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Professional Summary

PhD in Computer Science with expertise in renewable energy forecasting, cost optimization, and carbon emission reduction. Experienced in distributed control system based power plant operations, and IT infrastructure management. Strong research profile with publications in sustainable energy and cybersecurity. Passionate about leveraging AI, data analytics, and automation to drive innovation in academia and industry.

Education

- 2017 – 2025 ■ **PhD Computer Science, COMSATS University Islamabad, Pakistan.**
Thesis title: *Towards Energy Efficient Cloud: A Green and Intelligent Migration of Traditional Energy Sources.*
- 2011 – 2016 ■ **MS Computer Science, Virtual University of Pakistan, Lahore.**
Thesis title: *SOA for CoT: Service Oriented Architecture for Cloud of Things.*
- 2006 – 2011 ■ **BS Computer Science, Virtual University of Pakistan, Lahore.**
Project title: *Recruitment Management System (Web Based Application).*
- 2000 – 2002 ■ **BA (English, Economics), Bahauddin Zakariya University, Multan.**
- 1994 – 1997 ■ **DAE Electronics, Punjab Board of Technical Education, Lahore.**
- 1992 – 1994 ■ **SSC Science, Board of Intermediate and Secondary Education, Multan.**

Professional Experience

- 1998 – Present ■ **Assistant Technical Officer**, Pakistan Atomic Energy Commission (Retirement applied).
- 2008 – Present ■ **Senior Network Administrator (Part-Time)**, Standard College of Modern Sciences, Kundian, Pakistan (An affiliated campus of Virtual University of Pakistan).
- Spring 2021 ■ **Visiting Lecturer, Computer Science**, University of the Punjab, Jhelum Campus, Pakistan.
- Fall 2019 ■ **Visiting Lecturer, Computer Science**, University of Mianwali, Mianwali, Pakistan.
- Spring 2019 ■ **Visiting Lecturer, Computer Science**, University of Sargodha, Mianwali Campus, Pakistan.
- 2017 – 2019 ■ **Visiting Lecturer, Computer Science**, Chenab College of Advance Studies, Mianwali, Pakistan (An affiliated with NCBA&E University, Lahore).

Research Projects

1. Working as **Co-PI** of Deanship of Research and Graduate Studies, King Khalid University, KSA under **grant number RGP1/242/46**.
2. Working as **Consultant** of Deanship of Research and Graduate Studies, King Khalid University, KSA under **grant number RGP1/294/46**.
3. Worked as **Co-PI** of Deanship of Research and Graduate Studies, King Khalid University, KSA under **grant number RGP1/260/45**.

4. Worked as **Consultant** of Deanship of Scientific Research, King Khalid University, KSA under **grant number RGP1/380/43**.

