

Takreem Haider

Assistant Professor

College of Electrical & Mechanical Engineering

Email: takreem.haider@ceme.nust.edu.pk

Contact:



About

Dr. Takreem Haider is working as Assistant Professor in the College of Electrical & Mechanical Engineering. Dr. Takreem Haider has a PhD in Mathematics Cryptography. Dr. Takreem Haider has published 8 research articles & conference papers having a citation count of 106, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Mathematics Cryptography Quaid-i-Azam University , Pakistan	2019 - 2024
MPhil in Mathematics Data Science Quaid-i-Azam University , Pakistan	2016 - 2018
MSc in Mathematics University of the Punjab , Pakistan	2013 - 2015

Experience

Assistant Professor College of Electrical & Mechanical Engineering	2024- Present
Research Scholar Indiana University Bloomington , Luddy School of Informatics, Computing, and Engineering	2023 - 2023

An Efficient S-Box Generation With Mutation Optimization for Secure Image Encryption

Takreem Haider Aqeel Ejaz Ghulam Murtaza Naveed Ahmed Aza Umar Hayat

Security and Privacy , Volume:8, Issue4, Article Number: e70068, Pages:

Impact Factor: 2.1 | **Quartile:** 3

DOI: <https://doi.org/10.1002/spy2.70068>

2025

An optimized watermarking scheme based on genetic algorithm and elliptic curve

Takreem Haider Naveed Ahmed Azam Umar Hayat

Swarm and Evolutionary Computation , Volume 91, Article Number 101723

Impact Factor: 8.200 | **Quartile:** 1 | **Citations:** 2

DOI: <https://doi.org/10.1016/j.swevo.2024.101723>

2024

Substitution box generator with enhanced cryptographic properties and minimal computation time

Takreem Haider Naveed Ahmed Azam Umar Hayat

Expert Systems with Applications , Volume 241, Article Number 122779

Impact Factor: 8.5 | **Quartile:** 1 | **Citations:** 20

DOI: [10.1016/j.eswa.2023.122779](https://doi.org/10.1016/j.eswa.2023.122779)

2024

A novel pseudo-random number generator based on multivariable optimization for image-cryptographic applications

Takreem Haider Saúl A. Blanco Umar Hayat

Expert Systems with Applications , Volume 240, Article Number 122446

Impact Factor: 8.5 | **Quartile:** 1 | **Citations:** 10

DOI: [10.1016/j.eswa.2023.122446](https://doi.org/10.1016/j.eswa.2023.122446)

2024

A Novel Image Encryption Scheme Based on ABC Algorithm and Elliptic Curves

Takreem Haider Naveed Ahmed Azam Umar Hayat

Arabian Journal for Science and Engineering , Volume 48, Issue 8, Pages 9827-9847

Impact Factor: 2.9 | **Quartile:** 2 | **Citations:** 9

DOI: [10.1007/s13369-022-07383-3](https://doi.org/10.1007/s13369-022-07383-3)

2023

An Efficient and Secure Cryptographic Algorithm Using Elliptic Curves and Max-Plus Algebra-Based Wavelet Transform

Takreem Haider Kanza Abdul Sattar Umar Hayat Miguel D. Bustamante

Applied Sciences , Volume 13, Issue 14, Article Number 8385

Impact Factor: 2.7 | **Quartile:** 2 | **Citations:** 7

DOI: [10.3390/app13148385](https://doi.org/10.3390/app13148385)

2023

Identification of radon anomalies induced by earthquake activity using intelligent systems

Takreem Haider Adnan Barkat Umar Hayat Aamir Ali Muhammad Awais Aftab Alam Khaista Rehman Muhammad Ali Shah

Journal of Geochemical Exploration , Volume 222, Article Number 106709

Impact Factor: 4.166 | **Quartile:** 2 | **Citations:** 20

DOI: [10.1016/j.gexplo.2020.106709](https://doi.org/10.1016/j.gexplo.2020.106709)

2021

Time series analysis of soil radon in Northern Pakistan: Implications for earthquake forecasting

Takreem Haider Adnan Barkat Aamir Ali Umar Hayat Quentin G. Crowley Khaista Rehman Naila Siddique Talat Iqbal

Applied Geochemistry , Volume 97, Pages 197-208

Impact Factor: 2.894 | **Quartile:** 2 | **Citations:** 38

DOI: [10.1016/j.apgeochem.2018.08.016](https://doi.org/10.1016/j.apgeochem.2018.08.016)

2018

Editorial Activities

Applied Soft Computing Journal Reviewed Papers for Journals Impact Factor: 7.2	2025
Applied Soft Computing Journal Reviewed Papers for Journals Impact Factor: 7.2	2025
Applied Soft Computing Journal Reviewed Papers for Journals Impact Factor: 7.2	2025
Applied Soft Computing Journal Reviewed Papers for Journals Impact Factor: 7.2	2025
Applied Soft Computing Journal Reviewed Papers for Journals Impact Factor: 7.2	2025
Applied Soft Computing Journal Reviewed Papers for Journals Impact Factor: 7.2	2025
Applied Soft Computing Journal Reviewed Papers for Journals Impact Factor: 7.2	2025
Applied Soft Computing Journal Reviewed Papers for Journals Impact Factor: 7.2	2025
Applied Soft Computing Reviewed Papers for Journals Impact Factor: 7.2	2025
 Reviewed Papers for Journals Impact Factor: 3.8	2024
Journal of Cloud Computing Reviewed Papers for Journals Impact Factor: 3.7	2024
Information Sciences Reviewed Papers for Journals Impact Factor: 8.1	2024
Telecommunication Systems Reviewed Papers for Journals Impact Factor: 2.5	2024