

Dr. Muhammad Shahzad Sarfraz

Director FAST-NUCES CFD Campus

Head, FAST School of Computing

Professor of Computer Science

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I am deeply engaged in the fields of Computer Science and Geospatial Technologies, where I spearhead core thematic areas encompassing ICT tools for Health, Agriculture, Disaster Management, Location-based Systems, and associated GIS-based applications. My focus extends to leveraging web-based and machine learning open-source tools for Remote Sensing and GIS applications, as well as developing customized solutions to address organizational needs and readiness assessment. Furthermore, I specialize in evaluating location-based systems.

ACADEMIC & ADMINISTRATIVE RESPONSIBILITIES

1. Coordinate administrative functions including scheduling, budgeting, and resource allocation to ensure efficient campus operations.
2. Oversee compliance with institutional policies, regulations, and accreditation standards, maintaining a safe and conducive learning environment.
3. Continuous maintenance of departmental planning and establishing initiatives to reflect the university mission and vision.
4. Foster academic excellence by supporting faculty in curriculum development, assessment, and scholarly activities.
5. Promote student success through initiatives such as academic advising, student support services, extracurricular activities and graduates placements.

PROFESSIONAL EXPERIENCE

Director Campus

National University of Computer and Emerging Sciences

August 01, 2020 – Present
FAST-NUCES Pakistan

Professor of Computer Science

National University of Computer and Emerging Sciences

January 01, 2022 – Present
FAST-NUCES, Pakistan

Head School of Computing

National University of Computer and Emerging Sciences

March 01, 2022 – Present
FAST-NUCES, Pakistan

Head Department of Computer Science

National University of Computer and Emerging Sciences

January 01, 2019 July 31, 2020
FAST-NUCES, Pakistan

Associate Professor & Head Graduate Programs

National University of Computer and Emerging Sciences

Sep 05, 2018 – Dec. 31, 2021
FAST-NUCES, Pakistan

Director, Spatial Analytic Research (SAR) group, to conduct cutting-edge research on several real-world issues using Multispectral and Hyperspectral sensors.

Associate Professor

University of Gujrat

April 15, 2015 – September 05, 2018

Gujrat, Pakistan

Chairperson Computer Science Department**Director** Evening Programs**Assistant Professor & Head Graduate Programs**

National University of Computer and Emerging Sciences

March 01, 2014 – April 14, 2015

FAST-NUCES, Pakistan

Assistant Professor

COMSATS Institute of Information Technology (CIIT)

December 31, 2012 – February 28, 2014

Abbottabad, Pakistan

Visiting Researcher

National Institute of Informatics, Tokyo (NII)

August 01, 2010 – March 31, 2011

Tokyo, Japan

Research Associate/PhD Fellow

Asian Institute of Technology (AIT)

January 14, 2008 – December 30, 2012

Pathum Thani, Thailand

Lecturer

COMSATS Institute of Information Technology (CIIT)

August 04, 2006 – January 13, 2007

Abbottabad, Pakistan

Lecturer of Computer Science

International Academy & Computer College

October 01, 2004 – January 01, 2006

Faisalabad, Pakistan

Assistant Programmer/Database Administrator

Saeed Umer Traders

December 01, 2002 – August 31, 2004

Faisalabad, Pakistan

EDUCATION**Ph.D. in Computing (RS & GIS)**

Asian Institute of Technology, Thailand, 2012

M.S. in Computing (RS & GIS)

Asian Institute of Technology, Thailand, 2009

Master's in Computer Science

University of Agriculture, Pakistan, 2006

Bachelor's in Computer Science

University of Punjab, Pakistan, 2004

PROFESSIONAL MEMBERSHIP

1. Senior Member, IEEE
2. Member, Pak One Health Alliance
3. Member, Geological Society of America
4. Member, Asian Society of Remote Sensing
5. Member, Canadian Remote Sensing Society
6. Member, Association for Computing Machinery (ACM)
7. Member, International Association of Chinese Professionals in GIS
8. Member, International Society for Photogrammetry and Remote Sensing

FUNDED PROJECTS & HONORS AND AWARDS

1. **HEC Funded Research Project** Vector-borne Infectious Diseases Surveillance and Response System using Earth Observation Data. Funding amount Rs. 4.8 Million.
2. **NUCES Faculty Research Support Grant (FRSG)** Awards of Worth Rs. 5.4 Million for the Year 2023-2025.
3. **HEC Travel Grant for Conference** to Present Research at Seventh International Conference on Remote Sensing and Geoinformation of Environment held during 18-21 March, 2018 at Cyprus.
4. **HEC Travel Grant for Conference** to Present Research at “Symposium on ”Developments, Technologies and Applications in Remote Sensing” during May 7-10, 2018 in Beijing China.
5. **Start-up Incubator** during 2016 & 2018 Business Plan Competition at University of Gujrat.
6. **HEC Travel Grant** for Presenting Research at “XXII International Society for Photogrammetry and Remote Sensing (ISPRS) Congress 2016” during July 12-19, 2016 in Prague, Czech Republic.
7. **Research Productivity Award** for the Year 2014 from COMSATS University Islamabad, Pak.
8. **Winner of ISPRS Travel Grant** for Presenting Research Results at “ISPRS TC VIII Mid-Term Symposium 2014” by ISPRS Foundation during 9-12 December, 2014 in Hyderabad, India.
9. **Winner of GSA-USA Travel Fund** for Presenting Research at “Geological Society of America, 2014” by GSA International Section held on 19-22 October, 2014 in Vancouver, BC, Canada.
10. **Winner of NASA Travel Award** for Presenting Research Results at “2nd Symposium on Advances in Geospatial Technologies for Health” by NASA held during August 25-29, 2013 in Arlington, USA.
11. **Best Oral Presentation Award** at the 1st International Conference on Health Science Thai Traditional and Alternative Medicine held during 21-23 Nov at Maha Sarakham, Thailand.
12. **ProSPER.NET Thesis Competition Prize** for Excellent Research Presentation held at Headquarter of United Nation (UN) University, Japan during August, 2011.
13. **HEC Scholarship** for M.S. leading to Ph.D.
14. **1st Position in the Department** of Computer Science, Batch-2006, University of Agriculture, Faisalabad, Pakistan.

