

Muhammad Ashraf

Assistant Professor

School of Electrical Engineering and Computer Science

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Contact:

LinkedIn:



About

Dr. Muhammad Ashraf is working as Assistant Professor in the School of Electrical Engineering and Computer Science. Dr. Muhammad Ashraf has a PhD in Cryptography. Dr. Muhammad Ashraf has published 15 research articles & conference papers having a citation count of 133, carried out 2 projects and filed 0 intellectual property.

Qualifications

PhD in Cryptography Middle East Technical University , Turkey	2009 - 2013
MS in Information Security Military College of Signals , Pakistan	2005 - 2009
BE in Avionics College of Aeronautical Engineering (CAE) , Pakistan	1993 - 1996

Experience

Assistant Professor School of Electrical Engineering and Computer Science	2024- Present
Defence Faculty College of Aeronautical Engineering	2019 - 2019
Defence Faculty College of Aeronautical Engineering	2017 - 2019
DG Institute of Avionics and Aeronautics Air University, Islamabad , E-9 Air University Islamabad	2022 - 2024
HoD Department of Avionics Engineering , Air University	2022 - 2024
Dean Undergraduate National University of Technology, Islamabad , I-12, IJP road Islamabad	2021 - 2022
Director Center of Cryptology and Security , Air Headquarters, Islamabad	2019 - 2021
Def Fac NUST, CAE , PAF Academy Risalpur	2016 - 2019
TVF Air University Islamabad , Air University	2013 - 2016
Dy Director Center of Cryptology and Security , Air Headquarters Islamabad	2013 - 2016
Student Middle East Technical University , METU, Ankara Turkey	2009 - 2013
Dy Director Dte of Cyber Warfare , Air Headquarters, Islamabad	2008 - 2009
Dy Director Dte of Comm & Dte of Networks , Air Headquarters, Islamabad	2007 - 2008
Research Officer Kamra Avionics Rebuild Factory , KARF, PAC Kamra	2004 - 2005
Research Officer No 606 R&D Wing , PAF Camp Badaber	1998 - 2004
Avionics Instructor NUST, CAE , PAF Academy Risalpur	1996 - 1998

Research Projects

National Projects	
VoIP - Based Communication System Funding Agency: NUST Amount: PKR 750,000.00 Status: Approved_inprocess	
Molecular and Biochemical characterization of A-genome Synthetic hexaploids for their Glu-1 allelic variation Funding Agency: HEC Amount: PKR 500,000.00 Status: Completed	2011

