

Dr. Sania Bhatti

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EXPERIENCE		
Professor	MUET	www.sw.muett.edu.pk
10-01-2022 to date: Working as a Professor and Coordinator of BSAI in the "Department of Software Engineering, MUET, Jamshoro".		
Associate Professor	MUET	www.muett.edu.pk
08-03-2013 to date: Working as an Associate Professor in the "Department of Software Engineering, MUET, Jamshoro".		
Assistant Professor	MUET	www.muett.edu.pk
08-02-2011 to 07-03-2013: Worked as an Assistant Professor in the "Department of Software Engineering, MUET, Jamshoro".		
Lecturer	MUET	
21-11-2010 to 07-02-2011: Worked as a Lecturer in the "Department of Software Engineering, MUET, Jamshoro".		
PhD scholar	University of Leeds, United Kingdom	www.leeds.ac.uk
01-02-2007 to 20-11-2010: Joined and worked as PhD scholar in School of computing, University of Leeds, United Kingdom.		
Lecturer	MUET	
14-09-2004 to 30-01-2007: Worked as Lecturer in the "Department of Computer Systems and Software Engineering, MUET Jamshoro".		
Lecturer	Center of Excellence in Arts and Design, MUET Jamshoro	
01-04-2004 to 13-09-2004: Worked as Lecturer in the "Center of excellence of Arts and Design, MUET Jamshoro".		

RESEARCH GRANTS
➤ PI May 2019, "Predictive analytics using artificial intelligence for the arsenic levels in water, their exposure to foodstuff and health risk appraisal for Pakistan" funded by AI for Earth Microsoft Azure Grant, \$5,000 USD. ➤ PI Aug 2018, "Evolution of groundwater arsenic and health risk assessment prediction model via machine learning in Sindh, Pakistan" funded by AI for Earth Microsoft Azure Grant, \$5,000 USD. ➤ Co-PI, 2015 - 2016, "Auto reminder and Notifier" funded by NGIRI, National ICTRnD, Pakistan. ➤ PhD 2007-2010: Achieved scholarship under PC-1 scheme for strengthening and developing MUET approved by CDWP through HEC, Pakistan.

Committee Work
➤ Member, Advanced Studies and Research Board, SW Engineering department, MUET ➤ Member, Board of studies of SW engineering department, MUET ➤ Member, Board of faculty, FEECE faculty, MUET. ➤ Member, Industrial Advisory Board of SW Engineering department, MUET ➤ Convener: B.E SAR team, SW engineering department, MUET ➤ Focal person: M.E and PhD SAR team, SW engineering department, MUET ➤ Convener: Departmental OBE committee, SW engineering department, MUET

JOURNAL PUBLICATIONS

1. Kulsoom Panhwar, Bushra Naz Soomro, Sania Bhatti, Fawwad Hassan, Novel Encoder-Decoder Architecture with Attention Mechanisms for Satellite-Based Environmental Forecasting in Smart City Applications, *Future Internet*, Volume 17, Issue 9, Aug 2025. ISSN: 1999-5903. **(HEC W, IF:3.6)**
2. Afsa Riaz, Mohsin Ali Memon, Amirita Dewani, Sania Bhatti, Fariha Naeem, Meemona Sami, Topic Modeling and Identification in a Resource-Scarce Roman Urdu Language, *Kiet journal of computing and Information sciences*, Volume 7, Issue 2, 2024 pp. 60-83. DOI: [10.51153/kjicis.v7i2.233](https://doi.org/10.51153/kjicis.v7i2.233) **(HEC Y)**
3. Maryam Ghauri, Naeem Ahmed Mahoto, Sania Bhatti and Aqsa Umar, Cluster Analysis of COVID-19 Through Genome Sequences, *International Journal of Innovations in Science and Technology*, Volume 6, Issue 1, Mar 2024, pp. 265-274. ISSN(e): 2709-6130. **(HEC Y)**.
4. Jawad Hussain Kalwar, Sania Bhatti, Deep Learning Approaches for Network Traffic Classification in the Internet of Things (IoT): A Survey, *arXiv preprint arXiv: 2402.00920*, 2024, <https://doi.org/10.48550/arXiv.2402.00920>
5. Kulsoom Panwar, Bushra Naz, Sania Bhatti, A Systematic Review desertification identification with Multispectral Landsat Image and Deep Learning Models, *International Journal of Innovations in Science and Technology*, Volume 6, Issue 1, Jan 2024, pp.143-169, ISSN(e): 2709-6130. <https://journal.50sea.com/index.php/IJIST/article/view/614/1280> **(HEC Y)**.
6. Hira Noman, Naeem Mahoto, Sania Bhatti, Adel Rajab, and Asadullah Shaikh, Towards Sustainable Software Systems: A Software Sustainability Analysis Framework, *Information and software technology*, Volume 169, May 2024, 107411, ISSN: 0950-5849. **(HEC W, IF:3.9)**. DOI: <https://doi.org/10.1016/j.infsof.2024.107411>
7. Dua Agha, Areej Fatemah Meghji, and Sania Bhatti, Educational Data Mining in Outcome-Based Education: An Analysis of Predictive Models for Program Learning Outcome Attainment", *VAWKUM Transactions on Computer Sciences*, Volume 11, Number 2, July-December 2023, pp. 123-138, ISSN(e): 2308-8168, **(HEC Y)**. DOI: <https://doi.org/10.21015/vtcs.v11i2.1706>.
8. Dua Agha, Areej Fatemah Meghji, and Sania Bhatti, Clusters of Success: Unpacking Academic Trends with K-Means Clustering in Education, *VFAST transactions on Software engineering*, Volume 11, Issue 4, Dec 2023, pp.15-31, ISSN(e): 2309-3978. **(HEC Y)**. DOI: <https://doi.org/10.21015/vtse.v11i4.1633>
9. Dua Agha, Rashida Sohail, Areej Fatemah Meghji, Ramsha Qaboolio, Sania Bhatti, Test Driven Development and Its Impact on Program Design and Software Quality: A Systematic Literature Review, *VAWKUM Transactions on Computer Sciences*, pp. 2411-6335, Volume 11, Number 1, July-December, 2023, pp. 268-280, ISSN(e): 2308-8168 **(HEC Y)** DOI: <http://dx.doi.org/10.21015/vtcs.v11i1.1494>
10. Areej Fatemah Meghji, Farhan Bashir Shaikh, Shuaib Ahmed Wadho, Sania Bhatti, and Ramesh Kumar, Using Educational Data Mining to Predict Student Academic Performance, *VFAST transactions on Software engineering*, Volume 11, Issue 2, June 2023, pp.43-49, ISSN(e): 2309-3978. **(HEC Y)**. DOI: <http://dx.doi.org/10.21015/vtse.v11i2.1475>
11. Sania bhatti, Mariam Memon, Areej Fatemah Meghji, Scrutinizing Outcome Assessment of OBE using QOBE in Engineering Education, *International Journal of Innovation in Teaching and Learning (IJITL)*, Volume IX, Issue I, June 2023, pp.55-74. ISSN(P): 2664-2247, **(HEC Y)**, DOI :<https://doi.org/10.35993/ijitl.v9i1.2609>
12. Iqbal Khatoon, Amirita Dewani, Areej Fatemah Meghji, Sania Bhatti, Agent-Based Modelling of COVID-19: A Case study of Hyderabad City, *VFAST transactions on Software engineering*, Volume 11, Issue 1, pp.76-84, March 2023, ISSN(e): 2309-3978. **(HEC Y)**, DOI: <http://dx.doi.org/10.21015/vtse.v11i1.1444>
13. Muhammad Owais Raza, Zulfiqar Ali Bhatti, Mohsin Memon, Sania Bhatti, Nazia Pathan, Drought stage Prediction from remote sensing based vegetation and water indexes using Machine Learning, *Journal of Xi'an Shiyu University, Natural Sciences*,