SERVEICES RENDERED

1. Member, Finance and Planning Committee, UoG
2. Co-Opted Member, Board of Governors, FAST-NUCES Islamabad
3. Member, Committee on Reforms in Nursing Education in Punjab, PHEC, Punjab
4. Expert and Start-up Evaluator, All-Punjab Universities Innovation Expo 2023
5. Convener, Industry Advisory Board Committee, FAST School of Computing at CFD Campus
6. Member, Selection Board Meeting at Government College University Faisalabad
7. Subject Expert, Punjab Public Service Commission, Punjab

8. Member, Board of Studies, University of Education LHR, KFUEIT RYK, University of Sahiwal, PAF-IAST Haripur & NTU FSD
9. Member, Board of Faculty, Government College University, Faisalabad
10. Member, Faculty Selection/Promotion Board, NTU, Faisalabad
11. Head, Campus Research Committee at NUCES CFD Campus
12. Convener, Graduate Studies Committee (GSC) at FAST-NUCES CFD Campus
13. Subject Expert, DTRC Committee's to Review the Annual Progress of NTU TTS Faculty
14. Member, Grievance Redressal Committee at NUCES CFD Campus
15. Convener, Selection Committee of Administrative Staff at NUCES CFD Campus
16. Convener, Board of Studies, Department of Computer Science, University of Gujrat (UoG)
17. Head, Hall Management Committee, FAST-NUCES CFD
18. Convener, Departmental Research and Review Committee (DRRC), UoG
19. External Examiner, NTU Graduate Assessment Test (NTU GAT-Subject) for Admission to Ph.D
20. Member, Business Incubation Centre Advisory/Mentor Committee, UoG
21. External Examiner, NTU & Riphah University FSD; KFUEIT RYK, COMSATS University Islamabad - Sahiwal Campus, Lahore College for Women University/PUCIT/UET Lahore
22. Focal Person, NCEAC Accreditation Programs for Faculty of Computing & IT, UoG & NUCES
23. Member, Departmental Research and Review Committee (DRRC), Department of IT, UoG
24. Member, of Drafting and Proposing ORIC Policy of UoG
25. Convener, Campus Management Committee (CMC), FAST-NUCES CFD
26. Convener, Online Admission Data Cell for the Year 2015, UoG
27. Member, PEEF Scholarship Committee for Master level Programs for the Year 2016-17, UoG
28. Member, National Curriculum Revision Committee (NCRC) of Higher Education Commission on Remote Sensing & Geographical Information Systems
29. Member, National Grassroots ICT Research Initiative (NGIRI, 2015-16) for National level Competition Organized by Ministry of Information Technology, Pakistan
30. Member, Committee of Academia-Industry Linkages, UoG
31. Judge, Induction of Startups on Launchpad for PITB Incubation Wing
32. Judge and Evaluator, Prime Minister's Youth Skills Development Program
33. Member, PhD Fellowship Selection Committee, FAST-NUCES Islamabad
34. Member, Trainers Selection Committee for Sports, UoG
35. Head, Admission Committee at FAST-NUCES CFD Campus

36. Block In-charge, UET Entry Test 2016 at UoG
37. Judge and Evaluator, HULT Prize Business Idea Competition
38. Member, Board of Faculty, GC University, Faisalabad
39. Member, Selection Committee for Administrative Posts in BPS-17 and above at UoG
40. Member, Departmental Tenure Review Committee (DTRC) of TTS, GC University, Faisalabad
41. Paper Setter/Moderator, Annual System of Examination for 2016-2019, UoG
42. Co-opted Member, Reviewing/Negotiating Corporate Health Insurance Plan for UoG Employees
43. Member, Business Plan Competition Committee UoG
44. Subject Expert/Convener, Selection Committee for Appointment of Faculty on Contract-basis at UoG Hafiz Hayat, Lahore and Sialkot Campuses
45. Member, Scholarship Award Committee, UoG
46. Convener, NCEAC Accreditation Committee at UoG & FAST-NUCES CFD Campus
47. Member, Academic, and Financial Audit UoG, Lahore Campus
48. Member, Academic Council of UoG and NUCES
49. Member, Faculty/Administrative Staff Academic Audit Committee, Sub-campus LHR (PPP)
50. Member, Appellate Committee to Review Cases of Students Appeals
51. Convenor, PhD Program Teams (PT) for Self-assessment Report, UoG
52. Convener, Exam Supervisory Committee (ESC), FAST NUCES CFD Campus
53. Critic/Inspector, End Term Examination Spring-2017, UoG
54. Member, Internal Scholarship Award Committee (ISAC) for HEC Need-based Scholarship and Tuition-fee Concession for the Year 2017-2018
55. Member, IT Equipment Committee for Strengthening/overseeing and Smooth Proceedings of the Procurement Process of the Equipment, UoG
56. Convener, Curriculum/Exam Committee, UoG
57. Member, Preparing TORs of MOUs for Academic Collaboration b/w UESTC, China and UoG
58. Member, Implementation of Roles to Accelerate the Academia-Industry Linkages, UoG

