf International Conference (IEEE-GCC 2006), Manama, Bahrain, March 19-22, 2006.
37. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "Analytical Modeling of Call Admission Control Schemes for Multiclass Traffic Mobile Wireless Networks," 3rd IEEE Gulf International Conference (IEEE-GCC 2006), Manama, Bahrain, March 19-22, 2006.
38. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "A QoS-Aware Call Admission Control Algorithm for 3G Cellular Wireless Networks," 3rd IEEE Gulf International Conference (IEEE-GCC 2006), Manama, Bahrain, March 19-22, 2006.

39. **Salman A. AlQahtani** and Ashraf S. Mahmoud, "Uplink Admission Control in WCDMA," International symposium on wireless communications (ISWSN'05), pp. 18- 23, KFUPM, Sept. 2005.
40. **Salman A. AlQahtani** and Ashraf S. Mahmoud, " A Prioritized Uplink Call Admission Control Algorithm for 3G WCDMA Cellular Systems with Multi-Services," Proceedings of 6th IEE International Conference on 3G & Beyond (3G 2005), London, UK, pp. 173-178, 5-7 Nov. 2005.
41. **Salman A. AlQahtani**, "Information Security according to the new Technological and informational Development in Mobile Wireless Networks," Proceeding of the First International Conference on security issues for e-operations, Dubai, U.A.E. 26-28 April 2003.

THESIS SUPERVISION

No.	Degree	Total
1	PhD	10
2	Master	20
3	Projects	150

TECHNICAL PRESENTATIONS AND KEY NOTE SPEECH

- Presented all 1st author papers in their corresponding conferences and workshops.
- Was invited to give several technical presentations and workshops in Digital transformation, next generation networks, Industrial revolutions and Digital forensics, including:
 - **Rethinking Cyber Sovereignty and Cyber Security in the 5G Era**, NIC, Riyadh, Jan. 2020
 - **Digital Forensics: Technologies and Challenges**, MIO, Qatar, 2009
 - **Future Mobile Networks: Technologies and Opportunities**, CVC4IT, Jeddah, 2010
 - **3G & Beyond Infrastructure Sharing: Challenges & Opportunities and Risks for STC**, STC, 2009
 - **Wireless Evolution Roadmap Towards 4G**, Riyadh, 2013
 - **Cognitive Radio and Dynamic Spectrum Access**, Saudi Council of Engineers, Riyadh, 2017
 - **Internet of Everything (IoE): A Technology Vison**, Saudi Council of Engineers, Riyadh, 2017
 - **Paving The Way To Smart Sustainable and Safe Country**, Riyadh, NIC, MOI, 2017
 - **Digital Transformation and Internet of Everything**, Saudi Council of Engineers, Riyadh, 2017
 - **5G Networks: 5G Vision, Requirements, Key Technologies and Opportunities**, Saudi Council of Engineers, Riyadh, 2017
 - **Industry 4.0 and Internet of Everything**, Saudi Council of Engineers, Riyadh, 2017
 - **Paving the Way Toward a Better Understanding of 5G, IoT and IR 4.0- A Technology Vision**; Saudi International Exhibition for IoT, Riyadh, 2018
 - **How 5G, IoT and IR4.0 will Transform The World By 2025?**, Saudi Council of Engineers ,Riyadh, 2018
 - **IR4.0 and IoT: The Basics You Need to Know**, Saudi Council of Engineers, Abha, Oct. 2018.
 - **National Cyber Sovereignty in the Age of Digital Transformation**, Saudi Council of Engineers , Riyadh, Dec. 4, 2018.
 - **What must everyone know about: 5G, IoT, IIoT and Industry 4.0**, Saudi Council of Engineers, Jeddah, Dec. 7, 2018.

PROFESSIONAL ACTIVITIES

King Saud University, Riyadh, Saudi Arabia

- Member of King Saud University Council
- Chair of College of Computer and Information Sciences Scientific Council
- Member of Computer Engineering Scientific Council
- Member of Scholarship Committee at College of Computer Sciences & Information
- Member of Master Degree Curriculum committee at Computer Engineering Dept.
- Chairman of Curriculum committee at College of Computer Sciences & Information
- Chairman of Students Rights committee at College of Computer Sciences & Information
- Chairman of Examination committee at College of Computer Sciences & Information
- Member of Almuzahmia colleges' council.

King Fahd Security College (KFSC), Ministry of Interior (MOI), Riyadh, Saudi Arabia

- Committee Secretary – "Ministerial development plan committee for KFSC" 1998-2000
- IT and data processing committee Leader – "KFSC admission committee" 1998-2010
- Director of admission program and led the admission's data processing and monitoring committee
- Member of Curriculum committee 2007-2011
- Member of the ethical Technology content legalization Committee, MOI 2011

HONORS & AWARDS

- Best PhD student Award for academic achievements, KFUPM 2003-2007
- Highest Honors list, KFUPM 1992 – 1997
- Several certificates of appreciation from King Fahd Security College (KFSC) for distinct efforts and active contribution in the work's filed 1998-2007
- Certificates of appreciation from Assistant of Minister of Interior, His Highness Prince Mohamed bin Naïf, for distinct efforts and academic achievement. 2007
- Certificates of appreciation from college of computer and information sciences for distinct efforts and academic achievement. 2016

LANGUAGES AND PERSONAL INFORMATION'S

- Arabic – native language
- English – speak fluently and read/write with high proficiency
- France – beginner.