- Volume 66, Issue 3, pp. 81-99, Mar 2023, **(HEC X, Scopus, IF:0.376)**, ISSN: 1673-064X. DOI: [10.17605/OSF.IO/GBD2H](https://doi.org/10.17605/OSF.IO/GBD2H)
14. Aqsa Umar, Sania Bhatti, Areej Fatimah Meghji, Naeem Ahmed Mahoto, Sapna Kumari, Analysis of frequent nucleotides patterns in COVID-19 genome sequences using SPM algorithms, Journal of Xi'an Shiyu University, Natural Sciences, Volume 66, Issue 2, pp. 96-109, Feb 2023, **(HEC X, Scopus, IF:0.376)**, ISSN: 1673-064X. DOI: [10.17605/OSF.IO/D7GA3](https://doi.org/10.17605/OSF.IO/D7GA3).
 15. Amirita Dewani, Mohsin Ali Memon, Sania Bhatti, Adel Sulaiman, Mohammed Hamdi, Hani Alshahrani, Abdullah Alghamdi, Asadullah Shaikh, Detection of cyberbullying patterns in low resource colloquial Roman Urdu microtext using natural language processing, machine learning and ensemble techniques, Applied Sciences, Feb 2023, 13 (4), 2062. **(HEC W, Scopus, IF: 2.8)**, DOI: <https://doi.org/10.3390/app13042062>.
 16. Fariha Shaikh, Sania Bhatti, Shafqat Shahzoor Chandio, Muhammad Mujtaba Shaikh, Feasibility of adoption and overview of online learning in institutes of Pakistan after Covid-19: An instructors and learners perspective, Journal of Mechanics of continua and Mathematical Sciences, Volume 17, Issue 12, pp. 1-13, Dec 2022, DOI: <https://doi.org/10.26782/jmcms.2022.12.00001>
 17. Muhammad Owais Raza, Tarique Ahmed Khuhro, Sania Bhatti, Mohsin Memon, Evaluation of deep learning approaches for classification of drought stages using satellite imagery for Tharparkar, Sir Syed University Research Journal of Engineering & Technology, Volume 12, Issue 2, pp. 101-108, Dec 2022, ISSN: 2415-2048, DOI: <https://doi.org/10.33317/ssurj.450> (HEC Y).
 18. Hira Noman, Naeem Ahmed Mahoto, Sania Bhatti, Hamad Abosaq Al Salem, Mana Saleh Al Reshan, Asadullah Shaikh, An Exploratory Study of Software Sustainability at Early Stage of Software Development, Sustainability, July 2022, **(HEC W, Scopus, IF: 3.88)**, <https://doi.org/10.3390/su14148596>
 19. Sapna Kumari, Sania Bhatti, Mohsin Ali Memon, Aqsa Umar, Arsha Kumari, Contribution of Pakistani female researchers in ICT field: A bibliometric analysis, Pakistan Journal of Women's Studies: Alam-e-Niswan, Volume 29, No. 1, pp.141-157, 2022. ISSN: 2708-8065 **(EBSCO)**. DOI: <https://doi.org/10.46521/pjws.029.01.0116>
 20. Fazila Baloch, Sania Bhatti, Amirita Dewani, Analysis and Discovery of Process Model using Real Time Event Log Data - A Case Study Performed for Admission Portal at MUET, Acta scientific computer sciences, June 02, 2022; Volume 4 Issue 7, pp. 03-11, ISSN.
 21. Sapna Kumari, Sania Bhatti, Mohsin Ali Memon, Aqsa Umar, Arsha Kumari, Analysis of women empowerment in ICT institutes of Pakistan, Webology, Volume 19, No. 3, pp. 212-225, 2022. ISSN: 1735-188X. (HEC Y, **Scopus**)
 22. Amirita Dewani, Sania Bhatti, Mohsin Ali Memon, Analysis of Outcome-based educational model in Engineering Education with preliminary Findings, International journal of advanced culture Technology, Volume 10, Issue 1, pp. 1-9, 2022. ISSN: 2288-7318. DOI: <https://doi.org/10.17703/IJACT.2022.10.1.1>.
 23. Ghazala Junejo, Sania Bhatti, Mohsin Ali Memon, Probabilistic modeling of Histogram based fuzzy image enhancement algorithm, Review of information engineering and applications, Volume 9, No.1, pp. 1-11, Jan 2022, ISSN(e): 2409-6539. <https://doi.org/10.18488/79.v9i1.2908>.
 24. Aqsa Umar, Naeem Mahoto, Sania Bhatti, Sapna Kumari, Analysis of Covid-19 Genome Sequences based on Geo-Locations, Pakistan journal of engineering and technology, Volume 4, Issue 4, pp.41-45, Dec 2021. ISSN: 2664-2050. DOI: <https://doi.org/10.51846/vol4iss4pp41-45> **(HEC Y)**
 25. Amirita Dewani, Mohsin Ali Memon, Sania Bhatti, Cyberbullying detection: Advanced preprocessing techniques & deep learning architecture for Roman Urdu Data, Journal of big data, Dec 2021. ISSN: 2196-1115. DOI: [10.1186/s40537-021-00550-7](https://doi.org/10.1186/s40537-021-00550-7) **(Scopus, WoS, SCIE, HEC X, IF= 8)**.
 26. Aisha Sattar, Sania Bhatti, Salahuddin Saddar, Probabilistic Modeling of lossless compression using improved RLC, International journal of computer applications, Volume 183, Issue 43, pp.33-39, Dec 2021, ISSN: 0975 - 8887, DOI: [10.5120/ijca2021921838](https://doi.org/10.5120/ijca2021921838)