WORKSHOPS/CONFERENCES ORGANIZED

1. Session Chair, 5th International Conference on Advancements in Computational Sciences (ICACS) held during 19-20 February, 2024 at University of Lahore, Pakistan
2. Guest of Honour, 3rd IEEE Summit on Artificial Intelligence in Information and Communication held of November 2, 2023 at University of Faisalabad
3. General Chair & Host, International Conference on IT and Industrial Technologies (ICIT) held during October 09-10, 2023 Chiniot, Pakistan
4. Guest of Honour, 4th International Conference on Computing, Mathematics and Engineering Technologies (iCoMET) held during 17-18 March, 2023 at Sukkur IBA University, Pakistan
5. Organizer, Workshop on Opportunity of Research and Academic Collaboration between Pakistan and Scandinavian Universities held on March 14, 2023 at Higher Education Commission, Pakistan
6. Session Chair, 4th International Conference on Advancements in Computational Sciences (ICACS) held during 20-22 February, 2023 at University of Lahore, Pakistan
7. Member, Technical/Scientific Committee for International E-Conference on Biopolymer, Smart and Engineering Materials 2022- ICBSEM2022 held during November 25-26, 2022 at Ethiopia
8. Member, Steering Committee on 17th ICET Conference held during 29-30 November 2022 at GIKI, Pakistan
9. Organized, Hands-on One Day Training Workshop on Outcome Based Education held on Thursday August 04, 2022
10. Organized, Workshop on Emotional and Social Quotient for Effective Pedagogical Skills held on Thursday August 04, 2022
11. General Chair & Host, International Conference on IT and Industrial Technologies (ICIT) held during October 03-04, 2022 Chiniot, Pakistan
12. Organizer, Awareness Session on Challenges to National Security and Our Role as Citizens on 31 December 2021
13. Session Chair, Technical Session: Big Data Analytics in Health, Machine Learning and Artificial Intelligence during 7th International Conference on HealthGIS: Geo Intelligence for Smart Healthcare on February 25-26, 2021
14. Venue Partner & Organizer, Pakistan IT Professionals Conference (PIPC) held during 8-9 December, 2021 at FAST-NUCES CFD Campus
15. Organized, Seminar on Coordination and Team Management: From a Team Lead Perspective held on Monday, November 15, 2021
16. Organized, Workshop on Enabling Excellence at Higher Education Institutions (HEIs) held on Wednesday January 27, 2021 at FAST-NUCES CFD Campus
17. Organizer, Training on Quality Hygiene & Hospitality held during 8-9 January 2021 at FAST NUCES-CFD
18. Organized, Pedagogical and Assessment Techniques for Hybrid Education by Dr. Shaihd Qamar Research Scientist at the University of Louisville, Kentucky USA held on Thursday August 27, 2020

19. Organizer, TechStars Startup Weekend Faisalabad In partnership with Google for Startups on 29 November 2019
20. Organizer, TEDx held on 6th April, 2016 at Library Auditorium UoG
21. Organizer, Summit of Emerging Technologies on April 14, 2016 at Library Auditorium UoG
22. Organizer, TECHIE Empowerment Summit held on April 29, 2016 at UoG
23. Organizer, E-Gamming and Programming Competition held on April 21 and 25, 2016 at UoG
24. Organizer, 4th International Workshop on Frontiers of Information Technology during December 20-21, 2006 Islamabad Pakistan, Organized by COMSATS Institute of Technology and sponsored by Higher Education Commission (HEC) Pakistan

WORKSHOPS/EVENTS AND CONFERENCES PARTICIPATED

1. Glimpse to a Modern Pakistan/French-Pakistani Cooperation in Higher Education on November 1, 2022 at LUMS organized by Embassy of France in collaboration with Campus France
2. Artificial Intelligence Connect Conference organized by Motive's on July 2022 at PC Lahore
3. International Conference on Substance Abuse, Prevention and Treatment at on 11 June 2022, Organized by Department of Psychology, National University of Medical Sciences (NUMS)
4. Advance Optical Fiber Systems and Li-Fi Demonstration held on August 26, 2021, organized by EPTech and FAST-NUCES CFD Campus
5. Tech Education and Covid-19 organized by Open Islamabad Annual Forum on 23 August, 2020 at PNCA, Islamabad
6. Workshop on Importance of Institutional Performance evaluation (IPE) at Higher Education Institutions (HEIs) at FAST NUCES CFD delivered by Dr. Riaz Ahmed Director Quality Assurance and Amp International Collaboration NUST held on Friday June 21, 2019.
7. Workshop on Design & Development of Curriculum and its Assessment Techniques organized by FAST NUCES CFD on March 14, 2019
8. ISPRS Student Consortium Summer School on Big Geosensing Data EcoSystem: Theory, Processing & Application held during 20-24 October, 2018 at UTM Kuala Lumpur, Malaysia
9. The 39th Asian Conference on Remote Sensing (ACRS 2018) Jointly Organized by Malaysian Remote Sensing Agency and Asian Association on Remote Sensing held during 15-19 October, 2018 at Kuala Lumpur, Malaysia
10. Data Science Boot Camp Organized by HEC and NUCES during January 9-13, 2017
11. 5-Day HEC Indigenous On-Campus Training Organized by ORIC Office at UoG, Pakistan during June, 2015
12. Workshop on Encouraging Problem Solving Research Policy for Enabling Environment on 17-June-2014 organized by Pakistan Science Foundation, PCST, PHMA & IRP, Pakistan
13. Workshop on Intuitive Image analysis with ENV15.0, organized by Geoinformatics Center AIT Bangkok on May 2-3, 2012 Organized by Exelis Osaka, Japan

14. Strategies for Urban Flooding Management Jointly organized by AIT, Polytech, University of Sophia Antipolis/Polytech Nice Sophia and National University of Singapore/DLR German Space Agency, Germany during 28-29 June 2012
15. Expert Group Meeting on Geo-Reference Disaster Risk Management Information System in Asia-Pacific Region, during 15-17 February, 2012. Organized by UN-ESCAP (Economic and Social Commission for Asia and the Pacific)
16. Winter School in Water Quality and Testing jointly organized by Mutah University, BEN Hayyan and DAAD held during 2-9 April, 2011 at Jordan
17. 2011 ProSPER.Net Young Researchers' School on Learning from Japan's Experience on Urban Sustainability, Organized by Hosei University, Japan, 1-12 August, 2011
18. The Royal Thai Air Force Academy English Camp Project during 19-21 April 2010 at Samut Songkram, organized by AIT Career Center, Thailand
19. Professional Development Needs Assessment and APMAS Startup Workshop during 6-11 July 2010 organized by AIT Extension (Professional Education for Capacity Building) and sponsored by IFAD (International Fund for Agricultural Development)
20. International Conference on Sustainable Development in the context of Climate Change, Asian Institute of Technology during 24-25 September 2009 sponsored by UNESCAP (United Nation Economic and Social Commission for Asia and the Pacific)
21. 2nd International Conference on Geoinformation Technologies for Natural Disaster Management, & Rehabilitation held during 30-31 January 2009 at Thailand
22. International Training Course under ProGENY Project on Global Navigation Satellite System (GALILEO) Education Tools during November 21-22 2008 organized by ISMB and Politecnico di Torino, Italy
23. Symposium on Pedagogy, organized by FAST-NUCES, Pakistan
24. 2nd Annual Business & Technology Conference (BIZTECH'15), FAST-NUCES, Pakistan

