Dr. Amjad Ali

AddressPhone:
E-mail: Citations (Google Scholar):
Cumulative Impact Factor:
Professional Member ACM No.:
HEC Approved Supervisor From:

COURSES TAUGHT:

- Advanced Topics in Wireless Networks
- Special Topics in Computer Networks
- Advanced Topics in Computer Architecture
- Mobile Computing
- Networks Design and Analysis
- Data Structure and Algorithms
- Microprocessor and Computer Architecture
- Digital Logic Design

- Data Security and Encryption
- Information Security and Assurance
- Network Security
- Information Security
- Research Methodology in IT
- Operating Systems Concepts
- Communication and Embedded System

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EDUCATION:

Hamad Bin Khalifa University, Doha, Qatar

Post-Doctoral Fellow at the College of Science & Engineering, Doha, Qatar
May. 2022 - Present

Korea University, Anam-dong, Seongbuk-gu, Seoul, South Korea

Research Professor at Mobile Network and Communications Lab
in the School of Electrical Engineering, Korea University, Anam-dong, Seoul, South Korea
Sept. 2018 - March 2019

Inha University, Incheon, South Korea

Post-Doctoral Fellow at UWB Wireless Communications Research Center
in the Department of Information and Communication Engineering
Feb. 2018 - August 2018

Kyung Hee University, Suwon, South Korea

Ph.D. in Electronics and Radio Engineering, June. 2015
March 2012 - June 2015 (CGPA: 3.842/4.3)

COMSATS Institute of Information Technology, Lahore, Pakistan

M.S. in Computer Science, June 2008
Sept. 2006 - Sept. 2008 (CGPA: 3.80/4.0)

COMSATS Institute of Information Technology, Lahore, Pakistan

B.S. in Computer Science, Sept. 2006
March 2002 - Sept. 2006 (CGPA: 3.13/4.0)

EXPERIENCE:

Post-Doctoral Fellow, College of Science & Engineering, Hamad Bin Khalifa University, Doha, Qatar, **May 2022-to-date**

Division of Computer Science and Engineering

Assistant Professor, COMSATS University Islamabad, Lahore Campus, Pakistan, **July 2015 - May 2022**

Division of Computer Science

Research Professor, Mobile Network and Communications Lab at the School of Electrical Engineering Korea University, Anam-dong, Seongbuk-gu, Seoul, South Korea, **Sept. 2018 - March 2019**

Division of Electrical Engineering

Post-Doctoral Fellow, UWB Wireless Communications Research Center at Department of Information and Communication Engineering, Inha University, Incheon, South Korea, **Feb. 2018 - Aug. 2018**

Division of Information and Communication Engineering

Lecturer, University of Gujrat, Pakistan, **Nov. 2010 - June 2015**

Division of Information Technology & Computer Science

Research Assistant, Cognet lab, SEECS, NUST, Islamabad, Pakistan, **May 2009 - May 2010**

Division of Information Technology
Responsibilities: teacher assistant and conducting research in the area of cognitive radio networks and vehicular networks

Software Engineer, Rolustech, Lahore, Pakistan, **Sept. 2008 - April 2009**

Responsibilities: SugerCRM optimization, Web development.

System Software Engineer, 4M Wireless, Lahore, Pakistan, **June 2007 - Oct. 2007**

Responsibilities: System Programming in Real Time Kernel for portability of LTE-based mobile Software.

RESEARCH INTEREST:

- Cognitive Radio Networks (Multimedia transmissions, interference modeling, dynamic spectrum access, power and admission control, spectrum management, spectrum trading, cognitive MAC protocols, performance modeling, and optimization)
- Metaverse
- 6G and Beyond Cellular Communication Networks
- Internet of Things
- Blockchain
- Haptic Communications & Tactile Internet
- Wireless Ad-Hoc & Sensor Networks
- Device-to-device, Machine learning, Deep Learning, and its applications
- Smart Cities & Cloud Computing
- Image/video Processing
- Cyber Security/Network & Information Security

FUNDED PROJECTS (PARTICIPATED AS CO-PI AND ADVISOR):