(ProQuest, EBSCO)

27. Zulfiqar Ali Bhatti, Sania Bhatti S, Sikandar Ali Abbasi, Abdul Sattar Jatoti, Abdul Qadeer Laghari, Ghulamullah Maitlo, Hydrogen production through steam-assisted glycerol reforming via thermodynamic approach, Biomass Conversion and Biorefinery, Jul 30 2021. ISSN: 2190-6823. **(IF 4.9, Scopus, WoS, HEC X)**
28. Dewani, A., Ali Memon, M., & Bhatti, S. (2021). Development of computational linguistic resources for automated detection of textual cyberbullying threats in Roman Urdu language. 3C ICT. Development Notebooks Applied to ICT, 10 (2), 101-121. ISSN: 2254-4143. <https://doi.org/10.17993/3c tic.2021.102.101-121>. (ESCI, WoS, HEC Y)
29. Javeria Ashraf, Sania Bhatti, Shah Nawaz Talpur, Predicting the Best Team Players of Pakistan Super League using Machine Learning Algorithms, International journal of computer applications, Volume 183, issue 16, pp. 6-13, July 2021, ISSN: 0975 – 8887, [DOI: 10.5120/ijca2021921486](https://doi.org/10.5120/ijca2021921486). (ProQuest, EBSCO)
30. Muhammad Owais Raza, Mohsin Memon, Sania Bhatti, Drought Prediction with Raw Satellite Imagery and Ensemble Supervised Machine Learning, Review of Environment and Earth Sciences, Volume 8, Issue 1, pp. 1-7, March-April 2021, ISSN(e): 2313-8440, [DOI: 10.18488/journal.80.2021.81.1.7](https://doi.org/10.18488/journal.80.2021.81.1.7).
31. Mariam Memon, Sania Bhatti; Mohsin Ali Memon; Bibliometric Analysis of Information & Communications Technology Research in Pakistan, International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), Volume 7, Issue 1, pp. 267-272, January-February 2021, ISSN: 2456-3307, <https://doi.org/10.32628/CSEIT217153>.
32. Sobia Iftikhar, Sania Bhatti, Zulfiqar Ali Bhatti, Sanam Narejo, Faisal Memon, Mohsin Memon, Groundwater Arsenic and Cancer Risk Assessment Prediction model via Machine Learning: A Step Towards Modernizing Academic Research, Sir Syed university journal of engineering and technology, Volume 10, Issue 2, pp. 26-31, Dec 2020, ISSN: 2415-2048, [DOI: https://doi.org/10.33317/ssurj.232](https://doi.org/10.33317/ssurj.232) (HEC Category Y).
33. Nazia Pathan, Mohsin Ali Memon, Zulfiqar Ali Bhatti, Sania Bhatti, M Owais Raza, Prediction of Arsenic (As) contamination in rice grain produced in Sindh using Machine Learning, International Journal of Engineering Science Invention, Volume 9, Issue 10, pp. 1-8, October 2020, ISSN (Online): 2319-6734, [DOI: 10.35629/6734-0910010108](https://doi.org/10.35629/6734-0910010108). (EBSCO)
34. Sobia Iftikhar, Sania Bhatti, Mohsin Ali Memon, Zulfiqar Ali Bhatti, Groundwater arsenic and health prediction model using machine learning for T. M Khan Sindh, Pakistan, International Journal of Information Technology and Computer Science, Volume 12, No. 2, April 2020, pp. 24-31, ISSN 2074-9007 (online) [DOI: 10.5815/ijitcs.2020.02.03](https://doi.org/10.5815/ijitcs.2020.02.03). **(EBSCO, Inspec)**
35. Saba Memon, Mohsin Ali Memon, Sania Bhatti, Wearable Technology for Infant Health Monitoring: A Survey, IET circuits, devices and systems, Volume 14, issue 2, pp. 115-129, March 2020. **(IF 1.395, Scopus, WoS, HEC X)**. [DOI:10.1049/iet-cds.2018.5447](https://doi.org/10.1049/iet-cds.2018.5447).
36. Uroosa kakepoto, Mohsin Ali Memon, Sania Bhatti, Analysis and testing of Mobile Application Interfaces Implemented in UI frameworks, International Journal of Scientific & Engineering Research, Volume 11, No. 2, pp. 1283-1289, Feb 2020, ISSN 2229-5518.
37. Veingus kehar, Sania Bhatti, Mohsin Memon, Prognosis of Diabetes by Performing Data Mining of HbA1c, International Journal of Computer Science and Information Security, Volume 18, No. 1, pp. 22-32, Jan 2020, ISSN 1947 5500. **(EBSCO, DOAJ)**
38. Amir Mughal, Sania Bhatti, Hira Noman, Daniyal Ahmed, Cloud based ERP for SME industry of Pakistan, International Journal of Computer Science and information security, Volume 17, No. 12, pp. 22-32, Dec 2019, ISSN 1947 5500. **(EBSCO, DOAJ)**
39. Zoobia Mushtaque, Mohsin Ali Memon, Sania Bhatti, Zeeshan Ahmed, MUET Blogging: An Integral Platform for Students Projects, International Journal of Recent Technology and Engineering, Volume 8, Issue 5, Jan 2020, pp. 1293-1298, ISSN(online): 2277-3878. [DOI:10.35940/ijrte.E4804.018520](https://doi.org/10.35940/ijrte.E4804.018520) **(Scopus)**
40. Maria Arain, Mohsin Ali Memon, Sania Bhatti, Maryam Arain, Feasibility of Chatbot for Mehran UET Examination Department, Review of Information Engineering and Applications, Volume 6, No. 2, pp. 17-28, 2019, ISSN(e): 2409-6539, [DOI: 10.18488/journal.79.2019.62.17.28](https://doi.org/10.18488/journal.79.2019.62.17.28).

