

# Rizwan Ahmad

Professor

School of Electrical Engineering and Computer Science

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## About

Dr. Rizwan Ahmad is working as Professor in the School of Electrical Engineering and Computer Science. Dr. Rizwan Ahmad has a PhD in Communication Networks. Dr. Rizwan Ahmad has published 89 research articles & conference papers having a citation count of 1244, carried out 8 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Communication Networks</b> Victoria University , Australia	2006 - 2010
<b>MS in Communication Engineering &amp; Media Technology</b> Universität Stuttgart , Germany	2003 - 2004
<b>BSc in EE</b> Islamic University of Technology , Bangladesh	1996 - 2000

## Experience

<b>Professor</b> School of Electrical Engineering and Computer Science	2022- Present
<b>Associate Professor</b> School of Electrical Engineering and Computer Science	2019 - 2022
<b>Assistant Professor</b> School of Electrical Engineering and Computer Science	2016 - 2019
<b>Assistant Professor</b> School of Electrical Engineering and Computer Science	2013 - 2016
<b>Assistant Professor</b> School of Electrical Engineering and Computer Science	2013 - 2013
<b>Lecturer</b> School of Electrical Engineering and Computer Science	2004 - 2013
<b>Postdoc Research Fellow</b> Qatar University , Doha Qatar	2010 - 2012
<b>Research Assistant</b> Stuttgart Technology, Center Sony International , Stuttgart Technology, Center Sony International, Germany	2003 - 2004

## Awards

Research Projects

National Projects

CSS based waveform design for Gr-Gr Communication System-Phase 1	2022
Funding Agency: NESCOM	
Amount: PKR 250,000.00	
Status: Approved_inprocess	
Design of a Low-Cost AI-Assisted Autonomous UAV-Surveillance System	2022
Funding Agency: NUST	
Amount: PKR 1,000,000.00	
Status: Approved_inprocess	
Event-Driven UAV Swarm Configuration Protocols	2021
Funding Agency: Defence R&D Dte	
Amount: PKR 4,191,663.00	
Status: Approved_inprocess	
Automatic Modulation Classification	
Funding Agency: Defense	
Amount: PKR 300,000.00	
Status: Approved_inprocess	
Design and Development of Smart Spraying System for Agricultural Drones	2022
Funding Agency: HEC	
Amount: PKR 19,874,000.00	
Status: Completed	
UAV assisted Disaster Response and Recovery (UDR2)	2022
Funding Agency: HEC	
Amount: PKR 15,818,000.00	
Status: Approved_inprocess	
Public Safety Communications in Context related to Terror Attacks (Counter Terrorism)	2018
Funding Agency: North Atlantic Teriority Organization (NATO)	
Amount: PKR 8,275,500.00	
Status: Approved_inprocess	

International Projects

Secure Vehicular Networks	2024
Funding Agency: International Partnership Fund of Nottingham Trent University	
Amount: PKR 1,492,201.00	
Status: Approved_inprocess	

Research Articles

WG-SLSQP: Weighted Geometric based Sequential Least Square Programming for Sink Node placement in WBAN	2024
Maria Hanif Rizwan Ahmad Abdul Hameed Muhammad Babar Muhammad Asim	
IEEE Access , Volume 12, Pages 125890-125905	
Impact Factor: 3.400   Quartile: 2   Citations: 1	
DOI: 10.1109/ACCESS.2024.3414129	
DAAG-SNP: Energy Efficient Distance and Angulation Based Agglomerative Clustering for Sink Node Placement	2024
Maria Hanif Rizwan Ahmad Waqas Ahmed Micheal Drieberg Muhammad Mahtab Alam	
IEEE Open Journal of the Communications Society, Volume: 5, Page(s):5013-5026	
Impact Factor: 6.3   Quartile: 1   Citations: 1	
DOI: 10.1109/OJCOMS.2024.3421901	
State-of-The-Art and Future Research Challenges in UAV Swarms	2024
Sadaf Javed Ali Hassan Rizwan Ahmad Waqas Ahmed Rehan Ahmed Ahsan Saadat Mohsen Guizani	
IEEE Internet of Things Journal, Volume 11, Issue 11, Pages 19023-19045	
Impact Factor: 8.200   Quartile: 1   Citations: 99	
DOI: 10.1109/JIOT.2024.3364230	