- ATSC3.0: Intelligent Content Distribution/Device platform Research Center funded by Institute for Information & Communications Technology Planning & Evaluation under ICT R&D, South Korea under the registration no. IITP-2020-2021-1-00729, project budget, Rs/- 50,00000.
- Intelligent Blockchain-Enabled Activity Recognition for Smart IoT Healthcare System funded by Ministry of Education, Jouf University, Kingdom of Saudi Arabia, under the registration no. 40/359, project budget, Rs/- 42,71,502.
- Level set-based Active Contours for Human Body Segmentation with Application on Activity Recognition funded by Jouf University, Sakaka, Aljouf, Kingdom of Saudi Arabia, registration no. 40/341, project budget, Rs/- 14,44,800.
- Efficient Resource Allocation Framework for Cloud-enabled Multimedia Vehicular Networks funded by Jouf University, Sakaka, Aljouf, Kingdom of Saudi Arabia, under the registration no. 40/359, project budget, Rs/- 10,24,800.

RESEARCH PROJECTS (PARTICIPATED AS RESEARCH ASSISTANT):

- Frequency Domain Equalization and Interference Cancellation for Time Variant Component in Time Varying Channels, Funded by Qualcomm.
- CLO technology study for improving mobile video QoS, Funded by Korea Electronics and Telecommunications Research Institute (ETRI).
- Improvement of multimedia service through CLO, Funded by Samsung Electronics Co., Ltd.
- IITP-ezbaro: Spectrum and radio technology for smart frequency usage Funded by MSIT (Ministry of Science, ICT) under the ITRC (Information Technology Research Center) support program (IITP-2018-2014-1-00729) South Korea.

SCHOLARSHIPS AND HONORS:

Excellent Research Award 2019

By Korea University, Seoul, South Korea.

Excellent Research Award 2018

By Inha University, Incheon, South Korea.

Post-Doctoral Fellowship

Fully Funded Post-Doctoral Fellowship, by Qatar Foundation at HBKU, Doha Qatar

Post-Doctoral Fellowship

Fully Funded Post-Doctoral Fellowship, by Korea University, Seoul, South Korea

Post-Doctoral Fellowship

Fully Funded Post-Doctoral Fellowship, by Inha University, Incheon, South Korea

Doctoral Study Abroad Scholarship

Fully Funded President Scholarship for PhD Study, by Kyung Hee University, South Korea

University Merit Scholarship

Merit Scholarship Award for M.S. Study from COMSATS, Lahore, Pakistan

University Merit Scholarship

Fully Funded Ministry of Science and Technology, Pakistan Scholarship Award for B.S. Study from COMSATS, Lahore, Pakistan.

Extra and Co-curricular Activities

Won many Awards in Different Events of Athletic, Marathon, Hiking and Cricket
at University and College level

PUBLICATIONS:

Ph.D. Thesis: Efficient Multimedia Transmissions Over Cellular Cognitive Radio Networks and MAC Layer Protocol for Enabling Future Technology, Kyung Hee University, South Korea, 2015.

JOURNAL PAPERS:

1. A. Mateen, M. Wasim, A. Ahad, T. Ashfaq, M. Iqbal, A. Ali,"Smart Energy Management System for Minimizing Electricity Cost and Peak to Average Ratio in Residential Areas with Hybrid Genetic Flower Pollination Algorithm," Alexandria Engineering Journal,IF: 6.626, June 2023.

2. A. Tehseen, T. Ehsan, H.B. Liaqat, X. Kong, A. Ali and A. Al-Fuqaha,"Shahmukhi Named Entity Recognition by using Contextualized Word Embeddings," Expert Systems With Applications, IF: 8.665, May 2023.

3. A. Tehseen, T. Ehsan, H.B. Liaqat, A. Ali and A. Al-Fuqaha,"Neural POS Tagging of Shahmukhi by using Contextualized Word Representations," Journal of King Saud University-Computer and Information Sciences, IF: 8.839, 2022.

4. L. Sanaa, M. M. Nazira, M. Iqbal, L. Hussain, and A. Ali,"Anomaly Detection for Cyber Internet of Things Attacks: A Systematic Review," Applied Artificial Intelligence, IF: 2.77, vol. 36, no. 1, pp. 32-63, 2022.

5. N. Akhter, M. Ali, L. Hussain, M. Shah, T. Mahmood, A. Ali, and A. Al-Fuqaha,"Diverse Pose Lip-Reading Framework," Applied Sciences, IF: 2.838, vol.12, no. 19, pp. 1-13, 2022.