LIST OF SELECTED PRESENTATIONS

1. Invited Talk, during Belt and Road Forum on Digital Earth (BRFonDE 2023), December 6-8, 2023 at Beijing China
2. Keynote Speech, on 5th International Conference of Computer Science and Allied Technologies 2023 (ICCSAT-2023) at Lahore Garrison University during November 22-23, 2023
3. Panelist, Ecommerce Pro - Agencies & Freelancers Summit at Lahore Chamber of Commerce & Industry on 16-July, 2022
4. Panelist, 14th IEEE Pakistan Student/YP/WIE/SIGHT Congress during 26-27 February 2022 at Faisalabad
5. Panelists, for Leaders Talks on Bridging Academia/Industry for Cyber Maturity at BSides Islamabad 7-8 November 2020
6. Invited Discussion, on Eco-System of Faisalabad - Challenges & Opportunities organized by Askolay on 8th October 2020

7. Invited Talk, "Tech Education and COVID-19" organized by Startup Grind on 22nd August 2020
8. Oral Presentation, at 7th International Conference on Remote Sensing and Geoinformation of Environment, organized by Cyprus Remote Sensing Society held during March 18-21, 2019
9. Oral Presentation, at ISPRS Technical Commission Symposium on Developments, Technologies and Applications in Remote Sensing held during May 07-10, 2018 Beijing China
10. Invited Speaker, during AgMIP-Pakistan for Climate Change Adaptation Strategies on Ensure Food Security during 16-17 January 2014 at UAF, Pakistan
11. Guest Speaker, for Seminar on Emerging Technologies and Trends in Computer Science held on January 18, 2014 at UAF, Pakistan
12. Trainer, for 3 Days Workshop on Innovative Statistical Tools for Data Analysis "SPSS, GIS & SARA (WHO)", organized by WHO and Institute of Public Health Pakistan during January 21-23, 2014
13. Invited Talk, Consultative Meeting for eHealth Strategic Planning on "Vision and Key Components for eHealth" organized by WHO, Govt. of Pakistan and COMSATS during 1-2 May, 2014
14. Invited Talk, at International Seminar on "Climate Change Adaptation Strategies to Ensure Food Security" held at University of Agriculture, Faisalabad from Jan 16-17, 2014 organized by AgMIP, Pakistan and Washington State University, USA
15. Trainer, Use of Innovative Statistical Tools for Data Analysis (SPSS, GIS & SARA) at Institute of Public Health, Lahore Organized by WHO from January 21-23, 2014
16. Trainer, Workshop on Geographical Information System for Water Management Officers during 09-10 December, 2013 conducted by Water Management Training Institute, Lahore
17. Invited talk on GIS Applications for Health on Fourth International eHealth Conference during 22-23 November 2013 at Karachi organized by eHealth Association of Pakistan
18. Keynote Speech, at ICBIM 2013, International Society of Universal Research in Science, Pakistan held during 27-28 April 2013 at Abbottabad, Pakistan
19. Delivered Talk, on Geo-Spatial Technologies for Spatial Epidemiology, on 9th ISPRS Summer School held during 25-30 October, 2013 Bali Indonesia
20. Invited Talk, on Geo-Information technologies for Social Issues at 11th International Conference on Frontiers of Information Technology (FIT) held at Islamabad, Pakistan from 16-18 Dec 2013 supported by IEEE CS Society.
21. Oral Presentation, on Remote Sensing & GIS tools for Public Health at 4th International eHealth Conference held at Karachi, Pakistan during 22-23 Nov 2013
22. Invited Talk, Geo-spatial Technologies for Monitoring Climate and Environment at 34th ACRS Summer School held at Bali, Indonesia during 25-31 Oct 2013
23. Oral Presentation, on Identification of Urban and Peri-urban Favorable Breeding Habitat for Aedes mosquitoes at 2nd Symposium on Advances in Geospatial Technologies for Health at Arlington, VA, USA during 25-30 August 2013

24. Oral Presentation, on Crop Identification, Forecasting, and Stress Detection using Hyper Spectral Remote Sensing Sydney Convention and Exhibition Center 10-15 April 2011, Australia
25. Trainer, Advance Satellite Image Processing for LULCM Project for Bhutan from 26-March to 13 April, 2012 at Asian Institute of Technology (AIT), Thailand
26. Trainer, GIS and Remote Sensing in Irrigation Planning, from 6-June to 1-July, 2011, Organized by AIT and supported by “Ministry of Energy and Water (MEW), Afghanistan
27. Oral Presentation, on Role of Remote Sensing to Extract Water Quality Parameters and its Management organized by EXCEED (Technische Universitat Braunschweig Germany) and Mutah University Jordan, Sponsored by DAAD on 6th April 2011 Aqaba, Jordan
28. Oral Presentation, at 3rd International Conference on Geoinformation Technology for Natural Disaster Management & Rehabilitation during 19-20 October, 2010 at Chiang Mai, Thailand
29. Poster Presentation, on Geospatial Characterization of Dengue Risk in Urban Environment during 26-28 July 2010 at Map Asia & ISG 2010 Malaysia
30. Presentation, on “Vector-borne Diseases and Role of Remote Sensing & GIS, Current & Future Research Perspective” for Outreach International Participant from Department of Remote Sensing, Faculty of Geoinformation Science & Engineering, University Technology of Malaysia on 16th December-2009