41. Arsha Kumari, Din Mohammad Sangrasi, Sania Bhatti, Bhawani Shankar D. Chowdhry and Sapna Kumari, Off-line, Sindhi handwritten character identification, International Journal of Information Technology and computer science, Volume 11, No. 4, Jun. 2019, pp., ISSN: 2074-9007 (Online), DOI: 10.5815/ijitcs.2019.06.02. **(IET Inspec, EBSCO)**.
42. Sania Bhatti, Amirita Dewani, Sehrish Maqbool, Mohsin Ali Memon, A Web based Approach for teaching and learning Programming Concepts at Middle School level, International Journal of Modern Education and Computer Science (IJMECS), Volume 11, No. 4, Apr. 2019, pp.46-53, ISSN: 2075-0161 (Online), DOI: [10.5815/ijmeecs.2019.04.06](https://doi.org/10.5815/ijmeecs.2019.04.06). **(Scopus, IET Inspec, EBSCO)**.
43. Qurban Ali Mari, Sania Bhatti, Tariq Jameel Saifullah Khanzada, "Scrutinizing Cross-Platform Mobile App Development Frameworks: PhoneGap and Ionic", International Journal of Computer Trends and Technology, volume 67, No. 8, 2019, pp. 26-32, ISSN 2231-2803, DOI: [10.14445/22312803/IJCTT-V67I8P106](https://doi.org/10.14445/22312803/IJCTT-V67I8P106) (Dimensions, crossref).
44. Sheeraz Memon, Sania Bhatti, Liaquat Ali Thebo, Mir Mohammad Baqir Talpur, Mohsin Ali Memon, A Video Based Vehicle Detection, Counting and Classification System", International Journal of Image, Graphics and Signal Processing (IJIGSP), Volume 10, No. 9, Sep. 2018, pp.43-41. ISSN: 2074-9082 (Online), <https://doi.org/10.5815/ijigsp.2018.09.05>. **(Scopus, IET Inspec, EBSCO)**
45. P. Memon, T. Hafiz, S. Bhatti and S. Shahid, Comparative study of Testing Tools: BlazeMeter and Apache JMeter, Sukkur IBA Journal of Computing and Mathematical Sciences, Vol 2, No 1, Jan-Jun 2018, pp. 70-76. DOI: <https://doi.org/10.30537/sjcms.v2i1.66>
46. Amirita Dewani, Sania Bhatti, Pirah Memon, Veena Kumari, Anum Arain, Ayaz Jiskani, Keyless smart home: An application of home security and automation, Oriental journal of computer science and technology, Vol 11, No. 2, June 2018, pp. 70-76, ISSN: 0974-6471. DOI: <http://dx.doi.org/10.13005/ojcs11.02.06>. **(IET Inspec)**
47. Pirah Memon, Sania Bhatti, Amirita Dewani and Tahseen Hafiz, Scrutinizing automated load testing via BlazeMeter, ApacheJMeter, and Hp loadrunner, International journal of advance studies in computer science and engineering (IJASCSE), March 2018, Vol 7, No.3, pp.35-42, ISSN: 2278 7917. **(IET Inspec, EBSCO)**
48. Memoona Sami, Shahzad Memon, Junaid Baloch, Sania Bhatti, An automated framework for finding fake profiles on facebook, International journal of advance studies in computer science and engineering, Feb 2018, Vol 7., No.2 pp.8-16, ISSN: 2278-7917. **(IET Inspec, EBSCO)**
49. A. Dewani, S. Bhatti, M. Memon, W. Arif, Quratulain, S. B. Zehra, Sign language E-Learning system for hearing-impaired community of Pakistan, Springer International journal of Information technology, Jan 2018, Vol 10, No.2, pp. 225-232, ISSN: 2511-2104. **(IET Inspec, EBSCO)**
50. Meemona Sami, Sania Bhatti, Junaid Baloch, Shehram Shah, How to Keep your systems records safe, Springer International journal of Information technology, Vol 11, No. 2, pp. 287-293, Apr 2019, ISSN: 2511-2104. <https://doi.org/10.1007/s41870-018-0104-5>. **(IET Inspec, EBSCO)**
51. M. A Memon, S. Bhatti, N. A Mahoto, F. Memon, LIFEREC: A Framework for Recommending Users from Past Life Experiences, Mehran University Research Journal of Engineering & Technology, July 2017, Vol 36, No. 2, pp.661-672. (HEC Recognized Category 'X' Journal)
52. S. Bhatti, M. Memon, S. Memon, Evaluating FTTT Protocol via PRISM, PRISM-symm and GRIP, International Journal of Computer Theory and Engineering (IJCTE), June 2017, Vol 9, No. 3, pp. 162-166. ISSN: 1793-8201. **(IET Inspec, EBSCO)**
53. M. A. Memon, S. Bhatti, N. A. Mahoto, A digital diary: remembering the past using the present context, Mehran University research journal of engineering and technology, April 2016, Vol 35, No. 2, pp. 275-286. (HEC Category X)
54. S. Memon, S. Bhatti, F. R. Abro, Automatic Speaker Recognition based on Mel-Frequency