6. S. A. Qureshi, L. Hussain, Q.U.A. Chaudhary, S. R. Abbas, R. J. Khan, A. Ali, and A. Al-Fuqaha, "Kalman Filtering and Bipartite Matching Based Super-Chained Tracker Model for Online Multi Object Tracking in Video Sequences," Applied Sciences, IF: 2.838, vol. 12, no. 19, pp. 1-19, 2022.

7. A. Alsirhani, M.A. Khan, A. Alomari, S. Maryam, A. Younas, M. Iqbal, M.H. Siqqidi, and A. Ali,"Securing Low-Power Blockchain-Enabled IoT Devices Against Energy Depletion Attack," ACM Transactions on Internet Technology, IF: 3.989, https://doi.org/10.1145/3511903, January 2022.

8. U. Draz, A. Ali, M. Bilal, T. Ali, M.A. Iftikhar, A. Jolfaei, and D.Y. Suh, "Energy Efficient Proac-tive Routing Scheme for Enabling Reliable Communication in Underwater Internet of Things," IEEE Transactions on Network Science and Engineering, IF: 5.033, vol. 8, no. 4, pp. 2934-2945, 2021.

9. M.H. Siddiqi, U. Draz, A. Ali, M. Iqbal, M. Alruwaili, Y. Alhwaiti, and S. Alanazi,"FANET: Gets Smart City Mobility Off to a Flying Start with Self-Organized Drone-based Networks," IET Communications, IF: 1.345, https://doi.org/10.1049/cmu2.12291, Oct. 2021.

10. U. Draz, S. Yasin, T. Ali, A. Ali, Z.B. Faheem, N. Zhang, M.H. Jamal, D.Y. Suh, "ROBINA: Rota-tional Orbit Based Inter-Node Adjustment for Acoustic Routing Path in Internet of Underwater Things (IoUTs)," MDPI Sensors, vol. 21, no. 17, pp. 59-68, IF: 3.847, 2021.

11. U. Draz, T. Ali, S. Yasin, A. Hussain, S. Bukhari, A. Nawaz, A. Ali, M.A. Khan, and L.T. Jung,"A Novel Layer by Layer Energy Efficient Watchman Algorithm for Wireless Sensors and Actor Networks, "Romanian Journal of Information Science and Technology, vol. 24, no. 3, pp. 284-298, IF: 0.852, 2021.

12. T. Ali, U. Draz, S. Yasin, S. Bukhari, M.S. Khan, M. Hamdi, S. Rahman, L.T. Jung, A. Ali, "An Optimal Scheme for UWSAN of Hotspots Issue Based on Energy-Efficient Novel Watchman Nodes," Wireless Personal Communications, vol. 121, no. 01, pp. 69-94, IF: 2.017, May 2021.

13. M.H. Siddiqi, N. Almashfi, A. Ali, M. Alruwaili, Y. Alhwaiti, S. Alanazi,M.M. Kamruzzaman, "A Unified Approach for Patient Activity Recognition in Healthcare using Depth Camera," IEEE Access, vol. 9, pp. 92300-92317, IF: 3.476, June 2021.

14. U. Draz, S. Yasin, M. Irfan, T. Ali, A. Ali, A. Glowacz, F. Brumercik, W. Glowacz, "TANVEER: Tri-Angular Nearest Vector-based Energy Efficient Routing for IoT-Enabled Acoustic Sensor and Actor Networks (I-ASANs)," MDPI Sensors, vol. 21, no. 11, pp.35-78, IF: 3.847, May 2021.

15. L. Hussain, P. Huang, T. Nguyen, K.J. Lone, A. Ali, M.S. Khan, H. Li, T.Q. Duong, and D. Y. Suh, "Machine learning classification of texture features of MRI breast tumor and peri-tumor of combined pre- and early treatment predicts pathologic complete response," BioMedical Engineering Online, IF: 3.903, June 2021.

16. M.H Siddiqi, K. Asghar, U. Draz, A. Ali, M. Alruwaili, Y. Alhwaiti, S. Alanazi, M.M. Kamruzza-man,"Image splicing-based forgery detection using discrete wavelet transform and edge weighted local binary patterns," Security and Communication Networks, pp. 1-10, IF:1.968, 2021.

