#### **Dr. Muhammad Shiraz**

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Email: muhammad.shiraz@fuuast.edu.pk

Muhammad Shiraz - Google Scholar

Shiraz, Muhammad - Author details - Scopus Preview My publications - Web of Science Researcher Profiles



#### **Professional Profile**

Eager to bring University students into the twenty-first century by employing distinct combination of my prestigious academic background and professional experience in the field of Computer Science.

	Holding PhD	Degree in	Computer	Science.
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- □ Dedicated to enthusiastic and dynamic teaching and research as a means of creating and nurturing a lifelong love of knowledge in students.
- ☐ Experienced in doing and conducting academic research.

## **Professional Association**

- ☐ HEC (Higher Education Commission) Pakistan approved supervisor for graduate studies.
- ☐ Evaluator National Computing Education Accreditation Council (NCEAC) HEC Pakistan.

## Education, Honors, and Achievements

#### **Post Doctorate**

University of Malaya, Kuala Lumpur, Malaysia. 2013-2014

#### **PhD.** in Computer Science (Distinction)

University of Malaya, Kuala Lumpur, Malaysia. 2013

#### **Masters of Science in Computer Science**

Allama Igbal Open University, Islamabad, Pakistan. 2008

#### **Masters in Information Technology**

CECOS University of IT and Emerging Sciences, Hayatabad Peshawar, Pakistan. 2005

**Bachelor in Information Technology**CECOS University of IT and Emerging Sciences, Hayatabad Peshawar, Pakistan. 2003

#### **Higher Secondary School Certificate (HSSC)**

Federal Board of Intermediate and Secondary Education, Islamabad, Pakistan, 2000

#### **Secondary School Certificate (SSC)**

Board of Intermediate and Secondary Education, Peshawar, Pakistan, 1998

#### **Academic Distinctions**

	PhD. Degree with Distinction in Thesis.
	Awarded GOLD Medal in Masters of Information Technology
	Awarded GOLD Medal in Bachelors of Information Technology.
<u>Scl</u>	nolarship Awards Earned
	Commonwealth Scholarship Award by Ministry of Higher Education Malaysia
	Partial Sponsorship award by Higher Education Commission (HEC) of Pakistan

## Professional Achievements/Honors/Awards

- 1. Program Evaluators Excellence Award 2019 by National Computing Education Accreditation Counsel (NCEAC) Higher Education Commission (HEC) Islamabad Pakistan
- 2. Best Research Paper Award (3<sup>rd</sup> Position) for the Year 2017 in Faculty of Science, Federal Urdu University of Arts, Science and Technology Islamabad Pakistan
- 3. Best Research Paper Award (1st Position) for the Year 2016 in Faculty of Science, Federal Urdu University of Arts, Science and Technology Islamabad Pakistan

#### Academic Honors

- 1. Excellence Award 2013 for Outstanding Achievement in the PhD Completion Period (less than 3 years).
- 2. Winner of the 2nd University Malaya 3 Minutes Thesis (UM3MT) writing competition 2013 Faculty of Computer Science and Information Technology University of Malaya, July 2013
- 3. Best Research Paper Award in the 1st Post Graduate Symposium for Excellence organized by Faculty of Computer Science and Information Technology University of Malaya, Malaysia September 27-28, 2011.
- 4. 2ndposition in intra university software competition in September 2003.
- 5. 1st position in the intra university Quiz competition on 14-15th September 2004.
- 6. Certified in the environmental protection debate declaration contest on 28th September 1995 by Environmental Protection Agency Government of NWFP at Government High School Dag-IsmaeelKheel, Nowshera.
- 7. 2nd position in inter private schools debate competition at Government High School Pabbi on 18th September 1997.
- 8. position in debate declaration contest on defense day at Nisar Shaheed Degree College Risalpure in September, 1999.
- 9. 3r position in BaatBazi (Poetry) competition at Nisar Shaheed Degree College Risalpure.
- 10. 2nd position in debate competition at Al-Khair University on 21st February 2001 under the supervision of Quran Society at Al-Khair University Peshawar campus.
- 11. 2nd position in debate declaration contest at Al-Khair University on 21st February 2001 under the supervision of Literary society Al-Khair University Peshawar Campus.
- 12. 3rd position in debate competition at Al-Khair University on 26th November 2001 under the supervision of Literary Society at Al-Khair University Peshawar campus.

- 13. 2nd position in Quiz competition at CECOS University under the supervision of Quran Society at CECOS University Peshawar.
- 14. 3rd position in English debate competition at CECOS University under the supervision of Literary Society at CECOS University Peshawar.
- 15. 2nd position in all Peshawar inter University debate competition at CECOS University under the supervision of Quran society.

## **Co-Curricular Activities in Candidature**

- 1.4 years experience as a senior Proctor and commander at Oxford Public school Pabbi, Nowshera Pakistan (1994-1998).
- 2.1 year experience as a commander at Nisar Shaheed Degree College Risalpure, Nowshera Pakistan in 1999-2000.
- 3.1 Year Experience as a proctor at Nisar Shaheed Degree College Risalpure Nowshera, Pakistan in 1999-2000.
- 4.1 year working experience as a Senior Coordinator at Quran Society CECOS University
- 5.1 year working experience as a Student Incharge of Quran Society CECOS University.
- 6.Active Participant in co-curricular activities including Speeches, Recitation of Holy Quran, NaatKwaani, Bait Bazi, Quiz Competition, Comedies at all school, college and University level.