- Cepstral Coefficients and Gaussian Mixture Models, Mehran University research journal of engineering and technology, Oct 2013, Vol 32, No. 4, pp.543-550. (HEC Category X)
55. S. Bhatti, T. J. S. Khanzada, S. Memon, Clustering and fault tolerance for target tracking using wireless sensor networks, Mehran University research journal of engineering and technology, Oct 2012, Vol 31, No. 4, pp.769-776. (HEC Category X)
 56. T. J. S. Khanzada, J. A. Baloch, and S. Bhatti, Distance Measurement Error Reduction Analysis for the Indoor Positioning System, Mehran University research journal of engineering and technology, Oct 2012, Vol 31, No. 4, pp.785-794. (HEC Category X)
 57. S. Bhatti, S. Memon, I. A. Jokhio, M. Memon, Modelling and symmetry reduction of a Target Tracking Protocol using Wireless Sensor Networks, International Journal of IET Communications, 3rd July 2012, Vol. 6, No. 10, pp. 1205-1211. ISSN 1751-8636. **(IF= 1.4, Scopus, WoS, HEC X)**
 58. S. Bhatti, M. Hashmani, N. Shaikh, The specification of an expert system for building bylaws compliance, Mehran University research journal of engineering and technology, April 2012, Vol 31, No. 2, pp. 243-252. (HEC Category X)
 59. S. Bhatti, I. A. Qureshi, S. Memon, Node clustering for Wireless Sensor Networks, Mehran University research journal of engineering and technology, January 2012, Vol. 31, No. 1, pp. 163-176. (HEC Category X)
 60. S. Memon, S. Bhatti, and T. J. S. Khanzada, Using Reversed MFCC and IT-EM for Automatic Speaker Verification, Mehran University research journal of engineering and technology, January 2012, Vol. 31, No. 1, pp. 155-162. (HEC Category X)
 61. M. Memon, S. Bhatti, S. Memon, Probabilistic and hybrid Model checking deployments for Wireless Sensor Networks, Mehran University research journal of engineering and technology, January 2012, Vol. 31, No. 1, pp. 177-188. (HEC Category X)
 62. S. Memon, T. J. S. Khanzada, S. Bhatti, Text-Independent speaker verification based on information theoretic learning, Mehran University research journal of engineering and technology, July 2011, Vol. 30, No.3, pp. 457-468. (HEC Category X)
 63. S. Bhatti, J. Xu, M. Memon, Clustering and Fault Tolerance for Target Tracking using Wireless Sensor Networks, International Journal of IET Wireless Sensor Systems, 2011, Vol.1, No. 2, pp.66-73. ISSN: 2043-6394. **(Scopus, WoS, IET Inspec, HEC X)**

CONFERENCE PUBLICATIONS

1. Owais Raza, Sania Bhatti, Jawad R, Tunç Aşuroğlu, Enhanced Human Activity Recognition (E-HAR): Leveraging Sensor Fusion, Placement and Algorithmic Strategies for Improved Activity Recognition," *2025 International Conference on Software, Knowledge, Information Management & Applications (SKIMA)*, Paisley, United Kingdom, 2025, pp. 1-6, doi: 10.1109/SKIMA66621.2025.11155627.
2. Umar Farooq Dar, Rohma Dar, Veena kumari, Ghulam Zainal Abdin, Sania Bhatti, Systematic Literature Review: Using Educational Data Mining for Recommender Systems, 4th International Conference on Recent Academic Studies ICRAS 2025.
3. Aleena Rafique, Sania Bhatti, Machine Learning Techniques for Software Fault Prediction: A distinctive Systematic Literature Review, International conference on engineering, natural sciences, and Technological developments (ICENSTED 2024), 19-21 July 2024, Turkey.
4. Adnan Ali Jamali, Sania Bhatti, Salahuddin Saddar, Comparative Analysis of Classical Machine Learning and Few Shot Learning on a Medical Text Data, 4th International Conference on Innovative Academic Studies (ICIAS 2024), 12-13 March 2024 – Konya, Turkey.
5. Fariha Smhaikh, Shafiq-Ur-Rehman Massan, Sania Bhatti, Shafqat Shahzoor Chandio and Muhammad Mujtaba Shaikh, Effects of Online Educational System on Personal Health of Student's and Teacher's in COVID-19 Crises, In: García Márquez, F.P., Jamil, A., Eken, S., Hameed, A.A. (eds) Computational Intelligence, Data Analytics and Applications. ICCIDA 2022. Lecture Notes in Networks and Systems, Vol 643. PP. 494 - 508, Springer, Cham. https://doi.org/10.1007/978-3-031-27099-4_38 ISBN 978-3-031-27098-7.

