

Muhammad Usama

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About

Dr. Muhammad Usama is working as Assistant Professor in the Pakistan Navy Engineering College. Dr. Muhammad Usama has a PhD in Information Security. Dr. Muhammad Usama has published 17 research articles & conference papers having a citation count of 199, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Information Security Universiti Teknologi Petronas , Malaysia	2014 - 2018
MS in Software Engineering Bahria University , Pakistan	2006 - 2008
BS in Software Engineering Bahria University , Pakistan	2000 - 2005

Experience

Assistant Professor Pakistan Navy Engineering College	2023- Present
Assistant Professor FAST-NU , FAST-NU, Karachi Pakistan	2022 - 2023
Assistant Professor DHA-SUFFA University , DHA-SUFFA University, Karachi, Pakistan	2020 - 2022
Research Assistant Qatar University , Qatar University, Doha, Qatar	2019 - 2020
Assistant Professor Bahria University , Bahria University, Karachi, Pakistan	2018 - 2019
Graduate Assistant University Technology Petronas , University Technology Petronas, Malaysia	2014 - 2018
Lecturer King Saud University , King Saud University, Riyadh, Saudi Arabia	2010 - 2013
Assistant Manager SUPARCO , SUPARCO, Karachi, Pakistan	2007 - 2010
Software Developer SigmaFlow , SigmaFlow, Karachi, Pakistan	2006 - 2007
Software Developer East Tech International , East Tech International, Karachi, Pakistan	2006 - 2006

Research Articles

Enhancing Healthcare Cybersecurity through the Development and Evaluation of Intrusion Detection Systems <i>Muhammad Usama Arshad Aziz Imtiaz Hassan Shynar Akhmetzhanova Sultan Noman Qasem Abdullah M. Albarrak Tawfik Al-Hadhrami</i> <i>Computer Modelling in Engineering & Sciences</i> , Volume:144, Issue:1, Page:1225-1248 Impact Factor: 2.500 Quartile: 1 DOI: https://doi.org/10.32604/cmes.2025.067098	2025
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Enhancing security in 6G-enabled wireless sensor networks for smart cities: a multi-deep learning intrusion detection approach <i>Muhammad Usama Muhammad Shahbaz Khan Oumaima Saidani Hussam Al Hamadi Noha Alnazzawi Mohammed S. Alshehri Jawad Ahmad Waqar Khan</i> <i>Frontiers in Sustainable Cities</i> , Vol 7, Article Number: 1580006 Impact Factor: 2.100 Quartile: 2 DOI: https://doi.org/10.3389/frsc.2025.1580006	2025
IDCE: Integrated Data Compression and Encryption for Enhanced Security and Efficiency <i>Muhammad Usama Arshad Aziz Suliman A. Alsuhibany Imtiaz Hassan Farrukh Yuldashev</i> <i>Computer Modelling in Engineering & Sciences</i> , Volume 143(1), Pages 1029-1048 Impact Factor: 2.200 Quartile: 2 DOI: https://doi.org/10.32604/cmes.2025.061787	2025
An efficient secure data compression technique based on chaos and adaptive Huffman coding <i>Muhammad Usama Qutaibah M. Malluhi Nordin Zakaria Imran Razzak Waheed Iqbal</i> <i>Peer-to-Peer Network Applications</i> , Volume 14, Issue 5, Pages 2651-2664 Impact Factor: 3.488 Quartile: 2 Citations: 12 DOI: https://doi.org/10.1007/s12083-020-00981-8	2021
An efficient construction of key-dependent substitution box based on chaotic sine map <i>Muhammad Usama Osama Rehman Imran Memon Safdar Rizvi</i> <i>International Journal of Distributed Sensor Networks</i> , Volume 15, Issue 12, Pages 1-9 Impact Factor: 1.151 Quartile: 4 Citations: 20 DOI: 10.1177/1550147719895957	2019
An efficient, secure, and queryable encryption for NoSQL-based databases hosted on untrusted cloud environments <i>Mamdouh Alenezi Muhammad Usama Khaled Almustafta Waheed Iqbal Muhammad Ali Raza Tanveer Khan</i> <i>International Journal of Information Security and Privacy</i> , Volume 13, Issue 2, Pages 14-31 Impact Factor: N/A Citations: 5 DOI: 10.4018/IJISP.2019040102	2019
Chaos-based simultaneous compression and encryption for Hadoop <i>Muhammad Usama Nordin Zakaria</i> <i>PLoS ONE</i> , Volume 12, Issue 1, Article Number e0168207 Impact Factor: 2.766 Quartile: 1 Citations: 12 DOI: 10.1371/journal.pone.0168207	2017
Range GLS-Coding: A Scheme of Simultaneous Data Compression and Encryption <i>Muhammad Usama Nordin Zakaria</i> <i>Journal of Informatics and Mathematical Sciences</i> , Vol:8, No. 4, Pages:273-279 Impact Factor: N/A DOI: 10.26713/jims.v8i4.557	2016
Chaos based secure storage and transmission of digital medical images <i>Fahad bin Muhaya Muhammad Usama Fahim Akhter</i> <i>Applied Mathematics and Information Sciences</i> , Volume 8, Issue 1, Pages 27-33 Impact Factor: N/A Citations: 1 DOI: http://dx.doi.org/10.12785/amis/081L04	2014
Framework for secure wireless communication in wireless sensor networks <i>Muhammad Usama Fahad bin Muhaya</i> <i>International Journal of Distributed Sensor Networks</i> , Volume 2013, Article ID 585491, 8 pages Impact Factor: 0.923 Quartile: 3 Citations: 1 DOI: http://dx.doi.org/10.1155/2013/585491	2013
Satellite Image Encryption for C4I System <i>Abdullah Sharaf Alghamdi Hanif Ullah Muhammad Usama Iftikhar Ahmad Khalid Alnafajan</i> <i>International Journal of the Physical Sciences</i> , Vol:6, Issue:17, Pages:4255-4263, Article Number: E4CC61B26745 Impact Factor: N/A DOI: 10.5897/IJPS11.470	2011
Chaos-based secure satellite imagery cryptosystem <i>Muhammad Usama Muhammad Khurram Khan Khaled Alghathbar Changhoon Lee</i> <i>Computers and Mathematics with Applications</i> , Volume 60, Issue 2, Pages 326-337	2010