Journal Publications

1. Mushtaq, H., Latif, S., Ilyas, M. S. B., **Mohsin, S. M.**, & Ali, M. (2025). CLS-3D: Content-wise LiDAR-Camera Fusion and Slot Reweighting Transformer for 3D Object Detection in Autonomous Vehicles. *IEEE Access*. <https://doi.org/10.1109/ACCESS.2025.3558780> (IF = 3.40)
2. **Mohsin, S. M.**, Maqsood, T., & Madani, S. A. (2024). Towards Energy Efficient Cloud: A Green and Intelligent Migration of Traditional Energy Sources. *Energies*, 17(11), 2787. <https://doi.org/10.3390/en17112787> (IF = 3.25)
3. Changazi, S. A., Bakhshi, A. D., Yousaf, M., **Mohsin, S. M.**, Akber, S. M. A., Abazeed, M., & Ali, M. (2024). Optimization of network topology robustness in IoTs: A systematic review. *Computer Networks*, 110568. <https://doi.org/10.1016/j.comnet.2024.110568> (IF = 4.47)
4. Sammar, M. J., Saeed, M. A., **Mohsin, S. M.**, Akber, S. M. A., Bukhsh, R., Abazeed, M., & Ali, M. (2024). Illuminating the Future: A Comprehensive Review of AI-Based Solar Irradiance Prediction Models. *IEEE Access*. <https://doi.org/10.1109/ACCESS.2024.3402096> (IF = 3.40)
5. Sheeraz, M., Durad, M. H., Paracha, M. A., **Mohsin, S. M.**, Kazmi, S. N., & Maple, C. (2024). Revolutionizing SIEM Security: An Innovative Correlation Engine Design for Multi-Layered Attack Detection. *Sensors*, 24(15), 4901. <https://doi.org/10.3390/s24154901> (IF = 3.40)
6. Manzoor, S., Mustafa, S., Gulzar, K., Gulzar, A., Kazmi, S. N., Akber, S. M. A., Bukhsh, R., Aslam, S., & **Mohsin, S. M.** (2024). MultiFuzzTOPS: A Fuzzy Multi-Criteria Decision-Making Model Using Type-2 Soft Sets and TOPSIS. *Symmetry*, 16(6), 655. <https://doi.org/10.3390/sym16060655> (IF = 2.70)
7. Hussain, M., Hasnain, M., Khanzada, A., Arif, M. A., AboShaban, Y., Nadeem, M. A., & **Mohsin, S. M.** (2024). A Hybrid Effective Access Control in Cloud Computing. *Journal of Computing & Biomedical Informatics*, 07(01). <https://doi.org/10.56979/701/2024>
8. Ali, M., Haque, M. U., Durad, M. H., Usman, A., **Mohsin, S. M.**, Mujlid, H., & Maple, C. (2023). Effective network intrusion detection using stacking-based ensemble approach. *International Journal of Information Security*, 22(6), 1781-1798. <https://doi.org/10.1007/s10207-023-00718-7> (IF = 2.43)
9. Akhtar, M. N., Qureshi, K. Q., Durad, M. H., Usman, A., **Mohsin, S. M.**, Band, S. S., & Mosavi, A. (2023). Computationally efficient GPU based NS solver for two dimensional high-speed inviscid and viscous compressible flows. *Engineering Applications of Computational Fluid Mechanics*, 17(1), 2210196. <https://doi.org/10.1080/19942060.2023.2210196> (IF = 5.90)
10. Ali, M., Mazhar, T., Shahzad, T., Ghadi, Y. Y., **Mohsin, S. M.**, Akber, S. M. A., & Ali, M. (2023). Analysis of Feature Selection methods in Software Defect Prediction Models. *IEEE Access*, 11, 145954-145974. <https://doi.org/10.1109/ACCESS.2023.3343249> (IF = 3.40)
11. Sheeraz, M., Paracha, M. A., Haque, M. U., Durad, M. H., **Mohsin, S. M.**, Band, S. S., & Mosavi, A. (2023). Effective Security Monitoring using Efficient SIEM Architecture. *Human-centric Computing and Information Sciences*, 13(17). <https://doi.org/10.22967/HGIS.2023.13.023> (IF = 3.90)
12. Khan, F. B., Asad, A., Durad, M. H., **Mohsin, S. M.**, & Kazmi, S. N. (2023). Dragonfly Cyber Threats: A Case Study of Malware Attacks Targeting Power Grids. *Journal of Computing & Biomedical Informatics*, 4(02), 172-185. <https://doi.org/10.56979/402/2023>
13. Gulzar, K., Memon, M. A., **Mohsin, S. M.**, Aslam, S., Akber, S. M. A., & Nadeem, A. N. (2023). An Efficient Healthcare Data Mining Approach Using Apriori Algorithm: A Case Study of Eye Disorders in Young Adults. *Information*, 14(4), 203. <https://doi.org/10.3390/info14040203> (IF = 3.10)

