

Madiha Khalid

Assistant Professor

School of Electrical Engineering and Computer Science

Email: madiha.khalid@seecs.edu.pk

Contact:

LinkedIn: www.linkedin.com/in/ madiha-khalid-221245156



About

Dr. Madiha Khalid is working as Assistant Professor in the School of Electrical Engineering and Computer Science. Dr. Madiha Khalid has a PhD in Information Security. Dr. Madiha Khalid has published 15 research articles & conference papers having a citation count of 27, carried out 2 projects and filed 0 intellectual property.

Qualifications

PhD in Information Security	2016 - 2023
Bahria University , Pakistan	
MS in Control Systems	2011 - 2012
UET Taxila , Pakistan	
BS in Electronics	2006 - 2010
UET Lahore , Pakistan	

Experience

Assistant Professor	2023- Present
School of Electrical Engineering and Computer Science	
Assistant Professor	2019 - 2023
Bahria University , BU-SEAS, H11	
Lecturer	2015 - 2019
Bahria University , BU-E* Campus	

Research Projects

National Projects	
AI-based Type Detection of Design for Crypto S-Boxes	2024
Funding Agency: NESCOM	
Amount: PKR 200,000.00	
Status: Approved_inprocess	
Quantum Implementation of Lightweight Ciphers	2024
Funding Agency: NESCOM	
Amount: PKR 300,000.00	
Status: Approved_inprocess	
International Projects	

Enhancing Ransomware Detection with Machine Learning Techniques and Effective API Integration

Asad Iqbal Mehdi Hussain Kaiser Riaz Madiha Khalid RAFIA MUMTAZ Ki-Hyun Jung

Computers, Materials & Continua , Pages 1-22

Impact Factor: 1.700 | Quartile: 3

DOI: <https://doi.org/10.32604/cmc.2025.064260>

2025

Innovative hip-knee health evaluation: Leveraging pose estimation for single-leg stance postural stability assessment

Safee Rehman Nadia Sultan Joddatt Fatima Muhammad Najam-ul-Islam Dr Madiha Khalid

Measurement and Control (United Kingdom), Pages 1-13

Impact Factor: 1.300 | Quartile: 3

DOI: <https://journals.sagepub.com/doi/10.1177/00202940241295875>

2024

Ultralightweight resilient mutual authentication protocol for IoT based edge networks

Madiha Khalid Umar Mujahid M. Najam-ul-Islam Hongsik Choi Imtiaz Alam Shahzad Sarwar

Journal of Ambient Intelligence and Humanized Computing, Pages 1-12

Impact Factor: 3.662 | Quartile: 2 | Citations: 5

DOI: <https://link.springer.com/article/10.1007/s12652-020-02732-2>

2021

Ultralightweight RFID Authentication Protocols for Low-Cost Passive RFID Tags

Madiha Khalid Umar Mujahid Najam-ul-Islam Muhammad

Security and Communication Networks, Volume 2019, Article ID 3295616, 25 pages

Impact Factor: 1.288 | Quartile: 4 | Citations: 15

DOI: <https://doi.org/10.1155/2019/3295616>

2019

Cryptanalysis of ultralightweight mutual authentication protocol for radio frequency identification enabled Internet of Things networks

Madiha Khalid Umar Mujahid Muhammad Najam-ul-Islam

International Journal of Distributed Sensor Networks, Volume 14, Issue 8, Pages 1-9

Impact Factor: 1.614 | Quartile: 3

DOI: <https://doi.org/10.1177/1550147718795>

2018

Efficient Hardware Implementation of KMAP+: An Ultralightweight Mutual Authentication Protocol

Umar Mujahid Muhammad Najam-ul-Islam Madiha Khalid

Journal of Circuits Systems and Computers, Volume 27, Issue 2, Article Number 1850033