<b>On Evaluation of discrete RL agents for Traffic Scheduling and Trajectory Optimization of UAV-based IoT Network with multiple RIS unit</b> <i>Rizwan Ahmad Sania Gul Sheheryar</i> <i>International Journal of Innovations in Science and Technology</i> , Volume 6, No. 5, Pages 275–285 <b>Impact Factor:</b> 0 <b>DOI:</b> 101	2024
<b>Optimal Sliding Window Selection in Non-Overlapping Backoff Algorithm for IEEE 802.15.6 WBAN</b> <i>Abdul Saboor Rizwan Ahmad Waqas Ahmed Muhammad Mahtab Alam Ayman Radwan</i> <i>IEEE Communications Letters</i> , Volume 28, Issue 6, Pages 1467-1471 <b>Impact Factor:</b> 3.700   <b>Quartile:</b> 2   <b>Citations:</b> 2 <b>DOI:</b> 10.1109/LCOMM.2024.3384755	2024
<b>Arithmetic N-gram: an efficient data compression technique</b> <i>Ali Hassan Sadaf Javed Sajjad Hussain Rizwan Ahmad Shams Uddin Qazi</i> <i>Discover Computing</i> , Volume 27, Issue 1, Article Number 1 <b>Impact Factor:</b> 0   <b>Citations:</b> 4 <b>DOI:</b> 10.1007/s10791-024-09431-y	2024
<b>Energy Efficiency and Latency Optimization for IoT URLLC and mMTC Use Cases</b> <i>OSAMA ELGARHY LUCA REGGIANI Muhammad Mahtab Alam Ahmed Zoha Rizwan Ahmad ALAR KUUSIK</i> <i>IEEE Access</i> , Volume:12, Page:23132-23148 <b>Impact Factor:</b> 3.4   <b>Quartile:</b> 2   <b>Citations:</b> 21 <b>DOI:</b> 10.1109/ACCESS.2024.3364349	2024
<b>Indoor PV Modeling Based on the One-Diode Model</b> <i>Christopher Jun Qian Teh Micheal Drieberg Khairul Nisak Md Hasan Abdul Latif Shah Rizwan Ahmad</i> <i>Applied Sciences</i> , Volume: 14, Issue: 01, Article Number: 427 <b>Impact Factor:</b> 2.5   <b>Quartile:</b> 1   <b>Citations:</b> 2 <b>DOI:</b> 10.3390/app14010427	2024
<b>Enhanced Border Surveillance through a Hybrid Swarm Optimization Algorithm</b> <i>Mahnoor Tariq Ahsan Saadat Rizwan Ahmad Zainab Abaid Joel Rodrigues</i> <i>IEEE Sensors Journal</i> , Volume 23, Issue 22, Pages 28172-28181 <b>Impact Factor:</b> 4.3   <b>Quartile:</b> 1   <b>Citations:</b> 7 <b>DOI:</b> 10.1109/JSEN.2023.3317531	2023
<b>A UAV-Assisted Edge Framework for Real-Time Disaster Management</b> <i>Haris Ijaz Rizwan Ahmad Rehan Ahmed Waqas Ahmed Yan Kai Wu Jun</i> <i>IEEE Transactions on Geoscience and Remote Sensing</i> , Volume 61, Article Number 1001013 <b>Impact Factor:</b> 8.2   <b>Quartile:</b> 1   <b>Citations:</b> 23 <b>DOI:</b> 10.1109/TGRS.2023.3306151	2023
<b>Fuzzy-Layered Recurrent Neural Network based Hybrid SWIPT Protocol for Cooperative Networks</b> <i>Rubab Zahra Batool Ali Hassan Rizwan Ahmad Waqas Ahmed Joel J.P.C. Rodrigues Ayman Radwan</i> <i>IEEE Communications Letters</i> , Volume: 27, Issue: 8, Page(s):2247-2251, INSPEC Accession Number: 23552399 <b>Impact Factor:</b> 4.1   <b>Quartile:</b> 2   <b>Citations:</b> 1 <b>DOI:</b> 10.1109/LCOMM.2023.3283498	2023
<b>A DRL Strategy for Optimal Resource Allocation Along With 3D Trajectory Dynamics in UAV-MEC Network</b> <i>Rizwan Ahmad Tayyaba Khurshid Waqas Ahmed Muhammad Rehan Muhammad Mahtab Alam Ayman Radwan</i> <i>IEEE Access</i> , Volume 11, Pages 54664-54678 <b>Impact Factor:</b> 3.9   <b>Quartile:</b> 2   <b>Citations:</b> 16 <b>DOI:</b> 10.1109/ACCESS.2023.3278591	2023
<b>A novel consensus-oriented distributed optimization scheme with convergence analysis for economic dispatch over directed communication graphs</b> <i>Rizwan Ahmad Um-E-Habiba Alvi Waqas Ahmed Muhammad Rehan Ayman Radwan</i> <i>Soft Computing</i> <b>Impact Factor:</b> 4.1   <b>Quartile:</b> 2   <b>Citations:</b> 11 <b>DOI:</b> 10.1007/s00500-023-08506-0	2023
<b>UAV trajectory planning for disaster scenarios</b> <i>Sadaf Javed Ali Hassan Rizwan Ahmad Waqas Ahmed Muhammad Mahtab Alam Joel J.P.C. Rodrigues</i>	2023

**On Coverage of Critical Nodes in UAV-Assisted Emergency Networks**

2023

*Rizwan Ahmad Maham Waheed Waqas Ahmed Muhammad Mahtab Alam Maurizio Magarini*

*Sensors* , Volume 23, Issue 3, Article Number 1586

**Impact Factor:** 3.847 | **Quartile:** 2 | **Citations:** 12

**DOI:** 10.3390/s23031586

**An Insight into the Machine-Learning-Based Fileless Malware Detection**

2023

*Rizwan Ahmad Osama Khalid Subhan Ullah Tahir Ahmad Saqib Saeed Dina A. Alabbad Mudassar Aslam Attaullah Buriro*