14. Akber, S. M. A., Kazmi, S. N., **Mohsin, S. M.**, & Szczesna, A. (2023). Deep Learning-Based Motion Style Transfer Tools, Techniques and Future Challenges. *Sensors*, 23(5), 2597. <https://doi.org/10.3390/s23052597> (IF = 3.40)
15. Ahmed, S., Khan, Z. A., **Mohsin, S. M.**, Latif, S., Aslam, S., Mujlid, H., Adil, M., & Najam, Z. (2023). Effective and Efficient DDoS Attack Detection Using Deep Learning Algorithm, Multi-Layer Perceptron. *Future Internet*, 15(2), 76. <https://doi.org/10.3390/fi15020076> (IF = 3.40)
16. Latif, S., Fang, X., **Mohsin, S. M.**, Akber, S. M. A., Aslam, S., Mujlid, H., & Ullah, K. (2023). An Enhanced Virtual Cord Protocol Based Multi-Casting Strategy for the Effective and Efficient Management of Mobile Ad Hoc Networks. *Computers*, 12(1), 21. <https://doi.org/10.3390/computers12010021> (IF = 2.80)
17. Gulzar, K., Tariq, O., Mustafa, S., **Mohsin, S. M.**, Kazmi, S. N., Akber, S. M. A., Abazeed, M. & Ali, M. (2023). A Fuzzy Analytic Hierarchy Process for Usability Requirements of Online Education Systems. *IEEE Access*, 11, 146076-146089. <https://doi.org/10.1109/ACCESS.2023.3341355> (IF = 3.40)
18. Khan, S. R., Hayder, I. A., Habib, M. A., Ahmad, M., **Mohsin, S.M.**, Khan, F. A., & Mustafa, K. (2023). Enhanced Machine-Learning Techniques for Medium-Term and Short-Term Electric-Load Forecasting in Smart Grids. *Energies*, 16(1), 276. <https://doi.org/10.3390/en16010276> (IF = 3.00)
19. **Mohsin, S. M.**, Maqsood, T., & Madani, S. A. (2022). Solar and Wind Energy Forecasting for Green and Intelligent Migration of Traditional Energy Sources. *Sustainability*, 14(23), 16317. <https://doi.org/10.3390/su142316317> (IF = 3.00)
20. Ayub, N., Ali, U., Mustafa, K., **Mohsin, S. M.**, & Aslam, S. (2022). Predictive Data Analytics for Electricity Fraud Detection Using Tuned CNN Ensembler in Smart Grid. *Forecasting*, 4, 936-948. <https://doi.org/10.3390/forecast4040051> (IF = 3.00)
21. Gulzar, K., Qadeer, N., Aamir, M., Nawaz, A., Mujlid, H., **Mohsin, S. M.**, & Ahmed, S. (2022). Cost Efficient Automobile Security Using Face Recognition and GSM Module. *Journal of Computing & Biomedical Informatics*, 4(01), 207-216. <https://doi.org/10.56979/401/2022/114>
22. Mumtaz, N., Ejaz, N., Habib, S., **Mohsin, S. M.**, Tiwari, P., Band, S. S., & Kumar, N. (2022). An Overview of Violence Detection Techniques: Current Challenges and Future Directions. *Artificial Intelligence Reviews*. <https://link.springer.com/article/10.1007/s10462-022-10285-3> (IF = 13.90)
23. Changazi, S. A., Bakhshi, A. D., Yousaf, M., Islam, M. H., **Mohsin, S. M.**, Band, S. S., Alsufyani, A., & Bourouis, S. (2022). GA-based geometrically optimized topology robustness to improve ambient intelligence for future internet of things. *Computer Communications*, 193, 109-117. <https://doi.org/10.1016/j.comcom.2022.06.030> (IF = 4.30)
24. Samuel, O., Omojo, A. B., **Mohsin, S. M.**, Tiwari, P., Gupta, D., & Shamshirband, S. (2022). An Anonymous IoT-Based E-Health Monitoring System Using Blockchain Technology. *IEEE Systems Journal*. <https://doi.org/10.1109/JSYST.2022.3170406> (IF = 3.99)
25. Waheed, A., Shah, M. A., **Mohsin, S. M.**, Khan, A., Maple, C., Aslam, S., & Shamshirband, S. (2022). A Comprehensive Review of Computing Paradigms, Enabling Computation Offloading and Task Execution In Vehicular Networks. *IEEE Access*, 10, 3580-3600. <https://doi.org/10.1109/ACCESS.2021.3138219> (IF = 3.40)
26. Latif, S. A., Wen, F. B. X., Iwendi, C., Li-Li, F. W., **Mohsin, S. M.**, Han, Z., & Band, S. S. (2022). AI-empowered, blockchain and SDN integrated security architecture for IoT network of cyber physical systems. *Computer Communications*, 181, 274-283. <https://doi.org/10.1016/j.comcom.2021.09.029> (IF = 4.30)
27. Aurangzeb, K., Aslam, S., **Mohsin, S. M.**, & Alhussein, M. (2021). A Fair Pricing Mechanism in Smart Grids for Low Energy Consumption Users. *IEEE Access*, 9, 22035-22044. <https://doi.org/10.1109/ACCESS.2021.3056035> (IF = 3.40)