6. Fahama Barakzai, Sania Bhatti, Salahuddin Sadar, Sentiment Analysis of Sindhi News Articles Using Deep Learning, IEEE 17th International Conference on Computer Science and Information Technologies (CSIT), Lviv, Ukraine, 2022, pp. 26-31, DOI: 10.1109/CSIT56902.2022.10000519.
7. Roshan Kumar, Sania Bhatti, Sadaquat Ali Ruk and Nazia Pathan, Identification of Endangered Animal species of Pakistan using Classical and Ensemble Approach, The 2nd IEEE International Conference on Computing and Machine Intelligence (ICMI 2022)
8. Iqra Soomro, Sania Bhatti, Shahnawaz Talpur, Analysis of usability issues of Q-OBE: Teachers' perspective, 3rd International Conference on Computational Sciences and Technologies, (INCCST), 17-19 Feb 2022, MUET, Jamshoro. ISBN # 978-969-23372-2-9.
9. Mahlaka Abbas Soomro, Sania Bhatti, Areej Fatemah, Analyzing Temperature and Rainfall effects on Crop Yield using Data Mining, 3rd International Conference on Computational Sciences and Technologies, (INCCST), 17-19 Feb 2022, MUET, Jamshoro. ISBN # 978-969-23372-2-9.
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12. Amirita Dewani, Mohsin Ali Memon, Sania Bhatti, Development of Computational Linguistic Resources for Automated Detection of Textual Cyberbullying Threats in Roman Urdu Language, 4th International Multi-Topic Conference on Engineering and Science (IMCES), 29-30 June 2021, Faculty of Information Technology, Universitas YARSI, Jakarta, Indonesia.
13. Afifah Jalbani, Sania Bhatti and Mohsin Memon, Performance measurement of Online Quiz/Assessment/Testing Tools, 2nd International conference on computational sciences and technologies (INCCST), 17-19 Dec 2020, MUET, Jamshoro.
14. Natasha Afaq, Mohammad Muzzamil Khattri, Fiza Karim Palijo, Sania Bhatti, No Hunger: An Application for Collection of Leftover Food items of Restaurants, 2nd International conference on computational sciences and technologies (INCCST), 17-19 Dec 2020, MUET, Jamshoro.
15. Rabia Jamro, Sania Bhatti and Salahuddin Saddar, Faisal Memon, Investigating the Usability of Java by Mining the GitHub Repositories, 2nd International conference on computational sciences and technologies (INCCST), 17-19 Dec 2020, MUET, Jamshoro.
16. Nasreen Babar, Sania Bhatti, Salahuddin Saddar, Uroosa Shaikh and Sorath Buriro, Malware Detection in Android in different Application Categories, 2nd International conference on computational sciences and technologies (INCCST), 17-19 Dec 2020, MUET, Jamshoro.
17. Muhammad Owais Raza, Mohsin Memon, Sania Bhatti, Rahim Bux, "Detecting Cyberbullying in Social Commentary using Supervised Machine Learning", Future of information and communication conference, 15-16 Mar 2020, San Francisco, California, US.
18. Hira Noman, Sania Bhatti, Rahim Bux, Sanaullah Bugti, Roshan Kumar, Sehrish Maqbool, Emotion detection using smart vehicle assistant, International conference on computational sciences and technologies (INCCST), 10-12 April 2019, Jamshoro.
19. Owais Raza, Fatima Jaffar, Karan Kumar, Sania Bhatti, Mehran Khan, Shakeel Jamali, Application of Facial Recognition and Object Identification in Security Surveillance, 4th Multi-Disciplinary Student Research International Conference (MDSRIC), 29-30 August 2018, University of Wah, Wah Cantt, Islamabad.
20. M. S. Langh, S. Bhatti, J. Baloch, S. Shah, How to keep your records save, 3rd International conference on recent trends in computer science and electronics, RTCSE-2018 02-03 Jan 2018, Bangkok, Thailand. ISBN: 978-81-938900-7-3
21. A. Dewani, S. Bhatti, M. Memon, W. Arif, Quratulain, S. B. Zehra, Sign language E-Learning system for hearing-impaired community of Pakistan, 3rd International conference on recent trends in computer science and electronics, RTCSE-2018 02-03 Jan 2018, Bangkok, Thailand. ISBN: 978-81-938900-7-3

22. S. Bhatti, A. Dewani, T. Hafiz, P Noor, M. G. Memon, Management of Non-Behavioral tasks via Auto Reminder and Notifier, International conference on Advancements in computational sciences, 19-21 Feb, 2018, Lahore, Pakistan, IEEE 2018, ISBN 978-1-5386-2172-1. **(Scopus)**
23. K. Dharani, S. Bhatti, A. Dewani, E. Rajput, A. Ayaz, Renovate-It: A Web and Android App Based Repairing and Maintenance System, International conference on computing, Mathematics and Engineering technologies, 3-4 March 2018, Sukkar Institute of Business Administration university, Pakistan. **(Scopus)**
24. S. Memon, M. Memon, S. Bhatti, T. J. Saifullah Khanzada, A. Memon, Trackers for sleepy drivers at the wheel, 11th International Conference on signal processing and communication systems, ICSPCS 2017, 29 Nov - 01 Dec 2017, Sydney Australia. **(Scopus)**
25. P. Memon, T. Hafiz, S. Shahid and S. Bhatti, Comparative study of Testing Tools: BlazeMeter and Apache JMeter, In: Proceedings of International Conference on Computing and Mathematical Sciences, ICCMS 2017, 25-26th February 2017, Institute of Business Administration, Sukkur.
26. G. Hussain, S. Memon, S. Bhatti, S. Ahmed, Comparative analysis of gabor feature and histogram oriented gradient using texture features for content-based image retrieval, Student conference on Engineering Science and Technology, SCONEST 2016, 14-15th December 2016, Hamdard University Main campus, Karachi.
27. S. Baloch, S. Bhatti, M. Sami, I. Memon, E- Noticeboard: Dynamic Information processing application, International Conference on Entrepreneurship, ICE 2015, 16-17th March 2015, Isra University, Hyderabad, Sindh, Pakiatan, pp. 42-52, Print ISBN 978-969-7506-01-9.
28. S. Bhatti, J. Xu, M. Memon, Energy-Aware Fault-tolerant Clustering Scheme for Target Tracking Wireless Sensor Networks, Seventh International Symposium on Wireless Communication Systems, York, The University of York, United Kingdom, 19th-22nd September, 2010, pp.531-535, ISBN 978-1-4244-6315-2. **(Scopus)**
29. S. Bhatti, J. Xu, M. Memon, Model checking of a Target Tracking Protocol for Wireless Sensor Networks, In: Proceedings of 10th International Conference on Computer and Information Technology, 29 June - 01 July, 2010, Bradford, UK, IEEE CS Press, pp. 2867-2872, ISBN 978-0-7695-4108-2. **(Scopus)**
30. S. Bhatti, J. Xu, Survey of Target Tracking Protocols using Wireless Sensor Network, The fifth International conference on Wireless and Mobile Communications ICWMC 2009, August 23-29, 2009-Cannes/La Bocca, French Riviera, France, IEEE computer society, pp. 110-115, ISBN 978-0-7695-3750-4. **(Scopus)**