Impact Factor: 0.939 | Quartile: 4 | Citations: 7

DOI: <https://doi.org/10.1142/S0218126618500330>

2018

Conference Proceedings

<p>Probabilistic Full Disclosure Attack On ISO-29167:Speck</p> <p><i>Armeen Syed Binh Tran Dr Madiha Khalid Umar Mujahid Muhammad Najam-ul-Islam</i></p> <p><i>ICT for Intelligent Systems (2024)</i>, res.country(233,)</p> <p>Citations: N/A</p> <p>DOI: https://doi.org/10.1007/978-981-97-5799-2_1</p>	2024
<p>Formal Security Analysis of Generalized Ultralightweight Mutual Authentication Protocol</p> <p><i>Muhammad Najam-ul-Islam Madiha Khalid Umar Mujahid</i></p> <p><i>Future Technologies Conference (FTC) 2023</i>, res.country(233,)</p> <p>Citations: N/A</p> <p>DOI: 10.1007/978-3-031-47451-4_40</p>	2023
<p>FPGA Based Emulation Of B92 QKD Protocol</p> <p><i>Umar Mujahid Madiha Khalid Muhammad Najam-ul-Islam</i></p> <p><i>2023 57th Annual Conference on Information Sciences and Systems, CISS 2023</i>, res.country(233,)</p> <p>Citations: N/A</p> <p>DOI: 10.1109/CISS56502.2023.10089628</p>	2023
<p>Cryptanalysis of Resource Constraint IoT Network Authentication Protocol RAPP</p> <p><i>Osman Khan Madiha Khalid Umar Mujahid Muhammad Najam-ul-Islam</i></p> <p><i>2021 International Bhurban Conference on Applied Sciences and Technologies (IBCAST)</i>, res.country(177,)</p> <p>Citations: N/A</p> <p>DOI: 10.1109/IBCAST51254.2021.9393199</p>	2021
<p>Cryptanalysis of the ultralightweight MAC protocol</p> <p><i>Madiha Khalid Umar Mujahid Hyesung Park Muhammad Najam-ul-Islam</i></p> <p><i>13th International Conference on Open Source Systems and Technologies (ICOSST)</i>, res.country(177,)</p> <p>Citations: N/A</p> <p>DOI: 10.1109/ICOSST48232.2019.9044036</p>	2019
<p>Recursive Cryptanalysis of the IoT Authentication Protocol</p> <p><i>Muhammad Najam-ul-Islam Madiha Khalid Hyesung Park Umar Khokhar</i></p> <p><i>2019 IEEE 1st Global Power, Energy and Communication Conference, GPECOM 2019</i>, res.country(224,)</p> <p>Citations: N/A</p> <p>DOI: 10.1109/GPECOM.2019.8778569</p>	2019
<p>Probabilistic full disclosure attack on IoT network authentication protocol</p> <p><i>Madiha Khalid Umar Mujahid Muhammad Najam-ul-Islam Binh Tran</i></p> <p><i>2019 Future of Information and Communication Conference (FICC)</i>, res.country(233,)</p> <p>Citations: N/A</p> <p>DOI: 10.1007/978-3-030-12385-7_52</p>	2019
<p>Cryptanalysis of Radio Frequency Identification System Mutual Authentication Protocol</p> <p><i>Muhammad Najam-ul-Islam Madiha Khalid Umar Mujahid Aniqah Tahir</i></p> <p><i>2019 2nd International Conference on Communication, Computing and Digital Systems, C-CODE 2019</i>, res.country(177,)</p> <p>Citations: N/A</p> <p>DOI: 10.1109/C-CODE.2019.8681046</p>	2019
<p>Security framework of Ultralightweight Mutual Authentication Protocols for low cost RFID tags</p> <p><i>Madiha Khalid Umar Mujahid</i></p> <p><i>2017 International Conference on Communication, Computing and Digital Systems, C-CODE 2017</i>, res.country(177,)</p> <p>Citations: N/A</p> <p>DOI: 10.1109/C-CODE.2017.7918896</p>	2017

Editorial Activities

<p>N/A</p> <p>Reviewed Papers for Journals</p> <p>Impact Factor: N/A</p>	2025
<p>N/A</p> <p>Reviewed Papers for Journals</p> <p>Impact Factor: N/A</p>	2025

N/A	2025
Reviewed Papers for Journals	
Impact Factor: N/A	
N/A	2025
Reviewed Papers for Journals	
Impact Factor: N/A	
N/A	2025
Reviewed Papers for Journals	
Impact Factor: N/A	
	2025
Edited Journal Issue / Proceeding / Book	
Impact Factor: N/A	
IEEE Internet of Things Journal	2025
Reviewed Papers for Journals	
Impact Factor: 8.3	
Journal of Information Security and Applications	2025
Reviewed Papers for Journals	
Impact Factor: 3.8	
IEEE Internet of Things Journal	2025
Reviewed Papers for Journals	
Impact Factor: 8	
N/A	2024
Reviewed Papers for Journals	
Impact Factor: --	
N/A	2024
Reviewed Papers for Journals	
Impact Factor: --	
EasyChair	2024
Edited Journal Issue / Proceeding / Book	
Impact Factor: N/A	
N/A	2024
Reviewed Papers for Journals	
Impact Factor: N/A	
N/A	2024
Reviewed Papers for Journals	
Impact Factor: N/A	
EasyChair	2024
Edited Journal Issue / Proceeding / Book	
Impact Factor: N/A	
PLOS ONE	2024
Reviewed Papers for Journals	
Impact Factor: 2.9	
PLOS One	2024
Reviewed Papers for Journals	
Impact Factor: 3.7	
N/A	2024
Edited Journal Issue / Proceeding / Book	
Impact Factor: N/A	
N/A	2024
Edited Journal Issue / Proceeding / Book	
Impact Factor: N/A	
	2024
Edited Journal Issue / Proceeding / Book	
Impact Factor: N/A	