*Sensors* , Volume 23(2), Article Number 612

**Impact Factor:** 3.847 | **Quartile:** 2 | **Citations:** 26

**DOI:** 10.3390/s23020612

**Getting Smarter about Smart Cities: Improving Data Security and Privacy through Compliance**

2022

*Rizwan Ahmad Mudassar Aslam Muhammad Abbas Khan Abbasi Tauqeer Khalid Rafi Us Shan Subhan Ullah Tahir Ahmad Saqib Saeed Dina A. Alabbad*

*Sensors* , Volume 22, Issue 23, Article Number 9338

**Impact Factor:** 3.847 | **Quartile:** 2 | **Citations:** 22

**DOI:** 10.3390/s22239338

**Data Protection and Privacy of the Internet of Healthcare Things (IoHTs)**

2022

*Rizwan Ahmad Jahanzeb Shahid Adnan K. Kiani Tahir Ahmad Saqib Saeed Abdullah M. Almuhaideb*

*Applied Sciences* , Volume 12, Issue 4, Article Number 1927

**Impact Factor:** 2.9 | **Quartile:** 2 | **Citations:** 105

**DOI:** 10.3390/app12041927

**Unlocking Household Electricity Consumption in Pakistan**

2021

*Rizwan Ahmad Khurram Pervez Mina Farmanbar Muhammad Anser Bashir Sajid Mehmood Muhammad Sajid Khan Muhammad Umer Saeed*

*Buildings* , Volume 11(11), Article Number 566

**Impact Factor:** 2.648 | **Quartile:** 2 | **Citations:** 14

**DOI:** 10.3390/buildings11110566

**Analytical modelling of false blocking problem in wireless ad hoc networks**

2021

*Rizwan Ahmad Micheal Drieberg Wai Kheong Chong Varun Jeoti*

*Peer-to-Peer Network Applications* , Pages 1-25

**Impact Factor:** 3.307 | **Quartile:** 2

**DOI:** 10.1007/s12083-021-01156-9

**ProSe Direct Discovery: Experimental Characterization and Context-Aware Heuristic Approach to Extend Public Safety Networks Lifetime**

2021

*Ali Masood Muhammad Mahtab Alam Yannick Le Moullec Luca Reggiani Davide Scazzoli Maurizio Magarini Rizwan Ahmad*

*IEEE Access* , Volume 9, Pages 130055-130071

**Impact Factor:** 3.367 | **Quartile:** 2 | **Citations:** 8

**DOI:** 10.1109/ACCESS.2021.3112751

**UAV-Assisted Wireless Localization for Search and Rescue**

2021

*Rizwan Ahmad Muhammad Atif Waqas Ahmed Linag Zhao Joel J. P. C. Rodrigues*

*IEEE Systems Journal* , Volume 15, Issue 3, Pages 3261-3272

**Impact Factor:** 3.931 | **Quartile:** 1 | **Citations:** 115

**DOI:** 10.1109/JSYST.2020.3041573

**Simple PV Modeling Under Variable Operating Conditions**

2021

*Christopher Jun Qian Teh Micheal Drieberg Socheatra Soeung Rizwan Ahmad*

*IEEE Access* , Volume 9, Pages 96546-96558

**Impact Factor:** 3.476 | **Quartile:** 2 | **Citations:** 25

**DOI:** 10.1109/ACCESS.2021.3094801

**A Reinforcement Learning Routing Protocol for UAV Aided Public Safety Networks**

2021

*Hassan Ishtiaq Minhas Rizwan Ahmad Waqas Ahmed Maham Waheed Muhammad Mahtab Alam Sufi Tabassum Gul*