28. Aslam, S., Herodotou, H., **Mohsin, S. M.**, Javaid, N., Ashraf, N., & Aslam, S. (2021). A survey on deep learning methods for power load and renewable energy forecasting in smart microgrids. *Renewable and Sustainable Energy Reviews*, 144, 110992. <https://doi.org/10.1016/j.rser.2021.110992> (IF = 16.79)
29. Mustafa, I., Mustafa, H., Azar, A. T., Aslam, S., **Mohsin, S. M.**, Qureshi, M. B., & Ashraf, N. (2020). Noise Free Fully Homomorphic Encryption Scheme Over Non-Associative Algebra. *IEEE Access*, 8, 136524-136536. <https://doi.org/10.1109/ACCESS.2020.3007717> (IF = 3.40)
30. Mustafa, I., Khan, I. U., Aslam, S., Sajid, A., **Mohsin, S. M.**, Awais, M., & Qureshi, M. B. (2020). A Lightweight Post-Quantum Lattice-Based RSA for Secure Communications. *IEEE Access*, 8(1), 99273-99285. <https://doi.org/10.1109/ACCESS.2020.2995801> (IF = 3.40)
31. Aurangzeb, K., Aslam, S., Haider, S. I., **Mohsin, S. M.**, Islam, S. U., Khattak, H. A., & Shah, S. (2019). Energy forecasting using multiheaded convolutional neural networks in efficient renewable energy resources equipped with energy storage system. *Transactions on Emerging Telecommunications Technologies*, e3837. <https://doi.org/10.1002/ett.3837> (IF = 4.19)
32. **Mohsin, S. M.**, Khan, I. A., Akber, S. M. A., Shamshirband, S., & Chronopoulos, A. T. (2021). Exploring the RFID mutual authentication domain. *International Journal of Computers and Applications*, 43(2), 127-141. <https://doi.org/10.1080/1206212X.2018.1533614>
33. Iqbal, Z., Javaid, N., **Mohsin, S. M.**, Akber, S. M. A., Afzal, M. K., & Ishmanov, F. (2018). Performance analysis of hybridization of heuristic techniques for residential load scheduling. *Energies*, 11(10), 2861. <https://doi.org/10.3390/en1102861> (IF = 3.25)