#### Seminars and Exhibitions Attended in Candidature

- 1. Invited Talk on Emerging Trends in Computer Science, organized by Central Punjab University Commercial Market Campus, Rawalpindi, June 2018.
- 2. Participant in Brains Storm Quiz competition at University of Peshawar (Software exhibition at Peshawar).
- 3. Participant of Quiz competition in all Pakistan inter-universities Quiz competition at Awan-e-Iqbal Lahore in 2003 (Software Exhibition at Lahore).

## Employment/ Professional Experience

Designed and conducted various faculty and student workshops for teaching advanced topics in computer programming, distributed applications, and mobile application development.

## Administrative Professional Responsibilities

- 1.Head Department of Computer Science, Federal Urdu University of Arts, Science and Technology Islamabad Pakistan, Since July 2021 to date.
- 2.Director IT (Additional) Federal Urdu University of Arts, Science and Technology Islamabad Pakistan, From January 2023 to date.
- 3.Head Department of Computer Science, Federal Urdu University of Arts, Science and Technology Islamabad Pakistan, From May 2016 to June 2018.

## <u>Institutional Services</u>

- 1. Convener Unfair Means Committee (UMC) from May 2014 to Jan 2023.
- 2. Convener Discipline Committee from June 2018 to Jan 2023.
- 3. Member Research Paper Verification Committee since March 2018 to date.
- 4. Member Departmental Promotion Committee for Administrative staff July 2018.
- 5. Convener Admission Committee for Undergraduate Studies at Department of Computer Science
- 6. Convener Admission Committee for Postgraduate Studies at Department of Computer Science

## Academic Professional Responsibilities

- 1. Associate Professor, Department of Computer Science, Federal Urdu University of Arts, Science and Technology Islamabad Pakistan, 1 July 2022 to-date.
- 2. Visiting Faculty member, Faculty of Computer Science and Information Technology, University of Malaya, February 2012
- 3. Assistant Professor, Department of Computer Science, Federal Urdu University of Arts, Science and Technology Islamabad Pakistan, September 2006 to June 2022.
- 4. Visiting Faculty member, Department of Computer Science, Allama Iqbal Open University Islamabad Pakistan.
- 5.Evening program Coordinator at Department of Computer Science Federal Urdu University of Arts, Sciences and Technology Islamabad, September 2008 to October 2010
- 6.Research Associate in the Project of E-Assessment Methods and Models for Students Evaluation in Asia, Department of Computer Science, Allama Iqbal Open University, Islamabad, Pakistan, October 2005 to August 2006.
- 7.Lecturer, CECOS Data Institute Peshawar, Pakistan April 2005 to August 2005.
- 8.Lecturer, Al-KhidmatInstitute of Information Technology (A project of Al-Khidmat Foundation and Sponsored by ICNA Relief), Peshawar Pakistan, January 2004 to April 2005.
- 9.Lecturer, HITECH Degree College Nowshera Pakistan, May 2003 to January 2004.

## Professional Collaboration and Establishment of Computer Labs

- 1. Moderator for signing MoU with Hazza Institute of Technology Islamabad in collaboration with Pakistan Software Export Board (PSEB) for Establishing Two Computer Labs in Department of Computer Science (July 2022)
- 2. Moderator for signing MoU with Hazza Institute of Technology Islamabad, in collaboration with Pakistan Software Export Board (PSEB) for Skilled Human Resource Development and Training students and Faculty Members at Federal Urdu University of Arts, Science and Technology Islamabad in IT Industry Academia Bridge program

## Workshops Organized

□ 5 days' workshop for teaching Network Programming Skills with the Post Graduate

Students of Faculty of Computer Science and Information Technology University Malaya, Malaysia

□ 1 Day workshop for teaching Android Programming skills to the faculty members of Faculty of Computer Science and Information Technology University Malaya, Malaysia September 2012.

#### Research Conference/ Symposium Participation

- 1. Invited Speaker in the 14<sup>th</sup> International Burban Conference on Applied Sciences and Technologies (IBCAST 17) 10- 14 Jan-2017 at National Center of Physics Islamabad Pakistan.
- 2. Guest Speaker in the 1<sup>st</sup> International Conference on Cyber Security & Digital Forensics, 7-8 December 2016, at SEECS NUST Islamabad Pakistan.
- 3. Post Graduate Symposium for Excellence (*PGReS 2013*) organized by Faculty of Computer Science and Information Technology University of Malaya Malaysia 22nd May, 2013
- 4. The 2012 International Conference on Information and Computer Networks (ICICN 2012) Singapore February 26-28, 2012
- 5. Post Graduate Symposium for Excellence (*PGReS 2012*) organized by Faculty of Computer Science and Information Technology University of Malaya, Malaysia September, 2012
- 6. Post Graduate Symposium for Excellence (*PGReS 2011*) organized by Faculty of Computer Science and Information Technology University of Malaya, Malaysia September 27-28, 2011.
- 7. National Graduate Symposium (NGS) for Post Graduate Students organized University Technology Petronas (UTP) at Ipoh, Malaysia, September 17-18, 2011.
- 8. 1st International Conference on Frontiers of Information Technology (FIT) organized by COMSATS Islamabad December 2006.
- 9. 9th International Conference on Frontiers of Information Technology (FIT) organized by COMSATS Islamabad December 2006.