*Sensors* , Volume 21(12), Article Number 4121

**Impact Factor:** 3.847 | **Quartile:** 2 | **Citations:** 23

**DOI:** <https://doi.org/10.3390/s21124121>

<b>Power Optimization in Device-to-Device Communications: A Deep Reinforcement Learning Approach with Dynamic Reward</b> <i>Rizwan Ahmad Zelin Ji Adnan K. Kiani Zhijin Qin</i> <i>IEEE Wireless Communications Letters</i> , Volume 10, Issue 3, Pages 508-511 <b>Impact Factor:</b> 5.281   <b>Quartile:</b> 1   <b>Citations:</b> 37 <b>DOI:</b> 10.1109/LWC.2020.3035898	2021
<b>Content-driven networking in smart cities: Key issues and open challenges</b> <i>Junling Shi Liang Zhao Ahmed Al-Dubai Jie Li Junling Shi Liang Zhao Ahmed Al-Dubai Rizwan Ahmad Jie Li</i> <i>Internet Technology Letters</i> , Volume 4, Issue 1, Article Number e264 <b>Impact Factor:</b> 0 <b>DOI:</b> 10.1002/ittl2.264	2021
<b>UAV and SWIPT Assisted Disaster Aware Clustering and Association</b> <i>Rizwan Ahmad Muhammad Mahtab Alam Maurizio Magarinni Ali Hassan Waqas Ahmed</i> <i>IEEE Access</i> , Volume 8, Pages 204791-204803 <b>Impact Factor:</b> 3.367   <b>Quartile:</b> 2   <b>Citations:</b> 25 <b>DOI:</b> 10.1109/ACCESS.2020.3035959	2020
<b>Latest Research Trends in Gait Analysis Using Wearable Sensors and Machine Learning: A Systematic Review</b> <i>Rizwan Ahmad Abdul Saboor Triin Kask Alar Kuusik Muhammad Mahtab Alam Yannick Le Moullec Imran Khan Niazi Ahmed Zoha</i> <i>IEEE Access</i> , Volume 8, Pages 167830-167864 <b>Impact Factor:</b> 3.367   <b>Quartile:</b> 2   <b>Citations:</b> 103 <b>DOI:</b> 10.1109/ACCESS.2020.3022818	2020
<b>Dynamic Slot Allocation using Non Overlapping Backoff Algorithm in IEEE 802.15.6 WBAN</b> <i>Rizwan Ahmad Abdul Saboor Waqas Ahmed Adnan Khalid Kiani Muhammad Mahtab Alam Alar Kuusik Yannick Le Moulec</i> <i>IEEE Sensors Journal</i> , Volume 20, Issue 18, Pages 10862-10875 <b>Impact Factor:</b> 3.301   <b>Quartile:</b> 2   <b>Citations:</b> 33 <b>DOI:</b> 10.1109/JSEN.2020.2993795	2020
<b>Surveying pervasive public safety communication technologies in the context of terrorist attacks</b> <i>Rizwan Ahmad Ali Masood Davide Scazzol Muhammad Mahtab Alam Navuday Sharma Yannick Le Moulec Luca Reggiani Maurizio Magarini</i> <i>Physical Communication</i> , Volume 41, Article Number 101109 <b>Impact Factor:</b> 1.810   <b>Quartile:</b> 3   <b>Citations:</b> 30 <b>DOI:</b> <a href="https://doi.org/10.1016/j.phycom.2020.101109">https://doi.org/10.1016/j.phycom.2020.101109</a>	2020
<b>Energy and environmental performance of a higher education sector – a case study in the United Kingdom</b> <i>Rizwan Ahmad Khuram Pervez Amber Ghulam Qadir Chaudhery Muhammad Sajid Khan Bilal Akbar Muhammad Anser Bashir</i> <i>International Journal of Sustainable Energy</i> , Volume 39, Issue 5, Pages 497-514 <b>Impact Factor:</b> 0   <b>Citations:</b> 7 <b>DOI:</b> <a href="https://doi.org/10.1080/14786451.2020.1720681">https://doi.org/10.1080/14786451.2020.1720681</a>	2020
<b>Interference and Priority Aware Coexistence (IPC) Algorithm for Link Scheduling in IEEE 802.15.6 Based WBANs</b> <i>Rizwan Ahmad Fawad Nawaz Khan Waqas Ahmed Muhammad Mahtab Alam Micheal Drieberg</i> <i>IEEE Access</i> , Volume 7, Pages 168736-168751 <b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 19 <b>DOI:</b> 10.1109/ACCESS.2019.2955395	2019
<b>Access Control for Fog/Cloud Enabled IoTs</b> <i>Rizwan Ahmad Amna Riaz Adnan K. Kiani Shahzad Saleem</i> <i>International Journal of Computer Science and Information Security</i> , Volume 17, No. 9, Pages 48-63 <b>Impact Factor:</b> - <b>DOI:</b> <a href="https://www.academia.edu/40932965/Access_Control_for_Fog_Cloud_Enabled_IoTs">https://www.academia.edu/40932965/Access_Control_for_Fog_Cloud_Enabled_IoTs</a>	2019
<b>A Machine Learning Approach to Achieving Energy Efficiency in Relay-Assisted LTE-A Downlink System</b> <i>rizwan Ahmad Hammad Hassan Irfan Ahmed Hedi Khammari Ghulam Bhatti Waqas Ahmed Muhammad Mahtab Alam</i> <i>Sensors</i> , Sensors 2019, 19, 3461; doi:10.3390/s19163461 <b>Impact Factor:</b> 3.275   <b>Quartile:</b> 1   <b>Citations:</b> 9 <b>DOI:</b> 10.3390/s19163461	2019