International Projects

Research Articles

BERT-Based Deceptive Review Detection in Social Media: Introducing Deceptive BERT <i>Muhammad Ashraf Syeda Basmah Hyder Noshina Tariq Syed Atif Moqurrab Joon Yoo Gautam Srivastava</i>	2024
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IEEE Transactions on Computational Social Systems, Volume 11, Issue 6, Pages 7234-7243	
Impact Factor: 4.500 Quartile: 1 Citations: 8	
DOI: https://doi.org/10.1109/TCSS.2024.3403937	
Adaptive MAC Scheme for Interference Management in Ad Hoc IoT Networks	2024
<i>Muhammad Ashraf Ehsan Ali Adnan Fazil Jihyoung Ryu Muhammad Zakwan</i>	
<i>Applied Sciences</i> , Volume 14(19), Article Number 8628	
Impact Factor: 2.500 Quartile: 1	
DOI: https://doi.org/10.3390/app14198628	
FL-DSFA: Securing RPL-Based IoT Networks against Selective Forwarding Attacks Using Federated Learning	2024
<i>Muhammad Ashraf Rabia Khan Noshina Tariq Farrukh Aslam Khan Saira Shafi Aftab Ali</i>	
<i>Sensors</i> , Volume 24(17), Article Number 5834	
Impact Factor: 3.400 Quartile: 2 Citations: 6	
DOI: https://doi.org/10.3390/s24175834	
Exploration of PQC-Based Digital Signature Schemes in TLS Certificates	2024
<i>Muhammad Umer Akram Muhammad Ashraf Tayyab Rehman Muhammad Abdur Rehman Javaid Muhammad Ali Khalid</i>	
<i>Asian Bulletin of Big Data Management</i> , Volume 4(3), Pages 22-41	
Impact Factor: N/A	
DOI: https://doi.org/10.62019/abbdm.v4i3.189	
BBAD: Blockchain-Backed Assault Detection for Cyber Physical Systems	2024
<i>Muhammad Ashraf Masooma Anwar Noshina Tariq Syed Atif Moqurrab Bayan Alabdullah Hatoon S. Alsagri Abrar Almjally</i>	
<i>IEEE Access</i> , Volume 12, Pages 101878-101894	
Impact Factor: 3.400 Quartile: 2 Citations: 5	
DOI: https://doi.org/10.1109/ACCESS.2024.3404656	
Impact of Post Quantum Digital Signatures On Block Chain: Comparative Analysis	2024
<i>Muhammad Ashraf</i>	
<i>The Asian Bulletin of Big Data Management</i> , Volume 4, Issue 1, Pages 121-138	
Impact Factor: N/A	
DOI: https://doi.org/10.62019/abbdm.v4i1.133	
Securing Smart Healthcare Cyber-Physical Systems against Blackhole and Greyhole Attacks Using a Blockchain-Enabled Gini Index Framework	2023
<i>Muhammad Ashraf Mannan Javed Noshina Tariq Farrukh Aslam Khan Muhammad Asim Muhammad Imran</i>	
<i>Sensors</i> , Volume 23(23), Article Number 9372	
Impact Factor: 3.400 Quartile: 2 Citations: 19	
DOI: https://doi.org/10.3390/s23239372	
A Fog-based Privacy-Preserving Federated Learning System for Smart Healthcare Applications	2023
<i>Muhammad Ashraf Maryum Butt Noshina Tariq Hatoon S. Alsagri Syed Atif Moqurrab Haya Abdullah A. Alhakbani Yousef A. Alduraywish</i>	
<i>Electronics</i> , Volume 12(19), Article Number 4074	
Impact Factor: 2.600 Quartile: 2 Citations: 17	
DOI: 10.3390/electronics12194074	
Bft-iomt: A Blockchain-based trust mechanism to mitigate sybil attack using fuzzy logic in the internet of medical things	2023
<i>Shayan E Ali Noshina Tariq Farrukh Aslam Khan Muhammad Ashraf Wadood Abdul Kashif Saleem</i>	
<i>Sensors</i> , Volume 23(9), Article Number 4265	
Impact Factor: 3.400 Quartile: 2 Citations: 43	
DOI: https://doi.org/10.3390/s23094265	
GITM: A GINI Index-Based Trust Mechanism to Mitigate and Isolate Sybil Attack in RPL-Enabled Smart Grid Advanced Metering Infrastructures	2023
<i>Muhammad Hassan Noshina Tariq Amjad Alsirhani Abdullah Alomari Farrukh Aslam Khan Mohammed Mujib Alshahrani Muhammad Ashraf Mamoonah Humayun</i>	
<i>IEEE Access</i> , Volume:11, Pages:62697-62720	
Impact Factor: 3.400 Quartile: 2 Citations: 23	
DOI: https://doi.org/10.1109/ACCESS.2023.3286536	
Design and Development of Secure Mobile Communication over GSM Network Using Open Source Operating System (OS)	2019

Muhammad Ashraf Arslan Asim
VFAST Transaction on Software Engineering, Volume 7, Number 1, Pages 1-5
Impact Factor: N/A
DOI: <https://doi.org/10.21015/vtse.v14i1.535>

An overview of trace based public key cryptography over finite fields 2014

Ersan Akyildiz Muhammad Ashraf
Journal of Computational and Applied Mathematics, Volume:259, Issue: PART B, Pages 599-621
Impact Factor: 1.266 | **Quartile:** 1 | **Citations:** 5
DOI: [10.1016/j.cam.2013.10.022](https://doi.org/10.1016/j.cam.2013.10.022)

Message transmission for GH-public key cryptosystem 2014

Muhammad Ashraf Barış Bülent Kirlar
Journal of Computational and Applied Mathematics, Volume 259, Part B, Pages 578-585
Impact Factor: 1.266 | **Quartile:** 1 | **Citations:** 7
DOI: <https://doi.org/10.1016/j.cam.2013.10.005>

On the alternate models of elliptic curves 2012

Muhammad Ashraf Baris Kirlar
International Journal of Information Security Science, Volume 1, No.2, Pages 49-66
Impact Factor: N/A

Conference Proceedings

Parallel implementation of 2D-DWT by purging read after write dependency for high speed applications 2007

Liaqat Ali Khan Ali Hassan Muhammad Ashraf Muhammad Shamim Baig
Proceedings - 3rd International Conference on Emerging Technologies, ICET 2007, res.country(177,)
Citations: N/A
DOI: [10.1109/ICET.2007.4516355](https://doi.org/10.1109/ICET.2007.4516355)