#### Invited Reviewer

- 1. Transactions on Emerging Telecommunications Technologies
- 2. Journal of Grid Computing
- 3. Computing Journal
- 4. Journal of Networking and Computer Applications
- 5. Journal of Supercomputing
- 6. Simulation Modeling Practice and Theory
- 7. Journal of Computer Communications and Collaboration
- 8. Journal of Zhejiang University-SCIENCE C (Computers & Electronics)
- 9. The Scientific World Journal
- 10. IEEE Access
- 11. Pervasive and Mobile Computing
- 12. IEEE Transactions on Services Computing
- 13. Journal of Internet Technology
- 14. Egyptian Informatics Journal

#### **Programming Tools Used**

- 1. C/C++
- 2. Java
- 3. Visual Studio
- 4. Android Application Development

## **Courses Taught:**

- 1. Cloud Computing
- 2. Cloud Computing Security
- 3. Distributed System
- 4. Object Oriented Programming
- 5. Socket Programming
- 6. Computer Communication and Networks
- 7. Internet Architecture and Protocols
- 8. Telecommunication Network Management
- 9. Database Management System
- 10. Visual Programming (Visual C#)
- 11. Programming Fundamentals
- 12. Operating Systems
- 13. Network Security

## **Editorial Services**

## Lead Guest Editor

1) Special Issue Title: Scalable Distributed Systems Based on Intelligent IoTs Journal: Applied Sciences (ISSN 2076-3417) Section: Computing and Artificial

Intelligence Create Date

03 January 2023

Deadline

2023-07-20

2) Special Issue "Towards Making Everything Smart by Using Edge Computing-based Internet of Things"

Journal: CMC-Computers, Materials & Continua

**Submission Deadline: 11 November 2022** 

3) Special Issue on Emerging Trends and Challenges in Mobile Edge Computing and Cloud-Aware Mobile Fog Computing (September 2021)

Journal: Wireless Communications and Mobile Computing

## Member Program Committee in Conferences

- 1. Member Program Committee, Frontiers of Information Technology (FIT) 2022 Track: Data Science & Advanced Analytics
- 2. Member Program Committee, Frontiers of Information Technology (FIT) 2021 Track: Data Science & Advanced Analytics
- 3. Member Program Committee, Frontiers of Information Technology (FIT) 2019

PHD Stu	dents Supervision			
SNO	Student Name	Thesis Title	Status	Institute
1	Qaisar Shaheen	A Lightweight Location Aware Fog Framework for QoS in Internet of Things Paradigm	Completed June 2021	Superior University Lahore
2	Ijaz Ahmed	Secure Framework Enhancing AES Algorithm in Cloud Computing	Completed June 2021	Superior University Lahore
3	Maria Ashraf	An Optimized and Lightweight Computational Offloading Framework for Task Placement in Fog Computing Environment	In Process	International Islamic University Islamabad

MS Stud	MS Students Supervised					
S. No.	Student's Name	Thesis Title	Year			
1	Ahmed Bilal	Electricity Fraud Detection Using Densenet-	2023			
		121 Based Ensembler				
2	Sadia Khalid	PCA-CSA Based SVM Model for Early	2023			
		Diabetic Retinopathy Detection				
3	Rao Rehan Akram	Towards Big Data Electricity Theft	2022			
		Detection Based on Improved RUSBoost				
		Classifiers				
4	Muhammad Rafaqat	Energy Efficient Framework for QoS in	2022			
	Khan	Wireless Body Area Network				

5	Waqas Ahmed	Towards Short Term Electricity Load Forecasting using Improved Support Vector	2022
		Machine and Extreme Learning	
6	Atif Hussain	Long Term Electricity Forecasting Based on Improved CNN-LSTM and Improved ELM	2022
7	Saleem Mustafa	Intelligent Skin Lesion Detection and Classification in Dermosopic Images	2021
8	Muhammad Tanveer	Mitigation of SPAM in Internet Telephony	2021
9	Muhammad Mehmood	A Lightweight Framework for Remote Data Integrity in Computational Cloud	2021
10	Nadia Zehra	Flood Prediction Using Machine Learning Algorithms	2020
11	Akbar Ali	Mobile Crowd Sensing Based Traffic Efficiency Model for Urban Traffic Congestion Control	2020
12	Muhammad Farhad Ali	Energy Efficient Multi-Forwarder Routing Protocol for Wireless Body Area Network	2019
13	Sumera Aziz	Measuring the Maturation of Gait in Children Using Computer Based Signal Processing Method	2019
14	Muhammad Irfan Ullah Khan	An Improved Intrusion Detection System for Detecting Grey Hole Attack in MANET	2019
15	Syed Rizwan Ali Shah	Programmers' Personality Prediction from Keyboard and Mouse: A Neural Networks Approach	2019
16	Wajid Ali	Usability Evaluation of Learning Management Systems for Pakistani Distance Learning Institutions	2019
17	Muhammad Fahad	Energy Efficient Multicast Routing Protocol for Wireless Sensor Networks	2019
18	Muhammad Kamran Khan	Communication Improvement and Delay Reduction Using Alternate Routing and Pending Request Table For MANET	2018
19	Muhammad Shoiab	Communication Improvement And Delay Reduction Using Alternate Routing And	2017

## International Research Projects in Collaboration with University of Jeddah Saudi Arabia

<b>Project Title</b>	Role	Amount
An Energy Efficient Framework for Scalable Social	Expert Consultant	SAR 10,000

Internet of Vehicles		
Project No. (UJ-02-066-DR), 2019.		
Dynamic Deployment of Road Side Units for Reliable Connectivity in Internet of Vehicles.	Expert Consultant	SAR 10,000,
Project No. (UJ-20-093-DR), 2020.		