<b>Network coding and hierarchical modulation for energy efficient cooperative WBAN</b> <i>Maham Waheed Sadaf Talha Rizwan Ahmad Adnan Khalid Kiani Waqas Ahmed Muhammad Mahtab Alam</i> <i>International Journal of Distributed Systems and Technologies (IJDST)</i> , Volume 10, Issue 3, Pages 90-110 <b>Impact Factor:</b> N/A   <b>Citations:</b> 5 <b>DOI:</b> 10.4018/IJDST.2019070106	2019
<b>Soft Computing techniques for dependable cyber physical systems</b> <i>MUHAMMAD ATIF SIDDIQUE LATIF RIZWAN AHMAD ADNAN K. KIANI JUNAID QADIR ADEEL BAIG HISAO ISHIBUCHI WASEEM ABBAS</i> <i>IEEE Access</i> , Volume 7, Pages 72030-72049 <b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 19 <b>DOI:</b> 10.1109/ACCESS.2019.2920317	2019
<b>An Energy-Aware Transmission Target Selection Mechanism for UAV Networking</b> <i>Rizwan Ahmad JIEHONG WU JIAN MA YINGYING ROU LIANG ZHAO</i> <i>IEEE ACCESS</i> , Volume 7, Pages 67367-67379 <b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 9 <b>DOI:</b> 10.1109/ACCESS.2019.2918329	2019
<b>A low complexity online controller using fuzzy logic in energy harvesting WSNs</b> <i>Rizwan Ahmad Talha Azfar Waqas Ahmed Abdul Haseeb Sufi Tabassum Gul Fu-Chun Zheng</i> <i>Science China Information Sciences</i> , April 2019, Vol. 62 042305:1–042305:10 <b>Impact Factor:</b> 3.304   <b>Quartile:</b> 1   <b>Citations:</b> 9 <b>DOI:</b> 10.1007/s11432-018-9751-5	2019
<b>Integration of millimeter-wave and optical link for duplex transmission of hierarchically modulated signal over a single carrier and fiber for future 5G communication systems</b> <i>Rizwan Ahmad Afnan Riaz Salman Ghafoor</i> <i>Telecommunication Systems</i> , DOI 10.1007/s11235-019-00558-8, pp. 1-9 <b>Impact Factor:</b> 1.734   <b>Quartile:</b> 3   <b>Citations:</b> 4 <b>DOI:</b> DOI 10.1007/s11235-019-00558-8	2019
<b>On Research Challenges in Hybrid Medium Access Control Protocols for IEEE 802.15.6 WBANs</b> <i>Abdul Saboor Waqas Ahmed Adnan K. Kiani Yannick Le Moullec Muhammad Mahtab Alam Rizwan Ahmad</i> <i>IEEE Sensors Journal</i> , - <b>Impact Factor:</b> 3.067   <b>Quartile:</b> 1   <b>Citations:</b> 40 <b>DOI:</b> 10.1109/JSEN.2018.2883786	2018
<b>A QoS MAC protocol for prioritized data in energy harvesting wireless sensor networks</b> <i>Sohail Sarang Micheal Drieberg Azlan Awang Rizwan Ahmad</i> <i>Computer Networks</i> , NULL <b>Impact Factor:</b> 3.030   <b>Quartile:</b> 1   <b>Citations:</b> 30 <b>DOI:</b> 10.1016/j.comnet.2018.07.022	2018
<b>On Achieving Throughput Optimality with Energy Predication-based Power Allocation in 5G Networks</b> <i>Syed Fasih Ali Gardazi Waqas Ahmed Rizwan Ahmad Hassaan Khaliq Qureshi</i> <i>Transactions on Emerging Telecommunications Technologies</i> , Volume:29, Issue:10, Special Issue: SI, Article Number:e3438 <b>Impact Factor:</b> 1.258   <b>Quartile:</b> 4   <b>Citations:</b> 1 <b>DOI:</b> https://doi.org/10.1002/ett.3438	2018
<b>Intelligent techniques for forecasting electricity consumption of buildings</b> <i>M. Usman K.P. Amber Rizwan Ahmad M.W. Aslam A. Kousar M.S. Khan</i> <i>Energy</i> , NULL <b>Impact Factor:</b> 5.537   <b>Quartile:</b> 1   <b>Citations:</b> 179 <b>DOI:</b> 10.1016/j.energy.2018.05.155	2018
<b>A unified approach of energy and data cooperation in energy harvesting WSNs</b> <i>Roomana Yousaf Rizwan Ahmad Waqas AHMED Fu-chun ZHENG</i> <i>Springer Science China Information Sciences</i> , NULL <b>Impact Factor:</b> 2.731   <b>Quartile:</b> 2   <b>Citations:</b> 4 <b>DOI:</b> 10.1007/s11432-017-9257-1	2018
<b>The Significance of a Building's Energy Consumption Profiles for the Optimum Sizing of a Combined Heat and Power (CHP) System?A Case Study for a Student Residence Hall</b> <i>Khuram Pervez Amber Antony R. Day Naeem Iqbal Ratyal Rizwan Ahmad Muhammad Amar</i> <i>Sustainability</i> , NULL	2018

DOI: 10.3390/su10062069

2018

DOI: 10.3390/en11051133

2018

DOI: 10.3390/s18020565

2017

DOI: 10.1109/ACCESS.2017.2743063

2011

DOI: 10.1109/TVT.2011.2171199

2010

DOI: 10.1049/jet-com.2010.0069

2009

DOI: <https://doi.org/10.1155/2009/968323>

## 2024

DOI: 10.1109/ELECOM63163.2024.10892180

2024

**DOI:** 10.1109/ELECOM63163.2024.10892156

2024

**DOI:** 10.1109/ELECOM63163.2024.10892163

2024

*Rizwan Ahmad Wagas Ahmed Adnan Kiani Muhammad Mahtab Alam Ali Hassan Sadaf Javed*

