

## Research & Publications

### Books

A. Butt (2010), Taxonomy of IDS: Intrusion Detection using System Call Sequence, VDM Verlag Dr. Müller, ISBN: 3639294092

### Journal Articles

22. S. A. Khan, M. Abdullah, W. Iqbal, M. A. Butt, “Efficient Job Placement using Two-way Offloading Technique over Fog-Cloud Architectures”, Cluster Computing, 2022, Cluster Computing doi: 10.1007/s10586-022-03750-9 (ISSN 1386-7857, **HEC W Category**)
21. S. A. Khan, M. Abdullah, W. Iqbal, M. A. Butt, F. Bukhari and S. -U. Hassan, "Automatic Migration-Enabled Dynamic Resource Management for Containerized Workload", IEEE Systems Journal, 2022, doi: 10.1109/JSYST.2022.3204748 (ISSN 1937-9234, **HEC W Category**)
20. M. A. Butt, Z. Ajmal, Z. I. Khan, M. Idrees, Y. Javed, “An In-Depth Survey of Bypassing Buffer Overflow Mitigation Techniques”, Applied Sciences, vol. 12, no. 13, pp. 1-30, 2022 (ISSN 1454-5101, **HEC X Category**)
19. M. A. Butt, M. Idrees, and Muhammad Saleem Raza, “Designing Fuzzy Logic Controller for UNIX Fuzzy find Command”, VFAST Transactions on Software Engineering, vol. 10, no. 2, pp 17-26. 2022, (ISSN 2411-6246, **HEC Y Category**)
18. H. R. Ahmad, M. Idrees, A. Ahmad, M. A. Butt, S. Shahzad, M. Shahzad, “Unification of Programming Languages”, Webology, vol. 19, no. 3, pp. 423-457, 2022 (ISSN 1735-188X, **HEC Y Category**)
17. A. Sohail, M. I. Tariq, S. Ali, M. A. Butt, M. Ismail, and F. Ahmad, “Diabetic Patient’s Behavior Observation on Social Media Using Active Surveillance”, Journal of Intelligent and Fuzzy Systems, vol. 43, no. 2, pp. 1969-1984, 2022 (ISSN 1875-8967, **HEC W Category**)
16. M. Idrees, M. A. Butt, and A. Ahmad, “Unification of Programming Languages, A Step Towards Visual Programming”, International Journal of Next-Generation Computing, vol. 12, no. 4, pp. 507-517, 2021 (**HEC Y Category**)
15. M. Idrees, A. Ahmad, M. A. Butt, and H. M. Danish, “Controlling PowerPoint using Hand Gestures in Python”, Webology, ISSN 1735-188X, vol. 18, no. 6, pp. 1372-1388, 2021 (**HEC Y Category**)
14. A. Sohail, A. Haseeb, M. Rehman, D. D. Dominic, and M. A. Butt, “An Intelligent Graph Edit Distance-Based Approach for Finding Business Process Similarities”, Computers, Materials & Continua, vol. 69, no. 3, pp. 3603-3618, 2021 (**I.F 4.89, HEC W Category**)
13. A. Ahmad, M. Idrees, M. A. Butt, and H. M. Danish, “BBVPL: A Block-Based Visual Programming Language Built on Google’s Blockly”, International Journal of Advanced Trends in Computer Science and Engineering, vol. 10, no. 3, pp. 2524-2532, 2021 (**HEC Y Category**)
12. A. Sohail, D. D. Dominic, M. Hijji, and M. A. Butt, “Competency Driven Resource Evaluation Method for Business Process Intelligence”, Computers, Materials & Continua, vol. 69, no. 1, pp. 1141-1157, 2021 (**I.F 4.89, HEC W Category**)
11. S. Habib, A. Ashraf, M. A. Butt, and M. Ahmad, “Medical Diagnosis Based on Single-valued Neutrosophic Information”, Neutrosophic Sets and Systems, vol. 42, pp. 302-323, 2021 (**HEC Y Category**)
10. M. Akram, G. Ali, A. Butt, and J. C. R. Alcantud, “Novel MCGDM Analysis under m-Polar Fuzzy Soft Expert Sets”, Neural Computing and Applications, <https://doi.org/10.1007/s00521-021-05850-w>, pp. 1-24, 2021 (**I.F 4.774, HEC W Category**)

9. G. Shahzadi, G. Muhiuddin, A. Butt, and A. Ashraf, "Hamacher Interactive Hybrid Weighted Averaging Operators under Fermatean Fuzzy Numbers", *Journal of Mathematics*, vol. 2021, pp. 1-17, 2021 (**I.F 0.712, HEC Y Category**)
8. A. Ashraf and M. A. Butt, "Extension of TOPSIS Method under Single-Valued Neutrosophic N-Soft Environment", *Neutrosophic Sets and Systems*, vol. 41, pp. 286-303, 2021 (**HEC Y category**)
7. N. Tahir, M. Asif, S. Ahmad, M. Sheraz, A. Malik, H. Aljuaid, A. Butt, and M. Rehman "FNG-IE: an improved graph-based method for keyword extraction from scholarly big-data", *PeerJ Computer Science*, <https://doi.org/10.7717/peerj-cs.389>, pp. 1-24, 2021 (**I.F 3.091, HEC W Category**)
6. M. Akram, G. Shahzadi, A. Butt and F. Karaaslan, "A hybrid decision making method based on q-rung orthopair fuzzy soft Information", *Journal of Intelligent & Fuzzy Systems*, <https://doi.org/10.3233/JIFS-202336>, pp. 1-16, 2021 (**I.F 1.851, HEC W Category**)
5. A. Sohail, K. Shahzad, P. D. Dominic, A. Butt, M. Arif and M. I. Tariq, "On Computing the Suitability of Non-Human Resources for Business Process Analysis", *Computers, Materials & Continua*, vol. 67, no. 1, 2021 (**I.F 4.89, HEC W Category**)
4. S. Habib, S. Wardat, A. Butt, M. Akram, F. Smarandache, "A Neutrosophic Clinical Decision-making System for Cardiovascular Diseases Risk Analysis", *Journal of Intelligent & Fuzzy Systems*, ISSN 1875-8967, vol. 39, no. 5, pp. 7807-7829, 2020 (**IF 1.851, HEC W Category**)
3. A. Butt and M. Akram, "A new intuitionistic fuzzy rule-based decision-making system for an operating system process scheduler", *SpringerPlus/SpringerOpen*, vol.5, no. 1, pp. 1-17, 2016 (**IF 1.130, HEC W Category**)
2. A. Butt and M. Akram, "A novel fuzzy decision-making system for CPU scheduling algorithm", *Neural Computing and Applications*, ISSN 0941-0643, vol. 27, no. 7, pp. 1927-1939, 2016 (**I.F. 4.774, HEC W Category**)
1. M. Akram, S. Shahzad, A. Butt, and A. Khaliq, "Intuitionistic Fuzzy Logic Control for Heater Fans", *Mathematics in Computer Science*, ISSN 1661-8289, vol. 7, no. 3, pp. 367-378, 2013 (**I.F. 0.76, HEC W Category**)