SELECTED PUBLICATIONS

1. Usman Ghous, Muhammad Shahzad Sarfraz, Muhammad Ahmad, Chenyu Li, Danfeng Hong, “(2+1) D Extreme Xception Net for Hyperspectral Image Classification”, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Earth and planetary sciences PP (99):1-14, (IF:5.5), January 2024.
2. Rabia Maqsood, Paolo Ceravolo, Muhammad Ahmad, & Muhammad Shahzad Sarfraz, “Examining students’ course trajectories using data mining and visualization approaches”, International Journal of Educational Technology in Higher Education, Springer Netherlands, (JCR IF=7.611), October 2023.
3. Ariyo Oluwasanmi, Muhammad Umar Aftab, Zhiguang Qin, Muhammad Shahzad Sarfraz, Yang Yu, and Hafiz Tayyab Rauf, “Multi-Head Spatiotemporal Attention Graph Convolutional Network for Traffic Prediction”, Multidisciplinary, MDPI & Switzerland, (IF. 3.847), April 2023.
4. Momna Javaid, Muhammad Shahzad Sarfraz, Muhammad Umar Aftab, Qamar uz Zaman, Hafiz Tayyab Rauf, and Khalid A. Alnowibet, “WebGIS-Based Real-Time Surveillance and Response System for Vector-Borne Infectious Diseases”, International Journal of Environmental Research and Public Health, Multidisciplinary, MDPI & Switzerland, (IF. 4.614), 2023.
5. Mahnoor Khalid, Muhammad Shahzad Sarfraz, Uzair Iqbal, Muhammad Umar Aftab, Gniewko Niedbala, and Hafiz Tayyab Rauf, “Real-Time Plant Health Detection Using Deep Convolutional Neural Networks”, Agriculture, Multidisciplinary, MDPI & Switzerland, (IF. 3.408), 2023.
6. Samia Aziz, Muhammad Shahzad Sarfraz, Muhammad Usman, Muhammad Umar Aftab, and Hafiz Tayyab Rauf, “Geo-Spatial Mapping of Hate Speech Prediction in Roman Urdu”, Mathematics, Computer Science, MDPI & Switzerland, (IF. 2.595), 2023.

7. M.H. Musaddiq, M.S. Sarfraz, N. Shafi, R. Maqsood, A. Azam, M. Ahmad, "Predicting the Impact of Academic Key Factors and Spatial Behaviors on Students' Performance", MDPI, Switzerland, (IF. 2.838), 2022.
8. Aftab, M. U., Hamza, A., Oluwasanmi, A., Nie X., Sarfraz, M. S., Shehzad, D., Qin, Z., & Rafiq, A. Traditional and Hybrid Access Control Models: A Detailed Survey. Security and Communication Networks, 2022.
9. Khan, M. A., Nasralla, M. M., Umar, M. M., Iqbal, Z., Rehman, G. U., Sarfraz, M. S., & Choudhury, N. (2021). A Survey on the Noncooperative Environment in Smart Nodes-Based Ad Hoc Networks: Motivations and Solutions. Security and Communication Networks, 2021.
10. Jalbani, K. B., Yousaf, M., Sarfraz, M. S., Jamili Oskouei, R., Hussain, A., & Memon, Z. Poor Coding Leads to DoS Attack and Security Issues in Web Applications for Sensors. Security and Communication Networks, 2021.
11. Memon, Z., Aghian, H., Sarfraz, M. S., Hussain Jalbani, A., Oskouei, R. J., Jalbani, K. B., & Hussain Jalbani, G. (2021). Framework for Educational Domain-Based Multichatbot Communication System. Scientific Programming, 2021.
12. Tariq, H., Hanif, M. K., Sarwar, M. U., Bari, S., Sarfraz, M. S., & Oskouei, R. J. Employing Deep Learning and Time Series Analysis to Tackle the Accuracy and Robustness of the Forecasting Problem. Security and Communication Networks, 2021.
13. Ali, H., Rafique, M. Z., Sarfraz, M. S., Malik, M. S. A., Alqahtani, M. A., & Alqurni, J. S. A novel approach for solving travelling thief problem using enhanced simulated annealing. PeerJ Computer Science, 7, e377.
14. Xiao, H., Ali, S., Zhang, Z., Sarfraz, M. S., Zhang, F., & Faisal, M. Big Data, Extracting Insights, Comprehension, and Analytics in Cardiology: An Overview. Journal of Healthcare Engineering. Hindawi.
15. Ahmad, M., Khan, A. M., Mazzara, M., Distefano, S., Ali, M., & Sarfraz, M. S. A Fast and Compact 3-D CNN for Hyperspectral Image Classification. IEEE Geoscience and Remote Sensing Letters.
16. Khan, M. A., Sarfraz, M. S., Alhaisoni, M., Albeshir, A. A., Wang, S., & Ashraf, I. StomachNet: Optimal Deep Learning Features Fusion for Stomach Abnormalities Classification. IEEE Access.
17. Umair, A., Sarfraz, M. S., Ahmad, M., Habib, U., Ullah, M. H., & Mazzara, M. Spatiotemporal Analysis of Web News Archives for Crime Prediction. Applied Sciences, 10(22), 8220.
18. Khan, M. A.; Seifedine, K.; Majed A.; Yunyoung N.; Yudong Z.; Venkatesan R.; and Sarfraz, M. S. "Computer-Aided Gastrointestinal Diseases Analysis From Wireless Capsule Endoscopy: A Framework of Best Features Selection. IEEE Access 8(2020), 132850-132859.
19. Ahmad, M.; Mazzara, M.; Raza, R.A.; Distefano, S.; Asif, M.; Sarfraz, M. S.; Khan, A.M.; Sohaib, A. Multiclass Non-Randomized Spectral-Spatial Active Learning for Hyperspectral Image Classification. Appl. Sci. 2020, 10, 4739.
20. Tariq M. Imran., Shahzadi T., Ali M. Natash, Sarfraz M. S. Hussain Akhtar, Imran M. Pricop Emil, Candia O, Paraschiv N. "Combination of AHP and TOPSIS methods for the ranking of information security controls overcome its obstruction under fuzzy environment." Journal of Intelligent & Fuzzy Systems, Vol. 38, no.5, pp.6675-6088, (2020).