17. U. Draz, T. Ali, N.A. Zafar, A.S. Alwadie, M. Irfan, S. Yasin, A. Ali, and M.A.K. Khattak, "Energy Efficient Watchman Based Flooding Algorithm for IoT-Enabled Underwater Wireless Sensor and Actor Networks" ETRI Journal, pp. 1-13, IF: 1.622, DOI: 10.4218/etrij.2019-0591, April 2021.

18. F. Ali, A. Ali, M. Imran, R.A. Naqvi, M.H. Siddiqi and K.S. Kwak,"Traffic Accident Detection and Condition Analysis Based On Social Networking Data,"Accident Analysis and Prevention, vol. 151, IF: 6.376, March 2021.

19. L. Feng, A. Ali, M.Iqbal, F. Ali, I.Raza, M. H. Siddiqi, M. Shafiq, and S.A. Hussain, "Dynamic Wireless Information and Power Transfer Scheme for Nano-Empowered Vehicular Networks," IEEE Transactions on Intelligent Transportation Systems, vol. 22, no. 7, IF: 9.551, July 2021.

20. A. Ali, L. Feng, A. K. Bashir, S. El-Sappagh, S. H. Ahmed, M. Iqbal, and G. Raja,"Quality of Service Provisioning for Heterogeneous Services in Cognitive Radio-enabled Internet of Things,"IEEE Transactions on Network Science and Engineering, vol. 7, no. 1, pp. 328-342, IF: 5.213 January 2020.

21. F. Ali, S.E. El-Sappagh, S.M. Islam, A. Ali, M. Attique, M. Imran, K. S. Kwak, "An Intelligent Healthcare Monitoring Framework Using Wearable Sensors and Social Networking Data,"Future Generation Computer Systems, vol. 114, pp. 23-43, IF: 7.187, 2020.

22. W. Ejaz, M. Naeem, S. Sharma, A. M. Khattak, M.R. Ramzan, A. Ali, and A. Anpalagan,"IoV-based Deployment and Scheduling of Charging Infrastructure in Intelligent Transportation Systems," IEEE Sensors Journal, IF: 3.301, Accepted July 2020.

23. G. Ali, A. Ali, F. Ali, U. Draz, F. Majeed, S. Yasin, T. Ali, N. Haider, "Artificial Neural Network-based Ensemble Approach for Multicultural Facial Expressions Analysis," IEEE Access, vol. 8, pp. 134950-134963, IF: 3.367, August 2020.

24. F. Ali, S. E. Sappagh, S. M. Riazul Islam, D. Kwak, A. Ali, M. Imran, K.S. Kwak, "A Smart Healthcare Monitoring System for Heart Disease Prediction Based On Ensemble Deep Learning and Feature Fusion," Informtion Fusion, vol. 63, pp. 208-222, IF: 12.975, Nov. 2020.

25. A. Ali, S. Tariq, L. Feng, M. Iqbal, I. Raza, M. H. Saddiqi, and A.K. Bashir, "Adaptive Bitrate Video Transmission over Cognitive Radio Networks Using Cross Layer Routing Approach," IEEE Transactions on Cognitive Communications and Networking, vol. 6, no. 3, pp. 935-945, IF: 4.341, 28 April 2020.

26. M. H. Siddiqi, A. Al-Dulaimi, A. Ali, S. F. Haider, F. Ali, and M. Iqbal, "Dynamic Priority-Based Efficient Resource Allocation and Computing Framework for Vehicular Multimedia Cloud Computing," IEEE Access, vol. 8, pp. 81080-81089 IF: 3.367, 28 April 2020.

27. U. Sikandar, M. Talha, S. Sarwar, M. Safyan, Z.U. Qayyum, A. Ali, and M. Iqbal,"A Context-aware and Intelligent Framework for the Secure Mission Critical Systems,", Transactions on Emerging Telecommunications Technologies, pp. 39-54, DOI:10.1002/ett.3954, IF 2.638, April 2020.

28. A. Ahmed, F. Zeshan, R. Marriam, A. Ali, A. Samreen,"Impact of Gamification on Learning Outcome of Computer Science Majors,", ACM Transactions on Computing Education, vol. 20, no. 2, pp.1-25, IF: 1.526, April 2020.

29. L. Hussain, I.A. Awan, W. Aziz, S. Saeed, A. Ali, F. Zeshan, and K.S. Kwak,"Detecting Congestive Heart Failure by extracting Multimodal Features and employing Machine Learning Techniques,"BioMed Research International, Vol. 2020, pp. 1-19, IF: 3.411, Feb. 2020.