# National Computing Education Accreditation Counsel (NCEAC) Visits Performed as Member of Accreditation Inspection Committee

- 1. BS Computer Science, Institute of Sothern Punjab Multan Pakistan
- 2. BS Computer Science, Karakurrum International University, Gilgit Balditstan
- 3. BS Computer Science Kohat University of Science and Technology Kohat.
- 4. BS Computer Science Abasyne University Peshawar.
- 5. BS Computer Science and BS Software Engineering COMSATS Attock.
- 6. BS Computer Science Post Graduate College for Men Mansehra.
- 7. BS Computer Science & BS Software Engineering Superior University Lahore.
- 8. BS Computer Science & BS Software Engineering University Management Technology Lahore.
- 9. BS Computer Science & BS Software Engineering Programs Lahore Garrison University Lahore.
- 10. BS Computer Science & BS Information Technology Programs Bahria University Karachi Campus January 2019.
- 11. BS Computer Science & Software Engineering programs COMSATS University Abbotabad Campus December 2018.
- 12. BS Computer Science Program SZABIST University Hyderabad Campus November 2018.
- 13. BS Software Engineering Program Muhammad Nawaz Sharif Agriculture University Multan, September 2018.

- 14. BS Software Engineering Program University of Azad Jammu and Kashmir Muzaffarabad October 2018
- 15. BS Computer Science, Bahauddin Zakariya University, Multan September 2018
- 16. BS Computer Science & Information Technology, University of Sargodha May 2018
- 17. BS Computer Science, Preston University Peshawar Campus January 2018
- 18. BS Computer Science, Bahauddin Zakariya University, Multan August 2017
- 19. BS Computer Science COMSATS University Attock Campus May 2017
- 20. BS Computer Science, Lahore University of Management Sciences (LUMS) Lahore May 2017
- 21. BS Software Engineering, Dir College of Information Technology Temargera Dir May, 2017
- 22. BS Computer Science, CECOS University of IT and Emerging Sciences Peshawar January 2017
- 23. BS Computer Science, CECOS University of IT and Emerging Sciences Peshawar January 2017
- 24. BS Software Engineering, COMSATS University Lahore Campus 2016
- 25. BS Computer Science, Pakistan Institute of Engineering and Technology Multan December 2016
- 26. BS Computer Science, Usman Institutue of Information Technology (UIT) Karachi 2016

## **Published Conference Proceedings**

- 1. Suleman khan, Ejaz Ahmed, Muhammad Shiraz, Abdullah Gani, Ainuddin Wahid Abdul Wahab, Mustapha AminuBagiwa, Forensic Challenges in Mobile Cloud Computing, 1<sup>st</sup>International Conference on Computer, Communication, and Control Technology, (I4CT'14), Kedah, Langkawi, Malaysia 2014.
- 2. LalehBoroumand, Muhammad Shiraz, Abdullah Gani, Rashid HafeezKhokar Analysis the impact of length of sequence on security and performance of port knocking authentication for mobile cloud computing, KSII The 5th International Conference on Internet (ICONI) 2013, December 12-16, 2013, at The Zign Hotel, Pattaya, Thailand.
- 3. Ejaz Ahmed, Liu Jie Yao, Salman Ali, Muhammad Shiraz, Abdullah Gani, Fuzzy based Spectrum Handoff and Channel Selection for Cognitive Radio Networks, The International Conference on Computer, Control, Informatics and its Applications 2013 (IC3INA 2013), Jakarta, Indonesia, November 19th-20th, 2013.
- 4. Muhammad Shiraz, Abdullah Gani, Rashid HafeezKhokar, Ejaz Ahmed An Extendable Simulation Framework For Modeling Application Processing Potentials Of Smart Mobile Devices For Mobile Cloud Computing, Frontier of Information Technology 2012, 17-19 december 2012.
- 5. Muhammad Shiraz, Abdullah Gani, Rashid HafeezKhokar Towards Lightweight Distributed Applications For Mobile Cloud Computing, 2012 IEEE International Conference on Computer Science and Automation Engineering (CSAE 2012), Zhangjiajie, China, May 25-27, 2012.
- 6. Muhammad Shiraz, Abdullah Gani A. (2012) "Mobile Cloud Computing: Critical Analysis of Application Deployment in Virtual Machines" 2012 Proceedings of ICICN 2012, IPCSIT vol. XX (2012) © (2012) IACSIT Press, Singapore.

- 7. SaeidAbolfazli, ZohrehSanaei, Muhammad Shiraz, Abdullah Gani, MOMCC: Market-Oriented Architecture for Mobile Cloud Computing Based on Service Oriented Architecture, MobiCC 2012: 2012 IEEE Workshop on Mobile Cloud Computing, Beijing, China (ISI-Cited Publication)
- 8. Muhammad Shiraz, Mansoor Alam Ansari Optimization of Job Superscheduler Architecture in Computational Grid Environments, WorldCom GCA, July, 2008, Las Vegas USA
- **9.** ZohrehSanaei, Saeid Abolfazli, Abdullah Gani, Muhammad Shiraz, SAMI: Service-Based Arbitrated Multi-Tier Infrastructure for Mobile Cloud Computing, MobiCC 2012: 2012 IEEE Workshop on Mobile Cloud Computing, Beijing, China (ISI- Cited Publication).

