# Dr. Sania Bhatti

Professor

Department of Software Engineering, Mehran University of Engineering & Technology, Jamshoro.

E-mail:sania.2kcs@gmail.com, sania.bhatti@faculty.muet.edu.pk

Orchid: 0000-0002-0887-8083

<u>Google Scholar:</u> https://scholar.google.com.pk/citations?user=\_

IA5f3gAAAAJ&hl=en&oi=ao

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Professor MUET <u>www.sw.muet.edu.pk</u>

**10-01-2022 to date:** Working as a Professor in the "Department of Software Engineering, MUET, Jamshoro".

Associate Professor MUET <u>www.muet.edu.pk</u>

**08-03-2013 to date:** Working as an Associate Professor in the "Department of Software Engineering, MUET, Jamshoro".

Assistant Professor MUET <u>www.muet.edu.pk</u>

**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 <u>www.leeds.ac.uk</u>

**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".

## **RESRARCH GRANDS**

- ➤ 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, "Evolvement 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 strengthen and development of MUET approved by CDWP through HEC, Pakistan.

## **MUET Committee Work**

- > Member of the board of studies of SW engineering department
- Member of the board of faculty
- > Member of the Industrial Advisory board of SW engineering department
- > Focal person of B.E SAR team
- > Focal person of M.E and PhD SAR team
- Convener of Departmental OBE committee
- Member of question paper evaluation committee

#### **JOURNAL PUBLICATIONS**

- 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
- 2. 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, pp.43-49, June 2023, ISSN(e): 2309-3978. (HEC Y). DOI: <a href="http://dx.doi.org/10.21015/vtse.v11i2.1475">http://dx.doi.org/10.21015/vtse.v11i2.1475</a>
- 3. 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. ISSN(P): 2664-2247, (HEC Y), DOI: 10.35993/ijitl
- 4. 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
- 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 Shiyou 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
- 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 Shiyou 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.
- 7. 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, 2023, 13, 2062. (HEC W, Scopus, IF: 2.8), DOI: https://doi.org/10.3390/app13042062.
- 8. 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
- 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).
- 10. 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, 2022, **(HEC W, Scopus, IF: 3.25)**
- 11. Sapna Kumari, **Sania Bhatti**, Mohsin Ali Memon, Aqsa Umar, Arsha Kumari, Contribution of Pakistani female researhers 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
- 12. 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.
- 13. 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**)

- 14. 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.
- 15. Ghazala Junejo, **Sania Bhatti**, Mohsin Ali memon, Probablistic 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.
- 16. 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. **(HEC Y)**
- 17. 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 (**Scopus, WoS, HEC X, IF= 10.8**).
- 18. 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 (ProQuest, EBSCO)
- 19. Zulfiqar Ali Bhatti, **Sania Bhatti**, Sikandar Ali Abbasi, Abdul Sattar Jatoi, 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. (**Impact Factor 4.9, Scopus, WoS, HEC X**)
- 20. 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**)
- 21. Javeria Ashraf, **Sania Bhatti**, Shahnawaz 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.
- 22. Muhammad Owais Raza, Mohsin Memon, **Sania Bhatti**, Drought Prediction with Raw Satellite Imagery and Ensemble Supervised Machine Learning, Review of Environment and Earth Sciences, ISSN(e): 2313-8440, Volume 8, Issue 1, pp. 1-7, March-April 2021, DOI: 10.18488/journal.80.2021.81.1.7.
- 23. 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), ISSN: 2456-3307, Volume 7 Issue 1, pp. 267-272, January-February 2021, https://doi.org/10.32628/CSEIT217153.
- 24. 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, Dec 2020, pp. 26-31. **DOI:** https://doi.org/10.33317/ssurj.232, **(HEC Category Y)**.
- **25.**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. **(EBSCO)**
- 26. 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 2074-9058 (online) DOI: 10.5815/ijitcs.2020.02.03. **(EBSCO, Inspec)**