2024 19th Biennial Baltic Electronics Conference (BEC), res.country(64,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/BEC61458.2024.10737973	
<b>Tight Coupling of GNSS and IMU using Extended Kalman Filtering</b>	2024
<i>Rizwan Ahmad Muhammad Irfan Haider Jillani Muhammad Mahtab Alam Usman Muhammad Babri</i>	
<i>Proceedings of the Biennial Baltic Electronics Conference, BEC, res.country(212,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/BEC61458.2024.10737945	
<b>Performance Evaluation of Distance-Based Random Mean Shift Clustering and Humpback Whale Optimization Algorithm for Sink Node Placement in WBAN</b>	2024
<i>Rizwan Ahmad Waqas Ahmed Micheal Dreiberg Muhammad Mahtab Alam Maria Hanif</i>	
<i>Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, LNICST, res.country(109,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-3-031-72524-1_17	
<b>Task Classification for Optimal Offloading and Resource Allocation in Vehicular Edge Computing</b>	2023
<i>Memona Mubashir Rizwan Ahmad Ahsan Saadat Saqib Rasool Chaudhry Adnan K Kiani Muhammad Mahtab Alam</i>	
<i>2023 Eighth International Conference on Fog and Mobile Edge Computing (FMEC), res.country(64,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/FMEC59375.2023.10306155	
<b>Analyzing and Investigating encrypted traffic for social media application Instagram</b>	2022
<i>Hameed Iqbal Rizwan Ahmad Waqas Ahmed Shams Qazi Muhammad Mahtab Alam</i>	
<i>2022 18th Biennial Baltic Electronics Conference (BEC), res.country(64,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/BEC56180.2022.9935603	
<b>Power Aware ON/OFF Switching Schemes for Energy Efficient Phantom Cellular Networks</b>	2022
<i>M Naveed Anjum Rizwan Ahmad Ali Hassan Waqas Ahmed Muhammad Mahtab Alam</i>	
<i>Biennial Baltic Electronics Conference, BEC, res.country(64,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/BEC56180.2022.9935605	
<b>Improvement of QoS through Relay Selection For Hybrid SWIPT Protocol</b>	2021
<i>Rizwan Ahmad Ali Hasan Rubab Zahra Batool Waqas Ahmed</i>	
<i>2021 IEEE 18th Annual Consumer Communications &amp; Networking Conference (CCNC), res.country(233,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/CCNC49032.2021.9369605	
<b>Effects of Major Air Pollutants on Millimeter Wave Spectrum</b>	2020
<i>Rizwan Ahmad Vandana Bassoo Durjan Sheena</i>	
<i>3rd International Conference on Emerging Trends in Electrical, Electronic and Communications Engineering (ELECOM) 2020, res.country(153,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/ELECOM49001.2020.9297032	
<b>Performance Analysis of Interference and Priority aware Coexistence in IEEE 802:15:6 based WBANs</b>	2020
<i>Rizwan Ahmad fawad khan Waqas Ahmed Muhammad Mahtab Alam</i>	
<i>17th Biennial Baltic Electronics Conference (BEC) 2020, res.country(64,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/BEC49624.2020.9277066	
<b>Managing Critical Nodes in UAV assisted Disaster Networks</b>	2020
<i>Rizwan Ahmad Ali Hasan Muhammad Mahtab Alam Maurizio Magarinni</i>	
<i>17th Biennial Baltic Electronics Conference (BEC) 2020, res.country(64,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/BEC49624.2020.9276993	
<b>Semi-Static ON/OFF Switching Schemes for Energy Efficient Phantom Cellular Networks</b>	2019
<i>Natasha Niaz Rizwan Ahmad Waqas Ahmed Liang Zhao Shahryar Saleem Natasha Niaz Rizwan Ahmad Waqas Ahmed Liang Zhao Shahryar Saleem</i>	
<i>18th IEEE International Conference on Ubiquitous Computing and Communications, res.country(48,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/IUCC/DSCI/SmartCNS.2019.00046	