## **List of Journal Publications**

S#	Name of Author	Complete Name of Journal and Address with ISSN (Print) No.	Title of Publication	Vol. No. & Page No.	HEC Categor y W/X/	Year Publish ed	Impact Factor
1.	Abeer Iftikhar , Kashif Naseer Qureshia, Muhammad Shiraz, Saleh Albahli,	Journal of King Saud University - Science	Security, Trust and Privacy Risks, Responses, and Solutions for High- Speed Smart Cities Networks: A Systematic Literature Review	Vol. 35, No. 9 p.10178 8	W	2023	6.9
2.	Maria Ashraf Muhammad Shiraz ORCID,Almas Abbasi ,Omar Alqahtani ,Gran Badshah and Ayodele Lasisi	Sensors	Microservice Application Scheduling in Multi-Tiered Fog- Computing-Enabled IoT	Vol. 23, No 16	W	2023	3.9
3.	Muhammad Imran Khan Khalil, Syed Adeel Ali Shah, Izaz Ahmad Khan, Mohammad Hijji, Muhammad Shiraz, Qaisar Shaheen	Computers, Materials & Continua (CMC) ISSN: 1546-2218	Energy Cost Minimization Using String Matching Algorithm in Geo- Distributed Data Centers	Vol.75, No.3,	W	2023	3.10
4.	Aimen Khalid, Gran Badshah, Nasir Ayub, Muhammad Shiraz, and Mohamed Ghouse	Sustainability ISSN 2071-1050	Software Defect Prediction Analysis Using Machine Learning Techniques	Volume 15 Issue 6	W	2023	3.9
5.	Muhammad Imran Khan Khalil Syed Adeel Ali Shah Amer Taj Muhammad Shiraz Basem Alamri, Sadia Murawwat and Ghulam Hafeez	Processes ISSN 2227-9717	Renewable-Aware Geographical Load Balancing Using Option Pricing for Energy Cost Minimization in Data Centers	Volume 10 Issue 10	X	2022	3.5

S #	Name of Author	Complete Name of Journal and Address with ISSN (Print) No.	Title of Publication	Vol. No. & Page No.	HEC Categor y W/X/	Year Publish ed	Impact Factor
6.	Saba Bashir, Irfan Ullah Khattak, Aihab Khan, Farhan Hassan Khan, Abdullah Gani, and Muhammad Shiraz	Complexity	A Novel Feature Selection Method for Classification of Medical data using Filters, Wrappers and Embedded Approaches	Volume 2022   Article ID 8190814	W	2022	2.3
7.	Muhammad Wasim Khan, Salem Mustafa, Taoqer Ahmed Rana, Arfan Jaffar, Muhammad Shiraz, Muhammad Arif,	Computational Intelligence and Neuroscience	Entropy and Gaussian Filter-Based Adaptive Active Contour for Segmentation of Skin Lesions	Volume 2022 Article ID 4348235	W	2022	3.120
8.	Shafiq,Muhammad Khuram Shahzad, MuhammadAnwar, Qaisar Shaheen, Muhammad Shiraz, and Abdullah Gani	Security and Communication Networks	Transfer Learning Auto-Encoder Neural Networks for Anomaly Detection of DDoS Generating IoT Devices	2022 Article ID 8221351	W	2022	1.968
9.	MariaAshraf , Muhammad Shiraz , AlmasAbbasi, Saleh Albahli	Journal of King Saud University - Computer and Information Sciences ISSN: 1319-1578	Execution in Fog Computing: A Taxonomy, Challenges and Future Directions	Volume 34, Issue 7, July 2022, Pages 3887- 3909	W	2022	6.9
10.	Saman Amjad, Muhammad Younas , Muhammad Anwar , Qaisar Shaheen , Muhammad Shiraz, and Abdullah Gani	Wireless Communications and Mobile Computing Hindawi Pubilsher, ISSN: 1530-8669 (Print)	Data Mining Techniques to Analyze the Impact of Social Media on Academic Performance of High School Students	2022	W	2022	2.146
11.	Jahangir Jabbar, Muzammil Hussain, Hassaan Malik, Abdullah Gani, Ali Haider Khan, and Muhammad Shiraz	Computers, Materials & Continua TechScience Press ISSN: 1546-2218 (Print)	A Novel Residual Network based Convolutional Neural Network for Classification of Wrist Cracks from X-Ray Imaging	Volume 73, Issue 1 1827- 1844.	W	2022	3.10
12.	Akbar Ali , Nasir Ayub, Muhammad Shiraz, Niamat Ullah , Abdullah Gani, and	Sustainibility ISSN: 2071-1050	Traffic Efficiency Models for Urban Traffic Management Using Mobile Crowd Sensing: A Survey	13(23), 13068	W	2021	3.9