21. Ashraf, M. Waseem., Manzoor Saher. Sarfraz M. S. Waseem M. Faisal., Ali Basic., Akhlaq M., Rujita C., Pupa Alex., “Fabrication and fuzzy analysis of AAO membrane with manipulated pore diameter for applications in biotechnology”. *Journal of Intelligent & Fuzzy Systems*, vol. 38, no. 5, pp. 5857-5864, (2020)
22. Tariq M. Imran., Shahzadi T., Ali M. Natash., Sarfraz M. S. Hussain Akhtar, Imran M. Pricop Emil, Candia O, Paraschiv N. “Intelligent data analysis and applications & smart vehicular technology, communications and applications” *Journal of Intelligent & Fuzzy Systems*, vol. 38, no. 5, pp. 5933-5947, (2020).
23. Khan, A., Shoaib, U., & Sarfraz, M. S. (2019). A Comprehensive Study of Modern and High-Speed TCP-Variant in Linux Kernel: TCP CUBIC. *The International Arab Journal of Information Technology*.16(6). 1028-1035.
24. Akram, A., Sarfraz, M. S. & Shoaib U. (2019). HLA Run Time Infrastructure: A Comparative Study. *Mehran University Research Journal of Engineering & Technology*. 38(4), 961-972.
25. Aurangzeb K., Haider I., Khan M.A., Saba T., Sarfraz, M.S., (2019). Human Behavior Analysis based on Multi-types Features Fusion and Von Nauman Entropy based Features Reduction. *Journal of Medical Imaging and Health Informatics*. 9(4), 662-669.
26. Hassan, J., Sarfraz, M. S. (2019). Impact of suicide bombings in Pakistan using spatial and temporal analysis. In *Seventh International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2019)* (Vol. 11174, p. 111740S). International Society for Optics and Photonics.
27. Shakoor A., Ahmed A., Sarfraz, M.S. (2018). Security Technique in Mobile Clouds to Ensure Malware Prevention. *Indian Journal of Science and Technology*. *Indian Journal of Science and Technology*, 11(31).
28. Naz, N. A., Shoaib, U., & Sarfraz, M. S. (2018). A Review on Customer Churn Prediction Data Mining Modeling Techniques. *Indian Journal of Science and Technology*, 11(27).
29. Naseem S.Z., Nazir S., Sarfraz, M.S., Shoaib U., Altaf A. (2018). Extended Tiny Encryption Algorithm Equipped with Arabic Script (AXTEA). *Pakistan Journal of Science*, 70(3).
30. Rana, M. F., Shoaib, U., Sarfraz, M. S. (2018). Ergonomics Estimation and Dimensions of ATM Usage in Pakistan. *Indian Journal of Science and Technology*. *Indian Journal of Science and Technology*, 11(24).
31. Baig, S., & Sarfraz, M. S. Spatio-temporal Analysis to Predict Environmental Influence on Malaria. *Proceedings of ISPRS TC III Mid-term Symposium “Developments, Technologies and Applications in Remote Sensing held in Beijing, China during May 7-10, 2018*.
32. Rana, I. A., Aslam, S., Sarfraz, M. S., & Shoaib, U. (2018). Analysis of Query Optimization Components in Distributed Database. *Indian Journal of Science and Technology*, 8(1).
33. Mahmood, A., Shoaib, U., & Sarfraz, M. S. (2018). A Recommendation System for Cloud Services Selection based on Intelligent Agents. *Indian Journal of Science and Technology*, 11(10).
34. Nazar, H., Sarfraz, M. S., & Shoaib, U. (2017). Web Accessibility Evaluation of Banking Website in Pakistan. *International Journal of Computer Science and Information Security*, 15(1), 642.
35. Noureen, A., Shoaib, U., & Sarfraz, M. S. (2017). Secure Device Pairing Methods: An Overview. *INTERNATIONAL Journal of Advanced Computer Science and Applications*, 8(9), 442-451.

36. Riaz, A., Shoaib, U., & Sarfraz, M. S. (2017). Workplace Design and Employee's Performance and Health in Software Industry of Pakistan. *International Journal of Advanced Computer Science and Applications*, 8(5), 542-548.
37. Azeem, M. W., Sarfraz, M. S., & Shoaib, U. (2016). Comparison of Different Techniques for Detecting Malware in Smartphones. *International Journal of Computer Science and Information Security*, 14(5), 642.
38. Rasheed, A., Shoaib, U., & Sarfraz, M. S. (2016). Performance evaluation of Keystone in cloud (OpenStack) for applications in Disaster Management & Recovery. *International Journal of Computer Science and Information Security*, 14(11), 202.
39. Rahman, A., Sarfraz, M.S., Shoaib, U., Abbas, G., & Sattar, M. A. (2016). Cloud based E-Learning, Security Threats and Security Measures. *Indian Journal of Science and Technology*, 9(48).
40. Tabassum, H., Shoaib, U., & Sarfarz, M. S. (2016). Tools and Techniques for Predicting User Browsing Behavior by using Web Usage Mining. *International Journal of Computer Science and Information Security*, 14(11), 519.
41. Rashid, A., Shoaib, U., & Sarfraz, M. S. (2016). Knowledge Discovery in Database using Intention Mining. *Science International-Lahore*, 28(6),5145-515.
42. Mir, S. S., Shoaib, U., & Sarfraz, M. S. (2016). Analysis of Digital Forensic Investigation Models. *International Journal of Computer Science and Information Security*, 14(11), 292.
43. Khalid, F., Shoaib, U., Sarfraz, M. S., Shabbir, A., Shaheed, S. M., & Rubab, U. E. (2016). Desktop Virtualization: An Art to Manage and Maintain affordable PC infrastructure. *International Journal of Computer Science and Information Security*, 14(11), 187.
44. Razzaq, S., Shoaib, U., & Sarfraz, M. S. (2016). Evaluation of Image Services in Open Source Clouds for Disaster Management. *International Journal of Computer Science and Information Security*, 14(11), 398.
45. Arshad, M., Nawaz, R., Shah Nawaz, M., Sarfraz, M. S., Ahmad S., & S. L. Ranamukhaarachchiet. (2015). First and second generation bioethanol production in sweet sorghum, mungbean and soybean in sole and intercropping systems. *Trop. Agric*, 41(3216), 010035-14.
46. Arshad, M., Nawaz, R., Shah Nawaz, M., Sarfraz, M. S., Ahmad, S., & Ranamukhaarachi, S. L. (2014). Effect of Legume type, Nitrogen Dose and Air Quality on Biomass and Bioethanol Production in Sweet Sorghum-Legume Intercropping. *Poljoprivreda i Sumarstvo*, 60(3), 257.
47. Sarfraz, M. S., Tripathi, N. K., Faruque, F. S., Bajwa, U. I., Kitamoto, A., & Souris, M. (2014). Mapping urban and peri-urban breeding habitats of Aedes mosquitoes using a fuzzy analytical hierarchical process based on climatic and physical parameters. *Geospatial health*, 8(3), 685-697.
48. Nawaz, R., Arshad, M., Sarfraz, M. S., Ashraf, M.W., Hayyat, M.U., Mahmood, R., and Parkpian, P. (2014). Interactions between Acidic (Al³⁺, Fe²⁺) and Basic (Ca²⁺, Mg²⁺) Cations in Oxisol and Ultisol under Acidification Induced by Simulated Acid Rain. *Asian Journal of Chemistry*. 269(15), 4794-4800.
49. Sarfraz, M. S., Tripathi, N. K., Ali, S., & Sattar, K. Relationship of Dengue Larval Density and Dengue Cases Considering Environmental Conditions in Uttaradit, Thailand. At GSA Annual Meeting in Vancouver, British Columbia during October, 2014.