30. A. Ali, M. E. Ahmed, F. Ali, N. H. Tran, D. Niyato, and S. Pack, "NOn-parametric Bayesian channEls cLustering (NOBEL) Scheme for Wireless Multimedia Cognitive Radio Networks,"IEEE Journal on Selected Areas in Communications, vol. 37, no. 10, pp. 2293-2305, IF: 11.420, Oct. 2019.

31. M. Alruwaili, M. H. Siddiqi, and A. Ali, "Human Body Segmentation using Level set-based Active Contours with Application on Activity Recognition,"IEEE Access, vol. 7, pp. 157841-157858, IF:3.745, Oct. 2019.

32. M. H. Siddiqi, M. Alruwaili, and A. Ali, "A Novel Feature Selection Method for Video-Based Human Activity Recognition Systems,"IEEE Access, vol. 7, no. 1, pp. 119593-119602, IF:3.745, Dec. 2019.

33. F. Majeed, M. Shafiq, A. Ali, M. A. Hassan, S.A. Abbas, M. E. Alzahrani, M.Q. Saleem, H.B. Liaqat, A. Garezi, A. Irshad, "Self-citation Analysis on Google Scholar Dataset for H-Index Corrections,"IEEE Access, vol. 7, no. 1, pp. 126025-126036, IF:3.745, Dec. 2019.

34. M. H. Siddiqi, M. Alruwaili, A. Ali, S. Alanazi, and F. Zeshan, "Human Activity Recognition using Gaussian Mixture Hidden Conditional Random Fields,"Computational Intelligence and Neuroscience, vol. 2019, pp. 1-14, IF: 2.284, Aug. 2019.

35. H. B. Liaqat, A. Ali, J. Qadir, A. K. Bahir, M. Bilal, and F. Majeed, "Socially-Aware Congestion Control in Ad-Hoc Networks: Current Status and The Way Forward," Future Generation Computer Systems, vol. 97, pp. 634–660, IF: 6.125, August 2019.

36. F. Ali, D. Kwak, P. Khan, S. El-Sappagh, A. Ali, S. Ullah, K. H. Kim, K-S. Kwak, "Transportation Sentiment Analysis Using Word Embedding and Ontology-based Topic Modeling," Knowledge-Based Systems, vol. 174, pp. 27–42, IF: 5.912, June 2019.

37. L. Feng, A. Ali, M. Iqbal, A. K. Bashir, S. A. Hussain, and S. Pack, "Optimal Haptic Communications over Nanonetworks for E-Health Systems," IEEE Transactions on Industrial Informatics, vol. 15, no. 5, pp. 3016–3027, IF: 9.112, May 2019.

38. M. Shafiq, P. Singh, I. Ashraf, M. Ahmad, A. Ali, A. Irshad, M. K. Afzal, and J-G. Choi, "Ranked Sense Multiple Access Control Protocol for Multichannel Cognitive Radio-Based IoT Networks," MDPI Sensors, vol. 19, no. 7, pp. 1–22, IF: 3.275, April 2019.

39. A. Ali, L. Abbas, M. Shafiq, A.K. Bashir, M.K. Afzal, H.B. Liaqat, M.H. Siddiqi, and K. S. Kwak, "Hybrid Fuzzy Logic Scheme for Efficient Channel Utilization in Cognitive Radio Networks," IEEE Access, vol. 7, pp. 24463–24476, IF: 3.745, Feb. 2019.

40. L. Feng, A. Ali, H. B. Liaqat, M. A. Iftikhar, A.K. Bashir, and S. Pack, "Stochastic Game-based Dynamic Information Delivery System for Wireless Cooperative Networks," Future Generation Computer Systems, vol. 95, pp. 277–291, IF: 6.125, June 2019.

41. M. Shafiq, M. Ahmad, M. K. Afzal, A. Ali, A. Irshad, and Jin-Ghoo Choi, "Handshake Sense Multiple Access Control for Cognitive Radio-Based IoT Networks," MDPI Sensors, vol. 19, no. 2, pp. 1-21, IF: 3.275, January 2019.

42. F. Zeshan, R. Mohamad, M.N. Ahmad, M.B. Othman, A.A.M. Elhag, S.A. Hussain, A. Ahmad, A. Ali, M. Ashraf, I. babar, "Context-Aware Ontology And Web Services Discovery For Distributed Embedded Real-Time Systems, "Malaysian journal of Computer Science, IF: 0.723, vol. 32, no. 3, pp. 186-208, 2019.