Conference Publications

1. **Mohsin, S. M.**, Aslam, S., Akber, S. M. A., Iqbal, A., Waheed, A., & Ikram, A. (2020, February). Empowering cloud of things with edge computing: A comparative analysis. In *2020 International Conference on Information Science and Communication Technology (ICISCT)* (pp. 1-6). IEEE.
2. **Mohsin, S. M.**, Ashraf, N., Aslam, S., Qureshi, H. K., Mustafa, I., Cheema, M. A., & Qureshi, M. B. (2020, May). A cost efficient fair pricing scheme for low energy consumers of networked smart cities. In *2020 IEEE 91st Vehicular Technology Conference (VTC2020-Spring)* (pp. 1-5). IEEE.
3. Mahmood, S., **Mohsin, S. M.**, & Akber, S. M. A. (2020). Network Security Issues of Data Link Layer: An Overview. In *3rd International Conference on Computing, Mathematics and Engineering Technologies (iCoMET' 20)*. IEEE.
4. Mustafa, I., Aslam, S., Qureshi, M. B., Ashraf, N., Aslam, S., **Mohsin, S. M.**, & Mustafa, H. (2020). RL-MADP: Reinforcement Learning-based Misdirection Attack Prevention Technique for WSN. In *16th International conference on Wireless Communications & Mobile Computing (IWCMC' 2020)*. IEEE.
5. Aslam, S., Aslam, S., Herodotou, H., **Mohsin, S. M.**, & Aurangzeb, K. (2019). Towards Energy Efficiency and Power Trading Exploiting Renewable Energy in Cloud Data Centers. In *International Conference on Advances in the Emerging Computing Technologies (AECT'19)*. IEEE.
6. Aslam, S., Herodotou, H., Ayub, N., & **Mohsin, S. M.** (2019). Deep Learning based Techniques for Enhancing the Performance of Microgrids: A Review. In *17th International Conference on Frontiers of Information Technology* (pp. 116-121). IEEE.
7. **Mohsin, S. M.**, Javaid, N., Madani, S. A., Abbas, S. K., Akber, S. M. A., & Khan, Z. A. (2018). Appliance Scheduling in Smart Homes with Harmony Search Algorithm for Different Operation Time Intervals. In *32nd International Conference on Advanced Information Networking and Applications Workshops* (pp. 51-60). IEEE.

8. **Mohsin, S. M.**, Javaid, N., Madani, S. A., Akber, S. M. A., Manzoor, S., & Ahmad, J. (2018). Implementing Elephant Herding Optimization Algorithm with different Operation Time Intervals for Appliance Scheduling in Smart Grid. In 32nd International Conference on Advanced Information Networking and Applications Workshops (pp. 240-249). IEEE.
9. Javaid, N., **Mohsin, S. M.**, Iqbal, A., Yasmeen, A., & Ali, I. (2018). A Hybrid Bat-Crow Search Algorithm Based Home Energy Management in Smart Grid. In Conference on Complex, Intelligent, and Software Intensive Systems (pp. 75-88). Springer, Cham.
10. Javaid, N., Ullah Khan, A., **Mohsin, S. M.**, Jadoon, Y. K., & Nazeer, O. (2018). A Hybrid Flower-Grey Wolf Optimizer Based Home Energy Management in Smart Grid. In International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (pp. 46-59). Springer, Cham.
11. Aslam, S., Javaid, S., Javaid, N., **Mohsin, S. M.**, Khan, S. S., & Akbar, M. (2018). An efficient home energy management and power trading in smart grid. In International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (pp. 231-241). Springer, Cham.
12. Akber, S. M. A., Khan, I. A., Muhammad, S. S., **Mohsin, S. M.**, Khan, I. A., Shamshirband, S., & Chronopoulos, A. T. (2018). Data Volume Based Data Gathering in WSNs using Mobile Data Collector. In Proceedings of the 22nd International Database Engineering & Applications Symposium (pp. 199-207). ACM.

Awards and Certifications

2022	■ Master Trainer of Distributed Control System.
2019 – Present	■ Journal Reviewer Certificates.
2018	■ Merit Scholarship , Higher Education Commission (HEC) Pakistan.
2016 – Present	■ Conference Participation/Reviewer/TPC Member Certificates.

Volunteer Professional Services

2019 – Present	■ Working as an invited reviewer of many peer-reviewed journals of IEEE, Elsevier, Springer, MDPI, Taylor & Francis Online, Hindawi and Tech. Science Press.
2016 – Present	■ Working as an invited reviewer and technical program committee member of many national and international conferences.

Skills

Languages	■ Strong reading, writing and speaking competencies for Urdu and English.
Coding	■ Python, MATLAB, Java, $\text{\LaTeX}$.
Miscellaneous	■ Network administration, academic research, teaching, training, consultation, collaboration, project management, $\text{\LaTeX}$ typesetting and publishing.

References

Prof. Dr. Sajjad Ahmad Madani

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COMSATS University Islamabad (CUI), Islamabad,
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