- 27. 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. **(Impact factor 1.395)**. DOI:10.1049/iet-cds.2018.5447
- 28. 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.
- 29. Veingus kehar, **Sania Bhatti**, Mohsin Memon, Prognosis of Diabetes by Performing Data Mining of HbA1c, International journal of computer science and information security, Volume18, No. 1, pp. 22-32, Jan 2020, ISSN 1947 5500. **(EBSCO, DOAJ)**
- 30. Amir Mughal, **Sania Bhatti**, Hira Noman, Daniyal Ahmed, Cloud based ERP for SME industry of Pakistan, International journal of computer science and information security, Volume17, No. 12, pp. 22-32, Dec 2019, ISSN 1947 5500. **(EBSCO, DOAJ)**
- **31.**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 (**Dimensions, crossref**).
- 32. 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 (**Scopus**)
- 33. 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.
- 34. Arsha Kumari, Din Mohammad Sangrasi, **Sania Bhatti**, Bhawani Shankar 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**).
- 35. **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/ijmecs.2019.04.06. (**IET Inspec, EBSCO**).
- 36. 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. <a href="https://doi.org/10.1007/s41870-018-0104-5">https://doi.org/10.1007/s41870-018-0104-5</a>. (**IET Inspec, EBSCO**)
- 37. 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), DOI: 10.5815/ijigsp.2018.09.05. (**IET Inspec, EBSCO**)
- 38. Pirah Memon, Tahseen Hafiz, **Sania Bhatti** and Saman Shahid Qureshi, 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
- 39. 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: <a href="http://dx.doi.org/10.13005/ojcst11.02.06">http://dx.doi.org/10.13005/ojcst11.02.06</a>. (**IET Inspec**)
- 40. 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)
- 41. 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)**
- 42. 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)
- 43. 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 Category X**).
- 44. **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**)
- 45. 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**)
- 46. 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**)
- 47. **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**)
- 48.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**)
- 49. **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. (Impact factor 1.4)
- 50. **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**)
- 51. **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**)
- 52. 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**)
- 53. 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**)
- 54. 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**)
- 55. **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, IET Inspec**)

#### **CONFERENCE PUBLICATIONS**

- 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.
- 2. 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.
- 3. 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)
- 4. 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.
- 5. 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.
- Zainab Khan, Amirita Dewani, Hira Mustafa, Veena Kumari, Memoona sami, Sania Bhatti An Artificial Intelligence based Approach to Assist Stage 1 to 4 (from no impairment to moderately declined) Alzheimer's Disease Patients and Caregivers, 3rd International Conference on Computational Sciences and Technologies, (INCCST), 17-19 Feb 2022, MUET, Jamshoro. ISBN # 978-969-23372-2-9.
- 7. Kainat, Sania Bhatti, Mohsin Memon, Classification of Urdu Headlines News Using BERT and traditional Machine learning algorithms, IMTIC 2021, 10-12 Nov, MUET, Jamshoro. pp. 1-5, doi: 10.1109/IMTIC53841.2021.9719828.
- 8. 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.
- 9. Afifah Jalbani, Sania Bhatti and Mohsin Memon, Performance measurement of Online Quiz/Assessment/Testing Tools, 2<sup>nd</sup> International conference on computational sciences and technologies (INCCST), 17-19 Dec 2020, MUET, Jamshoro.
- 10. Natasha Afaque, Mohammad Muzzamil Khattri, Fiza Karim Palijo, Sania Bhatti, No Hunger: An Application for Collection of Leftover Food items of Restaurants, 2<sup>nd</sup> International conference on computational sciences and technologies (INCCST), 17-19 Dec 2020, MUET, Jamshoro.
- 11. Rabia Jamro, Sania Bhatti and Salahuddin Saddar, Faisal Memon, Investigating the Usability of Java by Mining the GitHub Repositories, 2<sup>nd</sup> International conference on computational sciences and technologies (INCCST), 17-19 Dec 2020, MUET, Jamshoro.
- 12. Nasreen Babar, Sania Bhatti, Salahuddin Saddar, Uroosa Shaikh and Sorath Buriro, Malware Detection in Android in different Application Categories, 2<sup>nd</sup> International conference on computational sciences and technologies (INCCST), 17-19 Dec 2020, MUET, Jamshoro.
- 13. 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.
- 14. 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.
- 15. 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.