50. Sarfraz, M. S., Tripathi, N. K., & Kitamoto, A. (2014). Near real-time characterisation of urban environments: a holistic approach for monitoring dengue fever risk areas. *International Journal of Digital Earth*, 7(11), 916-934.
51. Sarfraz, M. S., Tripathi, N. K., Kitamoto, A., and Souris, M. Identification of Urban and Peri-urban Favorable Breeding Habitat for Aedes Mosquitoes. At 2nd symposium on advances in geospatial technologies for health at Arlington, VA, USA during 24-30 August, 2013.
52. Asif, M., Sarfraz, M. S., Ahmed, M. S., & Tripathi, N. K. (2013). A Two Factor Based Anti-Phishing Method in Open ID. *Journal of Basic and Applied Scientific Research*. 3(12), 26-33.
53. Arshad, M., Cheema, T. A., Ahmad, S., Nawaz, R., Sarfraz, M. S., Shrestha, R. P., & Ranamukhaarachchi, S. L. (2013). Yield Comparison of Nonstructural Carbohydrates in Sweet Sorghum and Legume-Based Cropping Systems. *Communications in Soil Science and Plant Analysis*, 44(14), 2186-2206.
54. Sarfraz, M. S., Tripathi, N. K., Tipdecho, T., Thongbu, T., Kerdthong, P., & Souris, M. (2012). Analyzing the spatio-temporal relationship between dengue vector larval density and land-use using factor analysis and spatial ring mapping. *BMC public health*, 12(1), 853.
55. Asif, M., Nitin, T., Ullah, K., & Sarfraz, M. S. (2012). A Web-based Disaster Management-Mitigation Framework Using Information and Communication Technologies and Open Source Software. *JU Journal of Information Technology*, 1, 15-18.
56. Ahmad, S., Sadiq, M., Cheema, T.A., and Sarfraz, M. S. Geographical information system (GIS) based approach to monitor epidemiological disaster: 2011 dengue fever outbreak in Punjab, Pakistan. At 4th Int. Conference on Geo-Information Technology for Natural Disaster Management-“Reduce Exposure to Reduce Risk”, Colombo, Sri Lanka during 7-8 November 2012.
57. Shahzada, H., Tripathi, N.K., and Sarfraz, M. S. Geo-spatial site suitability for medicinal plants in Chiang Mai, Thailand. At the 1st International Conference on Health Science, Thai Traditional and Alternative Medicine, Mahasarakham University, Thailand during November, 21-23, 2012.
58. Sarfraz, M. S., Arshad, M., and Tripathi, N. K. Evaluation Of Ground Hyperspectral Remote Sensing For Precise Satellite Imagery Based Land Cover Classification And Forecasting Of Rice Grain Production. Proceedings of 34th International Symposium on Remote Sensing of Environment, held in Sydney Australia during April 10-15, 2011.
59. Ahmad, S., Sarfraz, M. S., and Tripathi, N. K. Disaster Management System and Role of CDMA Wireless Technology for Faster and Secure Communication. Proceedings of the Geo-Information Technology for Natural Disaster Management & Rehabilitation held in Chiang Mai, Thailand during 19-20 October-2010.
60. Sarfraz, M. S., Tripathi, N.K., Souris, M., Arshad, M., and Asif, M. Geospatial Characterization of Dengue Risk in Urban Environment. Proceedings of Map Asia & ISG 2010 held in Kuala Lumpur, Malaysia, July 26-28, 2010.