43. L. Hussain, A. Ali, S. Rathore, S. Saeed, A. Idris, M. U. Usman, M. A. Iftikhar, D. Y. Suh, "Applying Bayesian Network Approach to Determine the Association Between Morphological Features Extracted from Prostate Cancer Images," IEEE Access, vol. 07, pp. 1586–1601, IF: 4.098, Dec. 2018.

44. S. El-Sappagh, F. Ali, S. El-Masri, K. Kim, A. Ali, and K. S. Kwak, "Mobile Health Technologies for Diabetes Mellitus: Current State and Future Challenges," IEEE Access, vol. 7, pp. 21917-21947, IF: 4.098, Nov. 2018.

45. A. Ali, H. Liu, A. K. Bashir, S. El-Sappagh, F. Ali, A. Baig, D. Park, and K. S. Kwak, "Priority-Based Cloud Computing Architecture for Multimedia-Enabled Heterogeneous Vehicular Users," Journal of Advanced Transportation, vol. 2018, pp. 1–12, IF: 1.983, Sept. 2018.

46. S. El-Sappagh, F. Ali, A. Ali, A. Hendawi, F. A. Badria, and D. Y. Suh, "Clinical Decision Support System for Liver Fibrosis Prediction in Hepatitis Patients: A Case Comparison of Two Soft Computing Techniques," IEEE Access, vol. 6, pp. 52911–52929, IF: 4.098, Sept. 2018.

47. A. Ali, K. S. Kwak, N. H. Tran, Z. Han, D. Niyato, F. Zeshan, M. T. Gul, and D. Y. Suh, "RaptorQ-Based Efficient Multimedia Transmission Over Cooperative Cellular Cognitive Radio Networks," IEEE Transactions on Vehicular Technology, vol. 67 , no. 8, pp. 7275–7289, IF: 5.339, Aug. 2018.

48. S. El-Sappagh, J. M. Alonso, F. Ali, A. Ali, J-H. Jang, and K.S. Kwak, "An Ontology-Based Interpretable Fuzzy Decision Support System for Diabetes Diagnosis," IEEE Access, vol. 6, pp. 37371–37394, IF: 4.098, July 2018.

49. A. Ali, I. Yaqoob, E. Ahmed, M. Imran, K. S. Kwak, A. Ahmad, S. A. Hussain, and Z. Ali, "Channel Clustering and QoS Levels Identification Scheme for Multi-Channel Cognitive Radio Networks," IEEE Communications Magazine, vol. 56, no. 4, pp. 164–171, IF: 10.356, April 2018.

50. R. kumar, R. Gunasekaran, A.K. Bashir, C. Junaid, A. Ali, "A Console GRID Leveraged Authentication and Key Agreement Mechanism for LTE/SAE," IEEE Transactions on Industrial Informatics, vol. 14 , no. 6, pp. 2677–2689, IF: 7.377, March 2018.

51. S. A. Hussain, M. Iqbal, A. Saeed, I. Raza, H. Raza, A. Ali, A. K. Bashir, and A. Baig, "An Efficient Channel Access Scheme for Vehicular Ad hoc Networks, "Mobile Information Systems, vol. 2017, pp. 1–10, IF: 1.635, June 2017.

52. M. T. Gul, A. Ali, D. K. Singh, U. Imtinan, I. Raza, S. A. Hussain, D. Y. Suh, J. Lee, "Merge-and-forward: a cooperative multimedia transmissions protocol using RaptorQ codes,"IET Communications, vol. 10, no. 15, pp: 1884 –1895, IF: 1.779, Oct. 2016.

53. S. F. Haider, L. Abbas, A. Ali, M. Iqbal, I. Raza, S. A. Hussain, and D. Y. Suh, "Taxonomy and issues for antifragile-based multimedia cloud computing,"Journal of Reliable Intelligent Environments, Springer, vol. 2, no. 1, pp: 1–13, SCOPUS, Feb. 2016.

54. A. R. Khan, M. Iqbal , J. Muzaffar, A. Nisar, A. Ali, I. Raza, S. A. Hussain, "Optimized congestion aware and rate-adaptive multimedia communication for application in fragile environment during disaster management and recovery,"Journal of Reliable Intelligent Environments, Springer, vol. 1, no. 2, pp: 147–158, SCOPUS, Dec. 2015.