<b>A Primer On Public Safety Communication in the Context of Terror Attacks: The NATO SPS “COUNTER-TERROR” Project</b> <i>Rizwan Ahmad Muhammad Mahtab Alam Yannick Le Moullec Maurizio Magarinni Luca Regiani</i> <i>NATO Science for Peace and Security 'Cluster Workshop on Advanced Technologies' , res.country(20,)</i> <b>Citations:</b> N/A <b>DOI:</b> <a href="https://doi.org/10.1007/978-94-024-2021-0_3">https://doi.org/10.1007/978-94-024-2021-0_3</a>	2019
<b>On The Impact Of Clustering For Energy Critical Public Safety Networks</b> <i>Hassan Ishtiaq Minhas Rizwan Ahmad Waqas Ahmed Muhammad Mahtab Alam Maurizio Magarani</i> <i>2019 International Symposium on Recent Advances in Electrical Engineering (RAEE), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/RAEE.2019.8887025	2019
<b>Device-to-Device Discovery and Localization Assisted by UAVs in Pervasive Public Safety Networks</b> <i>Ali Masood Muhammad Mahtab Alam Rizwan Ahmad Navuday Sharma M. Mahtab Alam Yannick Le Moullec</i> <i>ACM MobiHoc workshop on innovative aerial communication solutions for Flrst REsponders network in emergency scenarios res.country(109,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3331053.3335031	2019
<b>Evolution of Wireless Standards for Health Monitoring</b> <i>Abdul Saboor Adeel Mustafa Rizwan Ahmad Muneeb Ahmed Khan Muhammad Haris Rashid Hameed</i> <i>2019 9th Annual Information Technology, Electromechanical Engineering and Microelectronics Conference (IEMECON), res.country(104,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IEMECONX.2019.8877040	2019
<b>Performance Evaluation of Energy Harvesting Enabled Phantom Cellular Network</b> <i>Natasha Niaz Rizwan Ahmad Waqas Ahmed</i> <i>International Symposium on Recent Advances in Electrical Engineering - 2018, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/RAEE.2018.8706894	2018
<b>Energy Efficiency for Bisection based Power Allocation with Proportional Fairness in Relay-assisted LTE-A Downlink System</b> <i>Hammad Hassan Rizwan Ahmad Irfan Ahmed Waqas Ahmed Muhammad Mahtab Alam</i> <i>2018 16th Biennial Baltic Electronics Conference (BEC), res.country(64,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/BEC.2018.8600970	2018
<b>A Unique Backoff Algorithm in IEEE 802.15.6 WBAN</b> <i>RIZWAN AHMAD Abdul Saboor Dr. Rizwan Ahmad Dr. Waqas Ahmad</i> <i>88th IEEE Vehicular Technology Conference, res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> paper not available online but on the ERP.	2018
<b>Network Coding for Energy Efficient Transmission in Wireless Body Area Networks</b> <i>Sadaf Talha Rizwan Ahmad Adnan K. Kiani Muhammad Mahtab Alam</i> <i>The 7th International Conference on Current and Future Trends of Information and Communication Technologies in Healthcare (ICTH 2017) res.country(196,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1016/j.procs.2017.08.285	2017
<b>Network Adaptive Interference Aware routing metric for hybrid Wireless Mesh Networks</b> <i>Rizwan Ahmad Adnan K. Kiani Ubaid Ullah Raja Farrukh Ali</i> <i>2016 International Wireless Communications and Mobile Computing Conference (IWCMC), res.country(55,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IWCMC.2016.7577092	2016
<b>RAEED-EA: A formally analysed energy efficient WSN routing protocol</b> <i>Navedd Ahmed Khan Rizwan Ahmad Adnan K. Kiani Kashif Saghar</i> <i>2016 13th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IBCAST.2016.7429900	2016
<b>Achieving energy efficiency through load balancing: A comparison through formal verification of two WSN routing protocols</b>	2016

<p><i>Rizwan Ahmad Naveed Ahmed Khan Adnan K. Kiani Kashif Saghar Centres of Excellence in Science &amp; Applied Technologies</i>  <i>13th International Bhurban Conference on Applied Sciences &amp; Technology (IBCAST), res.country(177,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/IBCAST.2016.7429901</p>		
<p><b>Priority Based Energy Aware (PEA) Routing Protocol for WBANs</b></p> <p><i>Sadaf Talha Rizwan Ahmad Adnan K. Kiani</i>  <i>2015 IEEE 82nd Vehicular Technology Conference (VTC2015-Fall), res.country(233,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/VTCFall.2015.7391095</p>		2015
<p><b>Performance of two way opportunistic MAC protocol in non-saturated ad hoc networks</b></p> <p><i>Rizwan Ahmad Mazen Hasna Adnan Abu Daya</i>  <i>2012 IEEE International Conference on Communications (ICC), res.country(38,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/ICC.2012.6364962</p>		2012
<p><b>Joint Hierarchical Modulation and Network Coding for Two Way Relay Networks</b></p> <p><i>Rizwan Ahmad Mazen Hasna</i>  <i>2012 IEEE 75th Vehicular Technology Conference (VTC Spring), res.country(113,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/VETECS.2012.6240272</p>		2012
<p><b>Two way opportunistic MAC protocol for Ad Hoc networks</b></p> <p><i>Rizwan Ahmad Mazen Hasna Adnan Abu Daya</i>  <i>2011 IEEE GLOBECOM Workshops (GC Wkshps), res.country(233,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/GLOCOMW.2011.6162499</p>		2011
<p><b>Minimum neighbour with extended Kalman filter estimator (MINEK): Performance evaluation</b></p> <p><i>Micheal Driberg Fu-Chun Zheng Rizwan Ahmad</i>  <i>2011 6th International ICST Conference on Communications and Networking in China (CHINACOM), res.country(48,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/ChinaCom.2011.6158199</p>		2011
<p><b>Delay Analysis of Enhanced Relay-Enabled Distributed Coordination Function</b></p> <p><i>Rizwan Ahmad Fu-Chun Zheng Micheal Driberg</i>  <i>2010 IEEE 71st Vehicular Technology Conference, res.country(227,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/VETECS.2010.5494181</p>		2010
<p><b>Impact of interference on throughput in dense WLANs with multiple APs</b></p> <p><i>Micheal Driberg Rizwan Ahmad Fu-Chun Zheng Michael Fitch</i>  <i>2009 IEEE 20th International Symposium on Personal, Indoor and Mobile Radio Communications, res.country(113,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/PIMRC.2009.5450199</p>		2009
<p><b>Performance of Asynchronous Channel Assignment Scheme in Non-Uniform and Dynamic Topology WLANs</b></p> <p><i>Micheal Driberg Rizwan Ahmad Fu-Chun Zheng Michael Fitch</i>  <i>2009 IEEE 20th International Symposium on Personal, Indoor and Mobile Radio Communications, res.country(113,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/PIMRC.2009.5449770</p>		2009
<p><b>An Enhanced Relay-Enabled Medium Access Control Protocol for Wireless Ad Hoc Networks</b></p> <p><i>Rizwan Ahmad Micheal Driberg Fu-Chun Zheng Sveirrir Olafsson</i>  <i>VTC Spring 2008 - IEEE Vehicular Technology Conference, res.country(197,)</i></p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/VETECS.2008.13</p>		2008