S #	Name of Author	Complete Name of Journal and Address with ISSN (Print) No.	Title of Publication	Vol. No. & Page No.	HEC Categor y W/X/	Year Publish ed	Impact Factor
	Muhammad Ahsan Qureshi						
13.	Akbar Ali, Muhammad Shiraz , Muhammad Ahsan Qureshi, , Azra Shamim	Sustainable Computing: Informatics and Systems ISSN 2210-5379	Mobile Crowd Sensing Based Dynamic Traffic Efficiency Framework for Urban Traffic Congestion Control	32 (2021): 100608.	W	2021	4.5
14.	Qaisar Shaheen, Muhammad Shiraz, Shariq Aziz Butt, Abdullah Gani,Muazzam Ali. Khan	Electronics ISSN 2079-9292	An Analytical Survey of WSNs Integration with Cloud and Fog Computing	10(21), 2625	W	2021	2.9
15.	Rehan Akram, Nasir Ayub, Fahad R. Albogamy, Gul Rukh, Sheraz Khan,	Energies ISSN 1996-1073	Towards big data electricity theft detection based on improved rusboost classifiers in smart grid	14(23), 8029	W	2021	3.2
16.	Tahirkheli, Abeer Iftikhar, Muhammad Shiraz, Bashir Hayat, Muhammad Idrees, Ahthasham Sajid, Rahat Ullah, Nasir Ayub, and Ki- Il Kim.	Electronics ISSN 2079-9292	A Survey on Modern Cloud Computing Security over Smart City Networks: Threats, Vulnerabilities, Consequences, Countermeasures, and Challenges.	10, 15 (2021):1 811.	W	2021	2.9
17.	Saleh Albahli, Nasir Ayub, Muhammad Shiraz	Applied Soft Computing ISSN: 1568-4946	Coronavirus disease (COVID-19) detection using X-ray images and enhanced DenseNet	10 (2021): 107645.	W	2021	8.7
18.	Muhammad Kamran Khan, Muhammad Shiraz, Qaisar Shaheen, Shariq Aziz Butt, Rizwan Akhtar, Muazzam A. Khan, and Wang Changda	Journal of Sensors ISSN: 1687-725X	Hierarchical Routing Protocols for Wireless Sensor Networks: Functional and Performance Analysis	2021	W	2021	1.9
19.	Muhammad Fahad Mukhtar, Muhammad Shiraz, Qaisar Shaheen, Kamran Ahsan, Riz wan Akhtar and Wa ng Changda	Wireless Communications and Mobile Computing ISSN: 1530-8669	RBM: Region-Based Mobile Routing Protocol for Wireless Sensor Networks	Volume 2021	W	2021	2.146

S#	Name of Author	Complete Name of Journal and Address with ISSN (Print) No.	Title of Publication	Vol. No. & Page No.	HEC Categor y W/X/	Year Publish ed	Impact Factor
20.	Albahli, Saleh, Muhammad Shiraz, and Nasir Ayub	IEEE Access ISSN: 2169-3536	Electricity Price Forecasting for Cloud Computing Using an Enhanced Machine Learning Model	8 (2020): 200971- 200981.	W	2020	3.9
21.	Iqbal, Sarwat, Muhammad Irfan, Kamran Ahsan, Muhammad Azhar Hussain, Muhammad Awais, Muhammad Shiraz, Mohammed Hamdi, and Abdullah Alghamdi	IEEE Access ISSN: 2169-3536	A Novel Mobile Wallet Model for Elderly Using Fingerprint as Authentication Factor	8 (2020)	W	2020	3.9
22.	Qaisar Shaheen, Muhammad Shiraz, Muhammad Usman Hashmi, Danish Mahmood, Zhu zhiyu, Rizwan Akhtar	Mobile Information Systems ISSN. 1574017X	A Lightweight Location-Aware Fog Framework (LAFF) for QoS in Internet of Things Paradigm	Volume 2020, Article ID 8871976	X	2020	1.863
23.	Ijaz Ahmad Awan, <b>Muhammad</b> <b>Shiraz</b> , Muhammad Usman Hashmi, Qaisar Shaheen , Rizwan Akhtar, and Allah Ditta	Security and Communication Networks ISSN 19390122	Secure Framework Enhancing AES Algorithm in Cloud Computing	Volume 2020  Article ID 886334	W	2020	1.968
24.	Waqas Ahmad, Nasir Ayub, Tariq Ali ,Muhammad Irfan,Muhammad Awais, <b>Muhammad</b> <b>Shiraz</b> and Adam Glowacz	Energies ISSN 1996-1073	Towards ShortTerm Electricity Load Forecasting Using Improved Support Vector Machine and Extreme Learning Machine	13(11), 2907.	W	2020	3.2
25.	Muhammad Shiraz, Laleh Boroumand, Abdullah Gani, Suleman Khan	Malaysian Journal of Computer Science ISSN: 0127-9084	An Improved Port Knocking Authentication Framework For Mobile Cloud Computing	32, no. 4 (2019): 269-283.	W	2019	0.6
26.	Qaisar Shaheen, Muhammad Shiraz, Suleman Khan, Nawsher Khan, Mohammed Ali Al-Garwi	IEEE access ISSN: 2169-3536	Towards Energy saving in Computational Clouds: Taxonomy, Review, and Open Challenges	6 (2018): 29407- 29418.	W	2018	3.9