BOOK CHAPTERS

1. Asmatullah Zubair, Sania Bhatti, Areej Fatimah, The Application of Deep Learning for Predicting the Financial Position of Pakistani Banking Sector, In Selçuk KENDİRLİ New Trends in Finance, All sciences Academy, ICIAS 2024, pp. 28-52, ISBN: 978-625-6530-94-2.
2. Shaikh, F., Massan, SuR., Bhatti, S., Chandio, S.S., Shaikh, M.M. (2023). Effects of Online Educational Systefm on Personal Health of Students and Teachers in COVID-19 Crises. In: García Márquez, F.P., Jamil, A., Eken, S., Hameed, A.A. (eds) Computational Intelligence, Data Analytics and Applications. ICCIDA 2022. Lecture Notes in Networks and Systems, vol 643. Springer, Cham. https://doi.org/10.1007/978-3-031-27099-4_38.
3. Muhammad Owais Raza, Mohsin Memon, Sania Bhatti, Rahim Bux, "Detecting Cyberbullying in Social Commentary using Supervised Machine Learning", Springer Nature Switzerland AG 2020, K. Arai et al. (Eds.): FICC 2020, AISC 1130, pp. 621-630, 2020. https://doi.org/10.1007/978-3-030-39442-4_45

OTHERS

- S. Memon, A. Samejo, Z. Baloch, "Computing Essentials", A practical guide for B.E in computer systems and software engineering, Jan 2007.
- S. Memon, Broadband services for handheld devices using WCDMA as core technology,

RESEARCH SUPERVISION

- Currently Supervising a PhD Student on "AI-Driven Data-Efficient Coronary tree segmentation and plaque Characterization in CT images".
- Currently Supervising a PhD student on "Mamba-AVGard: An Optimized Audio-Visual Deepfake Detection Framework".
- Currently co-supervising a PhD Student on "Software sustainability through software's design".
- Currently co-supervising a PhD Student on "Optimizing deep learning model for detecting desertification through multispectral Landsat imagery".
- A PhD Student completed her degree on topic of "Automated detection of Textual cyberbullying threats in Pakistani social media for Roman Urdu Language". In 2025
- Supervised the following independent M.E in software engineering projects at MUET.
 1. Scrutinizing Cross-Platform Mobile App Development performance using PhoneGap and Ionic frameworks, MEIT, IICT, MUET.
 2. MUET Blogging: An Integral Platform for Student Projects, MESE, IICT, MUET.
 3. Feasibility of Chabot for MUET examination department, MESE, IICT, MUET.
 4. Prognosis of Diabetes by Performing Data Mining of HbA1c, MESE, IICT, MUET.
 5. Evolvment of groundwater arsenic and health risk assessment prediction model via machine learning in Sindh, Pakistan, MESE, IICT, MUET.
 6. Analysis and testing of Mobile Application Interfaces Implemented in UI frameworks, MESE, IICT, MUET.
 7. Mechanism for ensuring teacher's presence in classroom using deep learning, MESE, IICT, MUET.
 8. Biblio Metric analysis of Information and Communication Technology Research in Pakistan, MESE, IICT, MUET.
 9. Prediction of Arsenic (As) contamination in rice grain produced in Sindh using Machine Learning, MESE, IICT, MUET.
 10. Malware detection in Android in Distinct app categories, MESE, IICT, MUET.
 11. Performance measurement of online testing tools, MESE, IICT, MUET.
 12. Investigating Java usability by mining GitHub repositories, MESE, IICT, MUET.
 13. Drought Prediction Using Machine Learning with Satellite Imagery, MESE, IICT, MUET.
 14. Predicting the Best Team Players of Pakistan Super League using Machine Learning Algorithms. MEIT, IICT, MUET.
 15. Probabilistic Modeling of lossless compression using improved RLC, MESE, IICT, MUET.
 16. Classification of Urdu Headlines News Using BERT and traditional Machine learning algorithms, MESE, IICT, MUET.
 17. Probabilistic Modeling of Histogram based fuzzy image enhancement algorithm, MESE, IICT, MUET.
 18. Genome Analysis for COVID'19 by means of Pattern Mining, MESE, IICT, MUET.
 19. A Bibliometric analysis: contribution of Pakistani female researchers in ICT field, MESE, IICT, MUET.
 20. Analyzing temperature and rainfall effects on crop yield using data mining, MESE, IICT, MUET.
 21. Sentiment analysis of Sindhi news article using deep learning, MESE, IICT, MUET.
 22. Analysis of usability issues of Q-OBE: Teachers' Perspective, MEIT, IICT, MUET.
 23. Feasibility of adaptation and analysis of online learning in IT and non-IT engineering disciplines in COVID-19 Crisis in Pakistan, MESE, IICT, MUET.
 24. Agent-based modelling of COVID-19: A case study of Hyderabad city, MESE, IICT, MUET.
 25. Low-Resolution Images Based Recognition of Endangered Animal Species in Pakistan using machine learning, MESE, IICT, MUET.
 26. Prediction of the financial position of Pakistani banks, MESE, IICT, MUET.
 27. Student Performance Prediction: An Educational Data Mining Perspective for Outcome-based Education (OBE), MESE, IICT, MUET.
 28. Medical Text Classification using Few Shot Learning, MESE, IICT, MUET.
 29. Detecting diverse effects of COVID-19 through Genome Sequences, MESE, IICT, MUET.
 30. An Analysis of stress detection of working women and housewives using wearable devices, MESE, IICT, MUET.