55. U. Ahmed, I. Raza, S. A. Hussain, A. Ali, M. Iqbal, X. Wang, "Modelling cyber security for software-defined networks those grow strong when exposed to threats,"Journal of Reliable Intelligent Environments, Springer, vol. 1, no. 2, pp: 123–146, SCOPUS, Nov. 2015.

56. M. J. Piran, M. E. Ahmed, A. Ali, D. Y. Suh, and J. B. Song, "Channel Allocation Based on Content Characteristics for Video Transmission in Time-Domain-Based Multichannel Cognitive Radio Networks, Mobile Information Systems, vol. 2015, pp. 1–7, IF: 1.635, Aug. 2015.

57. A. Ali, M. J. Piran, H. Kim, J. Yun, and D. Y. Suh, "PAD-MAC: Primary User Activity-Aware Distributed MAC for Multi-Channel Cognitive Radio Networks,"Sensors, vol. 15, no. 4, pp. 7658–7690, IF: 3.031, March 2015.

58. M. J. Piran, A. Ali, and D. Y. Suh, "Fuzzy-Based Sensor Fusion for Cognitive Radio-Based Vehicular Ad Hoc and Sensor Networks,"Mathematical Problems in Engineering, vol. 2015, pp. 1–9, IF: 1.179, Feb. 2015.

59. A. Ali, M. E. Ahmed, M. J. Piran, and D. Y. Suh, "Resource Optimization Scheme for Multimedia-Enabled Wireless Mesh Networks,"MDPI Sensors, vol. 14, no. 8, pp. 14500–14525, IF: 3.031, Aug. 2014.

60. M. J. Piran, Y. Cho, J. Yun, A. Ali, and D. Y. Suh, "Cognitive Radio-Based Vehicular Ad Hoc and Sensor Networks,"International Journal of Distributed Sensor Networks, vol. 2014, pp. 1–11, IF: 1.614, Aug. 2014.

61. A. Ali, M. Iqbal, A. Baig, and X. Wang, "Routing Techniques in Cognitive Radio Networks: A Survey,"International Journal of Wireless & Mobile Networks (IJWMN), vol. 3, no. 3, pp. 96–110, 2011.

Papers Under Review:

62. "Hybrid Enhanced Optimization-Based Intelligent Task Scheduling for Sustainable Edge Computing," IEEE Transactions on Consumer Electronics, **Major Revisions Submitted**, 2023.

63. "Robust Risk-Sensitive Task Offloading for Edge-Enabled Industrial Internet of Things, "IEEE Transactions on Consumer Electronics, **Major Revisions Submitted**, 2023.

64. "Computer Aided Diagnosis Model Based on Optimized Deep LSTM Ensemble Model and the Fusion of Multimodal Time Series Data, "Scientific Reports Nature, **Major Revisions Submitted**, 2023.

65. "A Survey on 6G Metaverse for Healthcare: Vision, Taxonomy, Enabling Technologies, Frameworks, and Research Challenges, "IEEE Communications Surveys & Tutorials, **Under Review**, 2023.

66. "Deep Neuro-Fuzzy Class Balancing for Enhanced Image Segmentation Using Convolutional Neural Networks, "IEEE Transactions on Fuzzy Systems, **Under Review**, 2023.

67. "Computational Efficiency Maximization for UAV-assisted MEC Networks with Energy Harvesting in Disaster Scenarios, "IEEE Internet of Things Journal, **Under Review**, 2023.

68. "Scalable and Resilient Routing for In-Band SDNs Using a Distributed Hash Table-Based Approach, "Mobile Networks and Applications, **Under Review**, 2023.

69. "Next-Generation Data Aggregation for Hierarchical Internet of Nano Things, "IEEE Internet of Things Magazine, **Under Review**, 2023.

70. "Enhancing User Verification and Data Security in Large-Scale Multi-Agent Systems Using Self Sovereign Identification Scheme in Fog Computing, "IEEE Systems Journal, **Under Review**, 2023.

71. "Statistical Transliteration from Roman to the Arabic Script of a Cursive Language, "Arabian Journal for Science and Engineering, **Under Review**, 2023.