Book Chapters

<b>The Role of Machine Learning in UAV-Assisted Communication</b> <i>Sadaf Javed Ali Hassan Rizwan Ahmad Shams Qazi Ahsan Saadat Waqas Ahmed</i> In: <i>Applications of Machine Learning in UAV Networks</i> , Chapter: 01, Pages: 26 <b>Citations:</b> 4 <b>DOI:</b> 10.4018/979-8-3693-0578-2.ch001	2024
<b>Investigation of Trust Models to Alleviate the Authentication Challenge in FinTech</b> <i>Naveed Naeem Abbas Rizwan Ahmad Shams Qazi Waqas Ahmed</i> In: <i>Handbook of Research on Cybersecurity Issues and Challenges for Business and FinTech Applications</i> , Chapter 9, Pages 174-191 <b>Citations:</b> 3 <b>DOI:</b> 10.4018/978-1-6684-5284-4.ch009	2022
<b>Impact of Deepfake Technology on FinTech Applications</b> <i>Naveed Naeem Abbas Rizwan Ahmad Shams Qazi Waqas Ahmed</i> In: <i>Handbook of Research on Cybersecurity Issues and Challenges for Business and FinTech Applications</i> , Chapter 12, Pages 225-242 <b>Citations:</b> 5 <b>DOI:</b> 10.4018/978-1-6684-5284-4.ch012	2022
<b>Prevention of Cryptojacking Attacks in Business and FinTech Applications</b> <i>Subhan Ullah Tahir Ahmad Rizwan Ahmad Mudassar Aslam</i> In: <i>Handbook of Research on Cybersecurity Issues and Challenges for Business and FinTech Applications</i> , Chapter 14, Pages 266-287 <b>Citations:</b> 4 <b>DOI:</b> 10.4018/978-1-6684-5284-4.ch014	2022

Editorial Activities

<b>Technical Journal UET Taxila</b> Reviewed Papers for Journals <b>Impact Factor:</b> N/A	2023
<b>Technical journal</b> Reviewed Papers for Journals <b>Impact Factor:</b> N/A	2023
<b>IGI Global Book Submission System</b> Reviewed Papers for Journals <b>Impact Factor:</b> N/A	2022
 Reviewed Papers for Journals <b>Impact Factor:</b> NA	2022
 Reviewed Papers for Journals <b>Impact Factor:</b> NA	2022
<b>IEEE Access</b> Reviewed Papers for Journals <b>Impact Factor:</b> 3.476	2022
<b>IGI Global Book Submission System</b> Reviewed Papers for Journals <b>Impact Factor:</b> N/A	2022
<b>IEEE Access</b> Reviewed Papers for Journals <b>Impact Factor:</b> 3.476	2022
<b>IGI Global Book Submission System</b> Reviewed Papers for Journals <b>Impact Factor:</b> N/A	2022
<b>IGI Global Book Submission System</b> Reviewed Papers for Journals <b>Impact Factor:</b> N/A	2022

IEEE Systems Journal	2022
Reviewed Papers for Journals	
<b>Impact Factor: 4.802</b>	
	2021
Reviewed Papers for Journals	
<b>Impact Factor: 3.301</b>	
	2021
Reviewed Papers for Journals	
<b>Impact Factor: 3.301</b>	
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Reviewed Papers for Journals	
<b>Impact Factor: NA</b>	
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Edited Journal Issue / Proceeding / Book	
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Reviewed Papers for Journals	
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	2020
Reviewed Papers for Journals	
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	2020
Reviewed Papers for Journals	
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<b>Impact Factor: 2.336</b>	
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Reviewed Papers for Journals	
<b>Impact Factor: 4.098</b>	
	2018
Reviewed Papers for Journals	

