Dr Zia ur Rehman



Contact Information

H # S.A 511, St # 3, Near Magistrate Colony, SadiqAbad, Rawalpindi, Pakistan.

Mobile: +92-317-3360094, +92-321-5360094

E-Mail: ziaraja@gmail.com, zrehman@numl.edu.pk

EXPERIENCE SUMMARY

I have 10 years of teaching experience for the subjects of Computer Sciences, and developed techniques so that students can have better understandability and show interest towards the lecture. I have proven the ability to communicate effectively with all levels of management. I am a detail oriented and committed to delivering superior quality work.

Education

- **PhD(CS)**, PMAS Arid Agriculture University, Rawalpindi, Pakistan, Oct. 2017 Mar 2023, Thesis titled "Secure Key Authentication Scheme for Cyber Physical System".
- MS(CS), 18th Year of Education, Muhammad Ali Jinnah University, Islamabad, Pakistan, 2007.
- Studied **Subject Credit Hours to complete 16**th **year of education**, Muhammad Ali Jinnah University, Islamabad, Pakistan, 2004.
- BCS(3 yr), Allama Iqbal Open University, Islamabad, Pakistan, 2003.
- Fsc (Pre-Eng.), Rawalpindi Board, 1999.
- Matric(Science), Rawalpindi Board, 1997.

Publications (ORCID: https://orcid.org/0000-0003-0108-6443),

(Google Scholar: https://scholar.google.com/citations?hl=en&user=NpcrcJ0AAAAJ)

- F. M. Riaz, S. Ahmad, J. A. Khan, S. Altaf, Z. U. Rehman and S. K. Memon, "Numerical Treatment of Non-Linear System for Latently Infected CD4+T Cells: A Swarm- Optimized Neural Network Approach," in IEEE Access, vol. 12, pp. 103119-103132, 2024
- M. Haroon, S. Altaf, Z. ur Rehman, M. W. Soomro, and S. Iqbal, "Human hand gesture identification framework using SIFT and knowledge-level technique," *Etri J. Wiley*, 2022.
- S. Altaf, M. Haroon, S. Ahmad, E.A Nasr, M. Zaindin, S. Huda & Z. u. Rehman "Radio-Frequency-Identification-Based 3D Human Pose Estimation Using KnowledgeLevel Technique," *Electronics*, vol. 12, no. 2, p. 374, 2023.

- S. Ahmad, Z. ur Rehman *et al.*, "**Dynamic Key Extraction Technique Using Pulse Signal and Lightweight Cryptographic Authentication Scheme for WBAN**," *Sustainability*, vol. 14, no. 21, p. 14625, 2022.
- Z. Rehman, S. Altaf, S. Ahmad, M. Alqahtani, and S. Huda, "Advanced Authentication Scheme with Bio-Key Using Artificial Neural Network," *Sustainability*, vol. 14, no. 7, p. 3950, 2022.
- Z. ur Rehman, S. Altaf, S. Ahmed, S. Huda, A. M. Al-Shayea, and S. Iqbal, "An Efficient, Hybrid Authentication using ECG and Lightweight Cryptographic Scheme for WBAN," *IEEE Access*, vol. 9, pp. 133809–133819, 2021.
- Z. ur Rehman, S. Altaf, and S. Iqbal, "An Efficient Lightweight Key Agreement and Authentication Scheme for WBAN". *IEEE Access*, vol. 8, pp. 175385–175397, 2020. Category- W, IF- 3.745.
- Authentication Schemes in Medical Cyber-Physical System, Book Chapter, *Status: published*, in Information Security Handbook by CRC Press, Taylor & Francis Group, Aug.,2020.
- Authentication Schemes in Cyber Physical System: A Secured Approach towards Future Emergency Management System, Abstract Presentation, Regional Workshop on ICT Role for Disaster Prediction & Management, PMAS-Arid Agriculture University, Rawalpindi on May 4, 2019.
- Survey of Authentication Schemes in Health Monitoring: A Subset of Cyber Physical System, at International Bhurban Conference on Applied Sciences & Technology (IBCAST), Islamabad, organized by IEEE on Jan. 9, 2019.

Subjects can Teach

• Computer Networks, Databases, Data Structures, Advanced Analysis of Algorithm, Information Security, Advanced Information Security, Cyber Security.

CAREER ACCOMPLISHMENTS

Teaching Experience

- Assistant Professor (Computer Science), from Sept 2023 to-date, in National University of Modern Languages (NUML), Islamabad, Pakistan.
- Lecturer (Computer Science), from Feb 2017 to Aug 2023, in National University of Modern Languages (NUML), Islamabad, Pakistan.
- Lecturer (Computer Science), (Visiting Faculty), from Sept., 2013 to till date, in University of Central Punjab, Rawalpindi Campus, Pakistan.
- Lecturer (Computer Science), (Visiting Faculty), from Sept. 2015 to June, 2017 in PMAS Arid Agriculture University Rawalpindi, Pakistan.

Research Coordinator

Serving as Research Coordinator (since Feb 2024 till now) for MSCS and PhD scholars, facilitating research planning, proposal development, and thesis supervision across interdisciplinary domains in Computer Science. Played a key role in enhancing research quality and aligning scholarly work by actively supervising research thesis in emerging trends in information security, AI, and applied computing.

Technical Profile

Database / Data Analysis: Oracle 8.x, 9i, 10g, MySQL, SQL Server Ms Access, Matlab,

WEKA, Python, AVISPA

GUI: oracle 9i Application server, Oracle Developer (Forms 6.0, Reports 6.0)

Languages: PL/SQL, SQL, SQL*Plus, Java, VB 6.0, ASP, PHP.

Personal Information

Nationality: Pakistani
D.O.B: 12/01/1982
Gender: Male
Marital Status: Married