Conference Proceedings

- Secure NoSQL Over Cloud Using Data Decomposition and Queryable Encryption** 2019
Muhammad Ali Raza Muhammad Usama Waheed Iqbal Faisal Bukhari
CIntelligent Technologies and Applications: Second International Conference, INTAP, res.country(177,)
Citations: N/A
DOI: 10.1007/978-981-15-5232-8_35
- Modified AES using chaotic key generator for satellite imagery encryption** 2009
Fahad Bin Muhaya Muhammad Usama Muhammad Khurram Khan
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) res.country(121,)
Citations: N/A
DOI: 10.1007/978-3-642-04070-2_107
- Satellite imagery security application (SISA)** 2008
Muhammad Usama Muhammad Khurram Khan
2008 IEEE International Multitopic Conference , res.country(177,)
Citations: N/A
DOI: 10.1109/INMIC.2008.4777741
- AINAN: Collaborative application for protein visualization & analyses** 2008
Rauf Malick Muhammad Usama Athar Abbas Waheed Iqbal Kamran Azim
Proc. 9th ACIS Int. Conf. Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing, SNPD 2008 and 2nd Int. Workshop on Advanced Internet Technology and Applications , res.country(217,)
Citations: N/A
DOI: 10.1109/SNPD.2008.123
- Classical and chaotic encryption techniques for the security of satellite images** 2008
Muhammad Usama Muhammad Khurram Khan
IEEE- International Symposium on Biometrics and Security Technologies, ISBAST'08, res.country(177,)
Citations: N/A
DOI: 10.1109/ISBAST.2008.4547663