- 16. 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, Bankok, Thailand. ISBN: 978-81-938900-7-3
- 17. 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, Bankok, Thailand. ISBN: 978-81-938900-7-3
- 18. 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)
- 19. 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)
- 20. S. Memon, M. Memon, S. Bhatti, T. J. Saifullah Khanzada, A. Memon, Trackers for sleepy drivers at the wheel, 11<sup>th</sup> International Conference on signal processing and communication systems, ICSPCS 2017, 29 Nov 01 Dec 2017, Sydney Australia. (**Scopus**)
- 21. 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.
- 22. G. Hussain, S. Memon, S. Bhatti, S. Ahmed, Comparative analysis of gabor feature and historgram 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.
- 23. S. Baloch, S. Bhatti, M. Sami, I. Memon, E- Noticeboard: Dynamic Information processing application, International Conference on Entrepreneurship, ICE 2015, 16-17<sup>th</sup> March 2015, Isra University, Hyderabad, Sindh, Pakiatan, pp. 42-52, Print ISBN 978-969-7506-01-9.
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- 26. 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. Raza M.O., Memon M., Bhatti S., Bux R. (2020) Detecting Cyberbullying in Social Commentary Using Supervised Machine Learning. In: Arai K., Kapoor S., Bhatia R. (eds) Advances in Information and Communication. FICC 2020. Advances in Intelligent Systems and Computing, vol 1130. Springer, Cham.

#### **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, Souvenir 2005.

#### **RESEARCH SUPERVISION**

- Currently co-supervising a PhD Student on "Software sustainability through software's design".
- Currently co-supervising a PhD Student on "Automated detection of Textual cyberbullying threats in Pakistani social media for Roman Urdu Language".
- Currently co-supervising a PhD Student on "Optimizing deep learning model for detecting desertification through multispectral Landsat imaginary".
- Supervised 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. Evolvement 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.
  - 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.
- Supervising the following independent M.E in software engineering projects at MUET.
  - 25. Low-Resolution Images Based Recognition of Endangered Animal Species in Pakistan using machine learning, MESE, IICT, MUET.
  - 26. Detecting diverse effects of COVID-19 through Genome Sequences, MESE, IICT, MUET.
  - 27. Prediction of the financial position of Pakistani banks, MESE, IICT, MUET.
  - 28. Student Performance Prediction: An Educational Data Mining Perspective for Outcome-based Education (OBE), MESE, IICT, MUET.
  - 29. Medical Text Classification using Few Shot Learning, MESE, 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 Mehran University research journal of engineering and technology Recognized by HEC in "Y" Category.
- 10<sup>th</sup>-12<sup>th</sup> May 2023: Member of reviewing committee in IMTIC 2023 at Mehran University of Engineering and Technology, Jamshoro.
- **7-9**<sup>th</sup> **Dec 2022:** Member of reviewing committee in ICETECC 2022 at Mehran University of Engineering and Technology, Jamshoro.
- **17**<sup>th</sup> **19**<sup>th</sup> **Feb. 2022:** Session chair in INCCST 22 at Mehran University of Engineering and Technology, Jamshoro.
- **10**<sup>th</sup> **12**<sup>th</sup> **Apr. 2019:** Session chair and Reviewer in INCCST 2019 at Mehran University of Engineering and Technology, Jamshoro.
- **25**<sup>th</sup>-**27**<sup>th</sup> **Apr. 2018:** Session chair and reviewer in IMTIC 2018 at Mehran University of Engineering and Technology, Jamshoro.
- **11**<sup>th</sup>-**13**<sup>th</sup> **Feb. 2015:** Member of reviewing committee in IMTIC 2015 at Mehran University of Engineering and Technology, Jamshoro.
- **18-20<sup>th</sup> 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.
- **28<sup>th</sup>-30<sup>th</sup> 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, 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.