31. A Study of Collaborative Filtering Techniques in Book Recommender System, MESE, IICT, MUET.
32. Exploring User Engagement Patterns in X Discourse during General Elections: Clustering and NLP Perspectives, MESE, IICT, MUET.
- Supervising the following independent M.E in software engineering projects at MUET.
33. Composite algorithm for Autism Spectrum Disorder early Identification, MESE, IICT, MUET.
34. Towards Early and accurate Cholangiocarcinoma detection using Zero-shot learning approach via Hyperspectral imaging, IICT, MUET.

EXPERT REVIEWER OF JOURNALS/ CONFERENCES

- Reviewed paper titled "Code-switching Functions in Online Advertisements on Snapchat" for PLOS One journal.
- Reviewed paper titled "Traffic Adaptive Deep Learning Based Fine-Grained Vehicle Categorization in Cluttered Traffic Videos" for Imaging Science Journal, Taylor & Francis journal.
- Reviewed paper titled "Vision-based vehicle detection for road traffic congestion classification" for Concurrency and computation: practice and experience", Wiley online journal.
- Reviewer of "Multi Head Text Mining from COVID-19 Feedback using Machine Learning, Deep Learning and Hybrid Deep Learning Approaches" submitted to Computational and Mathematical Methods in Medicine, Hindawi.
- Reviewer of "Multilingual Low Resource Language Identification (MLRLI) in Code-Mixing Social Media Dataset Using Machine Learning" submitted to the Complexity, Hindawi
- Reviewer of "Forecasting Cryptocurrency Prices with Hybrid Long Short – Term Memory and Variant Models for Long – term and Short – term" submitted to an Asia Pacific Journal of Information Systems journal.
- Reviewer of "Addressing cyberbullying in Urdu tweets: A comprehensive dataset and detection system" Submitted to PeerJ journal.
- Reviewer of "Artificial Intelligence inspired method for cross-lingual cyberhate detection from low resource languages" submitted to the Transactions on Asian and Low-Resource Language Information Processing.
- Reviewer of "Sarcasm Prediction in Sentiment Analysis: A Deep Learning Approach", submitted to the International Journal of Intelligent Systems.
- Reviewer of "Exploring Metaheuristic Optimization Algorithms in the Context of Textual Cyberharassment: A Systematic Review", submitted to the Expert Systems.
- Reviewer of "Anomaly Detection in Online Video Games: The Implications of Machine Learning Techniques" submitted to Applied Computational Intelligence and Soft Computing.
- Reviewer of "Analysis of Software Defined networks" submitted to the Heliyon journal.
- Reviewer of "Enhanced Detection of Cyberbullying in Roman Urdu Text Using Machine and Deep Learning Ensemble" submitted to PLOS ONE.
- Reviewer of "Detection of Language from Roman Urdu and English Multilingual Corpus" submitted to PLOS ONE.
- Reviewer of "Advanced SVM and Bi-directional Neural Network Method for Language Tagging, Annotation, and Segmentation in Multilingual Roman Urdu-English Text" submitted to Journal of Intelligent systems.
- Reviewer of "Hate Speech Detection Research in South Asian Languages: A Survey of Tasks, Datasets and Methods" submitted to Transactions on Asian and Low-Resource Language Information Processing.
- Reviewer of "A Robust and Linguistically-Aware Hate Speech Detection System for Roman Urdu" submitted to the Transactions on Asian and Low-Resource Language Information Processing.
- Reviewer of "Plagiarism Identification in Urdu English Language Pair Corpus using Machine Learning" submitted to PLOS ONE.
- Reviewer of "Cyberbullying Detection: Exploring Datasets, Technologies, and Approaches on Social Media Platforms" submitted to Computing Surveys.
- Reviewer of "Augmented Ensemble Model (AEM) for Health Trends Prediction on Social Networks" submitted to PLOS ONE.

- Reviewer of "Early detection of occupational stress: Enhancing workplace safety with machine learning and large language models" for PLOS One journal.
- Reviewer of the "Unveiling Roots of Adolescent Cyberbullying Through Explainable Machine Learning Approach" submitted to Development Science journal.
- Reviewer of "Prediction and simulation of COVID-19 transmission based on an agent model: a case study of Shanghai, Changchun, Beijing and Wuhan" submitted to Frontiers in Cellular and Infection Microbiology journal.
-
- 23rd 25th April 2025: Member of the reviewing committee ICETECC 2025 held at Mehran University of Engineering and Technology, Jamshoro.
- Reviewer of Mehran University research journal of engineering and technology Recognized by HEC in "Y" Category.
- **10th-12th May 2023:** Member of the reviewing committee in IMTIC 2023 at Mehran University of Engineering and Technology, Jamshoro.
- **7-9th Dec 2022:** Member of reviewing committee in ICETECC 2022 at Mehran University of Engineering and Technology, Jamshoro.
- **17th 19th Feb. 2022:** Session chair in INCCST 22 at Mehran University of Engineering and Technology, Jamshoro.
- **10th 12th Apr. 2019:** Session chair and Reviewer in INCCST 2019 at Mehran University of Engineering and Technology, Jamshoro.
- **25th-27th Apr. 2018:** Session chair and reviewer in IMTIC 2018 at Mehran University of Engineering and Technology, Jamshoro.
- **11th-13th Feb. 2015:** Member of reviewing committee in IMTIC 2015 at Mehran University of Engineering and Technology, Jamshoro.
- **18-20th Dec. 2013:** Member of reviewing committee in IMTIC 2013 at Mehran University of Engineering and Technology, Jamshoro.
- **24-26 April 2013:** Member of submission and proceeding committee of WSN4DC 2013 at Mehran University of Engineering and Technology, Jamshoro.
- **28th-30th Mar. 2012:** Member of reviewing committee and participated as session chair in IMTIC 2012 at Mehran University of Engineering and Technology, Jamshoro.

COURSES TAUGHT

- **Master's level courses:** Modern Computing Paradigm, Software Testing and Quality, Software Engineering Lab-II
- **Undergraduate level courses:** Simulation and modeling, Operations Research, Analysis of algorithms, Computer networks and management, Interactive Multimedia Systems and Graphics, Digital Communications, Multimedia communication, Computer Architecture and design, Introduction to computing, Visual Programming, Object Oriented Programming.