S#	Name of Author	Complete Name of Journal and Address with ISSN (Print) No.	Title of Publication	Vol. No. & Page No.	HEC Categor y W/X/	Year Publish ed	Impact Factor
27.	Muhammad Kamran Khan, Muhammad Shiraz, Kayhan Zrar Ghafoor, Suleman Khan, Ali Safaa Sadiq, and Ghufran Ahmed	Wireless Communications & Mobile Computing ISSN: 1530-8669	EE-MRP: Energy- Efficient Multistage Routing Protocol for Wireless Sensor Networks	Volume 97, Pages 66-78	W	2018	2.146
28.	Syed Adeel Ali Shah, Ejaz Ahmed, Feng Xia, Ahmad Karim, <b>Muhammad</b> <b>Shiraz</b> , Rafidah MD Noor	IEEE Systems Journal ISSN: 1932-8184	Adaptive Beaconing Approaches for Vehicular ad hoc	Journal Volume: 12 Issue: 2	W	2018	4.4
29.	Suleman Khan, Muhammad Shiraz Laleh Boroumand Abdullah Gani Muhammad Khurra m Khan	Journal of Network and Computer Applications ISSN: 1084-8045	Towards port-knocking authentication methods for mobile cloud computing	Volume 97 Pages 66-78	W	2017	8.7
30.	Muhammad Shiraz, Rashid Hafeez Khokar, Mohsin Iftikhar, Abdullah Gani	Wireless Personal Communications ISSN: 0929-6212	A Model for Distributed and Elastic Application Processing in Mobile Cloud Computing	Volume 95, Issue 4, pp 4403– 4423	W	2017	2.2
31.	Abdullah Yousafzai , Abdullah Gani , Rafidah Md Noor, Mehdi Sookhak, Hamid Talebian, <b>Muhammad Shiraz</b>	Knowledge and Information Systems Journal ISSN: 0219-1377	Cloud resource allocation schemes: review, taxonomy, and opportunities	Volume 50, Issue 2, pp 347–381	W	2017	2.531
32.	Suleman Khan,Abdullah Gani, Ainuddin Wahid Abdul Wahab,Salman Iqbal,Ahmed Abdelaziz,Omar Adil Mahdi, Abdelmuttlib Ibrahim Abdallaahmed,Muh ammad Shiraz, Yusor Rafid Bahar Al-Mayouf,Ziar Khan,Kwangman Ko,Muhammad Khurram Khan, And Victor Chang	IEEE Access ISSN :2169-3536	Towards an Applicability of Current Network Forensics for Cloud Networks: A SWOT Analysis,	Volume 4, Page(s): 9800 - 9820	W	2016	3.9

S#	Name of Author	Complete Name of Journal and Address with ISSN (Print) No.	Title of Publication	Vol. No. & Page No.	HEC Categor y W/X/	Year Publish ed	Impact Factor
33.	Suleman khan,Abdullah Gani,Ainuddin Wahid,Abdul Wahab, <b>Muhammad</b> <b>Shiraz</b> ,Iftikhar Ahmad,	Journal of Network and Computer Applications ISSN: 1084-8045	Network Forensics: Review, Taxonomy, and Open Challenges	Volume 66, Pages 214-235	W	2016	8.7
34.	Suleman Khan, Abdullah Gani, Ainuddin Wahid Abdul Wahab,, Mustapha Aminu Bagiwa, Muhammad Shiraz, Samee U. Khan, Rajkumar Buyya, Albert Y. Zomaya	ACM Computing Surveys ISSN: 0360-0300	Cloud Log Forensics: Foundations, State- of- the-art, and Future Directions	Volume 49 Issue 1	W	2016	16.6
35.	Raja Wasim Ahmad, Abdullah Gani, Siti Hafizah Hamid, , Feng Xia, <b>Muhammad Shiraz</b>	Journal of Network and Computer Applications ISSN: 1084-8045	A Review on mobile application energy profiling: Taxonomy, state-of-the-art, and open research issues	Volume 58, Page s 42-59	W	2015	8.7
36.	Raja Wasim Ahmad, Abdullah Gani, Siti Hafizah Ab. Hamid, <b>Muhammad Shiraz</b>	Journal of Supercomputing ISSN: 0920-8542	Virtual Machine Migration in Cloud Data Centers: a review, taxonomy, and open research issues	1(7): 2473- 2515. 2015	W	2015	3.3
37.	Raja Wasim Ahmad, Abdullah Gani, Siti Hafizah Ab Hamid, Muhammad Shiraz	Journal of Network and Computer Applications ISSN: 10848045	A survey on virtual machine migration and server consolidation frameworks for cloud data center	52: 11-25	W	2015	8.7
38.	Muhammad Ahsan Qureshi, Rafidah Md Noor, Shahaboddin Shamshirband, <b>Muhammad</b> <b>Shiraz</b> , Abdullah Gani	Arabian Journal of Science and Engineering ISSN: 2191-4281	Survey on Obstacle Modeling Patterns in Radio Propagation Models for Vehicular Ad Hoc Networks	40(5):13 85-1407	W	2015	2.9
39.	Muhammad Shiraz, Abdullah Gani, Azra Shamim, Suleman Khan, Raja Wasim Ahmad.	Journal of Grid Computing ISSN: 1570-7873	Energy Efficient Computational Offloading Framework for Mobile Cloud Computing Application	13(1), 1- 18/ 2015	W	2015	5.5
40.	Jie Yao Liu,Ejaz Ahmed, <b>Muhammad</b> <b>Shiraz</b> ,Abdullah Gani, Rajkumar	Journal of Network and Computer Applications ISSN: 10848045	Partitioning Algorithms in Mobile Cloud Computing: Taxonomy, Review and Future Directions	Volume 48, Pages 99-117	W	2015	8.7