CONFERENCE PAPERS:

72. Z. Saleem, U. Firdous, M.K. Afzal, A. Ali, A. Al-Fuqaha, S. Al-Rubaye, M. Iqbal, "Blockchain-Based Privacy Preservation Using Steganography in Drone-Enabled VANETs," IEEE GLOBECOM, **Accepted**, 2023.

73. U. Draz, A. Ali, S. Yasin, M. Khattak, and A. Nawaz, "Traffic Agents-Based Analysis of Hotspot Effect in IoT-Enabled Wireless Sensor Network," In Proc. of 18th IEEE International Bhurban Conference on Applied Sciences & Technology (IBCAST), Islamabad, Pakistan, Jan. 2021.

74. M. Ahmad, A. M. Khan, M. Mazzara, S. Distefano, A. Ali, and A. Tufail, "Extended Sammon Projection and Wavelet Kernel Extreme Learning Machine for Gait-based Legitimate User Identification," In Proc. of 34th ACM/SIGAPP Symposium On Applied Computing (SAC'19), Limassol, Cyprus, 8-12 April 2019.

75. A. Ali, M. Sakhare, F. Ali, K. S. Kwak, "Efficient Cooperative Caching Scheme for Mobile Multimedia Content Centric Networks," In Proc. of the Korean Institute of Communication Sciences Conference, Jeju, South Korea, June 2018, pp. 1309-1310.

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PROFESSIONAL SERVICES:

- Member Technical Program committee: **ICCC 2023 IoT Symposium**
- Member Technical Program committee: **CCNC 2022 IoT: From Sensors to Vertical Applications**
- Member Technical Program committee: **CCNC 2021 IoT Enabling Technologies**
- Member Technical Program committee: **IWCMC 2020 Smart City**
- Member Technical Program committee: **IWCMC 2020 IoT Symposium**
- Member Technical Program committee: **IWCMC Vehicular Comm 2020**
- Member Technical Program committee: **VTC2020-Fall**
- Member Technical Program committee: **VTC2020-Spring**
- Member Technical Program committee: **CCNC 2019**
- Member Technical Program committee: **IWCMC-AI-IoT 2019**

- Member Technical Program committee: **ICGHIT2019**

- Member Technical Program committee: **VTC2019-Spring**

- Member Technical Program committee: **IWCMC 2019 IoT Symposium 2019**

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- Member Technical Program committee: **IWCMC 2017 M2M&IoT Symposium 2017**

- Member Technical Program committee: **FIT 2017**

- Member Technical Program committee: **ICEET 2017**

- Member Technical Program committee: **FIT 2016**

- **Journal reviewer:** IEEE Communications Magazine, IEEE Transactions on Industrial Informatics, IEEE Transactions on Circuits and Systems for Video Technology, IEEE Transactions on Systems, Man and Cybernetics: Systems, IEEE Transactions on Vehicular Technology, IEEE Journal on Selected Areas in Communications, IEEE Internet of Things Journal, IET Communications, IEEE Access, Computer Networks, and Journal of Supercomputing.

EDITORIAL SERVICES:

- **Associate Editor:** IEEE Access 2018-Present Impact factor 3.745

- **Guest Editor:** On Special Issue "Machine Learning, Data Mining, and IoT Applications in Smart and Sustainable Networks" MDPI Sustainability, 2021 Impact factor 2.575

MS/PHD THESIS SUPERVISION:

- Amina Islam (2018-2021 MS(CS) CUI): Smart System for Medical Expertise Assistance

- Muhammad Zamman Aslam (2018-2021 MS(CS) CUI):Feasibility Test of mm-waves for Futuristic Wireless Applications

- Ismail (2018-2021 MS(CS) CUI):Broadcast Latency Minimization Framework for Multimedia Cognitive Radio Networks

- Athar Ikhlaq (2018-2020 MS(CS) CUI): Call admission and channel assignment framework Ensuring QoS for multimedia cellular Cognitive Radio Networks

- Kashif Ali (2017-2018 MS(IT) CUI): An Audit Framework for Cloud

- Nauman Ahmed (2016-2017 MS(CS) CUI): A delegation model for federated cloud

- Syed Fawad Haider (2013-2016 MS(IT) UoG): Dynamic priority-based efficient resource allocation scheme (DPERA) for multimedia applications

- Laraib Abbas:(2013-2016 MS(IT) UoG): Fuzzy logic-based efficient spectrum utilization scheme for Cognitive Radio Networks