S#	Name of Author	Complete Name of Journal and Address with ISSN (Print) No.	Title of Publication	Vol. No. & Page No.	HEC Categor y W/X/	Year Publish ed	Impact Factor
	Buyya,Ahsan						
41.	Qureshi  Muhammad  Shiraz, Mehdi  Sookhak , Abdullah  Gani, Syed Adeel  Ali Shah.	Journal of Network and Computer Applications ISSN: 10848045	A Study on Critical Analysis of Computational Frameworks for Mobile Cloud Computing	Volume 47, Pages 47-60	W	2015	8.7
42.	Azra Shamim, Vimala Balakrishnan, Muhammad Tahir and <b>Muhammad</b> Shiraz	The Scientific World Journal Publication details ISSN 2356-6140	Critical Product Features' Identification using an Opinion Analyzer Offloading	Volume 2014, 9 pages	W	2014	1.73
43.	Muhammad Shiraz, Abdullah Gani, Raja Wasim Ahmad, Syed Adeel Ali Shah, Ahmad Karim, Zulkanain Abdul Rahman	Plos One ISSN 1932-6203	A Lightweight Distributed Framework for Computational Offloading in Mobile Cloud Computing	Volume 9(8)	W	2014	3.7
44.	Nawsher Khan, Ibrar Yaqoob, Ibrahim Abaker Targio Hashem, Zakira Inayat, Waleed Kamaleldin Mahmoud Ali, Muhammad Alam, Muhammad Shiraz, Abdullah Gani	The Scientific World Journal ISSN 2356-6140	Big Data: Survey, Technologies, Opportunities, and Challenges	Volume 2014, 9 pages	W	2014	1.73
45.	Suleman Khan, Muhammad Shiraz, Ainuddin Wahid Abdul Wahab, Abdullah Gani, Qi Han, Zulkanain Bin Abdul Rahman	The Scientific World Journal ISSN 2356-6140	A Comprehensive Review on Adaptability of Network Forensics Frameworks for Mobile Cloud Computing	Volume 2014, 9 pages	W	2014	1.73
46.	Qi Han, Muhammad Shiraz, Liu, Abdullah Gani, Zulkanain Bin Abdul Rahman,	Frontiers of Information Technology and Electronic Engineering ISSN 2095-9184	Data Center Network Architecture in Cloud Computing: A Taxonomy and Review	15(9):77 6- 793/2014	W	2014	3
47.	Abdullah Gani, Golam Moktader Nayeem, <b>Muhammad</b> <b>Shiraz</b> , Mehdi Sookhak, Md	Journal of Network and Computer Applications ISSN: 10848045	A Review on Interworking and Mobility Techniques for Seamless Connectivity in Mobile Cloud Computing	43, 84– 102	W	2014	8.7

S #	Name of Author	Complete Name of Journal and Address with ISSN (Print) No.	Title of Publication	Vol. No. & Page No.	HEC Categor y W/X/	Year Publish ed	Impact Factor
	Whaiduzzaman, Suleman Khan						
48.	Han Qi, Muhammad Shiraz,Abdullah Gani,Md Whaiduzzaman,Sule man Khan	Journal of Supercomputing ISSN: 0920-8542	Sierpinski Triangle Based Data Center Architecture in Cloud Computing	69(2), 887-907/ 2014	W	2014	3.3
49.	Ahmad Karim, Rosli Bin Salleh, Muhammad Shiraz, Syed Adeel Ali Shah, Irfan Awan, Nor Badrul Anuar	Frontiers of Information Technology and Electronic Engineering ISSN 2095-9184	Botnet Detection Techniques: Review, Future Trends and Issues	Volume 15, Issue 11, pp 943–983	W	2014	3
50.	Syed Adeel Ali Shah, <b>Muhammad</b> <b>Shiraz</b> , Mostofa, Kamal Nasir and Rafidah Binti Md Noor,	Frontiers of Information Technology and Electronic Engineering ISSN 2095-9184	On Unicast Communication Protocols for Urban Vehicular Networks: Taxonomy and Parametric Comparison	Volume 15, Issue 7, pp 489–513	W	2014	3
51.	Md Whaiduzzaman, Abdullah Gani, Nor Badrul Anuar, Muhammad Shiraz, Mohammad Nazmul Haque, Tanzeena Haque	The Scientific World Journal ISSN 2356-6140	Cloud Service Selection using Multi-Criteria Decision Analysis	Volume 2014, 9 pages	W	2014	1.73
52.	<b>Muhammad</b> <b>Shiraz</b> , Abdullah Gani	Journal of Supercomputing ISSN: 0920-8542	A lightweight active service migration framework for computational offloading in mobile cloud computing	68( 2):978- 995/	W	2014	3.3
53.	Muhammad Shiraz, Ejaz Ahmed, Abdullah Gani, Qi Han	Journal of Supercomputing ISSN: 0920-8542	Investigation on Runtime Partitioning of Elastic Mobile Applications for Mobile Cloud Computing	67(1): 84- 103/2014	W	2013	3.3
54.	Muhammad Shiraz, Abdullah Gani, Rashid Hafeez Khokhar, and Rajkumar Buyya	IEEE Communications Surveys and Tutorials ISSN: 1553-877X	A Review on Distributed Application Processing Frameworks in Smart Mobile Devices for Mobile Cloud Computing	15(3):12 94–1313	W	2013	35.6
55.	Muhammad Shiraz, Saeid Abolfazli, Zohreh Sanaei, Abdullah Gani	Journal of Supercomputing ISSN: 0920-8542	A study on virtual machine deployment for application outsourcing in mobile cloud computing	63(3), 946-964 / 2013	W	2013	3.3

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56.	Ejaz Ahmed, <b>Muhammad</b> <b>Shiraz,</b> Abdullah Gani	Malaysian Journal of Computer Science ISSN: 0127-9084	Spectrum-aware Distributed Channel Assignment in Cognitive Radio Wireless Mesh Networks	26(13): 232- 250/2013	W	2013	0.6
57.	Rashid Hafeez Khokhar, Tanveer Zia, Kayhan Zrar Ghafoor, Jaime Lloret, <b>Muhammad</b> <b>Shiraz</b>	KSII Transactions on Internet and Information Systems ISSN: 1976-7277	Realistic and Efficient Radio Propagation Model to Handle Obstacles for Vehicle- to-X Communications	7(8),193 3-1954/ 2013	W	2013	1.5
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