THESES SUPERVISION

1. **Umer Iqbal** 2024 - Present
Discovering Archaeological Sites and Land cover/land-use Change in Chiniot using Remotely Sensed Images PhD
2. **Awais Azam** 2023 - Present
A Cross-Domain Recommendation Approach with Aspect-Based Sentiment Analysis and Transfer Learning for Cold Start Challenges PhD
3. **Muhammad Usman** 2022- Present
A Blockchain based Hybrid Access Control Model for IoT using Machine Learning PhD
4. **Adeel Ashraf Cheema** 2022- Present
Latent User-profiling for IoT facilitated Cross Domain Recommender Systems PhD
5. **Ch. Usman Ghous** 2022 - Present
Active Transfer Learning for Hyperspectral Image Classification PhD
6. **Mr Shahbaz Ahmed** 2014 – 20
Web GIS-based Surveillance and Prediction System for Dengue Virus in Punjab Pakistan Ph.D.
7. **Wania Fatima** 2022 – Present
Influential Factors Affecting Students Academic Performance in Online Education MS
8. **Kashaf Shakoor** 2021 – 23
Dengue Risk Assessment Using real Time Climate and Environment Staellites Data MS
9. **Areeba Waseem** 2021 – 23
Trajectory and Hotspot Analysis of Hate Speech on Social Media Networks MS
10. **Malahat Fatima** 2017 – 21
Geo Spatial Technologies for Real Time Monitoring of Vector borne Diaseases and Forecasting Possible Threats MS
11. **Mr. Umair Ashfaq** 2020 – 22
Social Media Warn Audience Prediction for e-commerce Using Machine Learning MS
12. **Ms. Mahnoor Khalid** 2020 – 22
Plants Health Detection using Deep Learning MS
13. **Samia Aziz** 2020 – 22
Geo Spatial Mapping of Hate Speech Prediction in Roman Urdu MS
14. **Momna Javaid** 2020 – 22
WebGIS Based Real Time Surveillance and Response System for Vector Borne Infections Diseases MS
15. **Aroosa Razzaq** 2019 – 21
Maize Plants Disease Classification Using Multispectral Images MS
16. **Rameen Zehra** 2018 – 21
Temporal and Spatiotemporal Sentiment Analysis of Tourists on Flicker MS

17. Muhammad Hammad Musaddiq	2018 – 21
Geospatial and Machine Learning Techniques for Predicting Students Academic Performance	MS
18. Talha Munir	2018 – 21
Air Pollution Prediction affecting Acute Respiratory Infection Disease using Remotely Sensed Images	MS
19. Nida Hussain	2018 – 21
Environmental Constraints of Optimization Crop Yield Prediction	MS
20. Noor Asim	2018 – 21
Weed Identification using Vegetation indices and Multispectral UAV Imaging	MS
21. Ms Farwa Ahmad	2017 – 20
Expert Recommendation System in Community Question Answering Forum Based on Users Profiles	MS
22. Ms Areeba Umair	2018 – 20
Prediction of Career Projection Trajectories of Pakistani Graduates using LinkedIn Data	M.Phil.
23. Ms Sahar Ajmal	2017 – 19
PUB-VEN: A Hybrid Expert System for Suggesting Publication Venue	M.Phil.
24. Ms Maryam Saeed	2016 – 18
Web-based Intervention and Analysis System for the Parents of Depressed and Anxious Adolescent	M.Phil.
25. Ms Madiha	2016 – 18
Spatial Inter-relationship of Quality of Life with Socio and Demographic Factors	M.Phil.
26. Mr Shahbaz Baig	2015 – 17
Analysing Spatial Dependencies of Contaminated Crops using Geospatial Technologies	M.Phil.
27. Ms Rafia Ilyas	2012 – 14
Effective Solution of University Time Tabling using Practical Swarm Optimizer	M.Phil.
28. Mr Abdul Shakoor	2010 – 12
Security Technique in Mobile Clouds to Ensure Malware Prevention	M.Phil.

ACTIVITIES CONDUCTED AND SUPERVISED

1. Convocations	2019, 2021, 2022 & 2023
2. New Students Orientations	2019, 2021, 2022 & 2023
3. Semester Positions Medal Distribution	2019, 2021, 2022 & 2023
4. Pakistan Engineering Council Visits	2019, 2021, 2022 & 2023
5. National Computing Education Accreditation Council Visits	2017, 2019, 2020, 2021 & 2023
6. Institutional Performance Evaluation Visits	2019, 2020, 2022, 2023 & 2024

7. Faculty Development Workshops	2021, 2022 & 2023
8. Self Assessment Visits of BS/MS/PhD Programs Visits	2019, 2020, 2021, 2022, & 2023
9. Industrial Advisory Board Meetings	2019, 2021, 2022, 2023, & 2024
10. Job Fair at FAST-NUCES CFD Campus	2019, 2021, 2022 & 2023
11. Alumni Home Comings	2019, 2021, 2022 & 2023
12. Daira (Extra and Co-Curriculum Activities Events)	2019-2022 & 2023
13. Book Fair	2021, 2022, & 2023
14. Launch of New Degree Programs PhD (CS & EE), MS (CS & DS), , BS (AI,SE, BA & Robotics)	

MEMORANDUM OF UNDERSTANDING SIGNED

1. SI-UK Pakistan Consultants	17-Feb-24
2. Crewlogix Technologies Software	18-Oct-23
3. Fastdev Software	10-Aug-23
4. Linnaeus, University, Sweden	10-Oct-23
5. Faisalabad I.T Companies Organization - FITCO Software	16-Feb-23
6. Akhuwat Foundation	20-Mar-23
7. Qbatch Software	07-Dec-22
8. MTM Manufacturing	30-Nov-22
9. Cogent Labs Software	23-Nov-22
10. Game Train IT & Trainings	01-Nov-22
11. Netixsol Blockchain/Technology Services	17-Oct-22
12. Bloctech Solutions Blockchain/Technology Services	15-Sep-22
13. Technupur IT Services	25-Jul-22
14. Key & Emms (Pvt.) Ltd. Manufacturing	03-Feb-22
15. Content Arcade Software	17-Nov-21
16. POA Solutions IT Training & Solutions	10-Nov-21
17. Systems Limited Software	03-Nov-21
18. DevNation IT Training	26-Oct-21
19. OZI Group Software	12-Oct-21
20. EPTeck Technologies Pvt. Ltd.	29-Jul-21

DEVELOPMENT PROJECTS COMPLETED IN CFD CAMPUS

Year	Description	Budget
2020-21	Separate Feeder Line from Grid, Grass cultivation in Cricket Ground, Construction of Students' Facilitation Center	351.02
2021-22	Construction of Girls' Hostel, Installation of Lift, Solar Parking Shed, Futsal Ground, Construction of stage, Street Lights Installation, Paver Work, Medical Center, Fitness Center	1239.45
2022-23	Construction of Data Science and AI Block, Girls Hostel Allied Facilities, Street Lights Installation, Construction of Panel & Sync Electric Room, Maintenance and Technician Workshop, Boundary Wall on New Land	544.40
2023-24	construction of two new floors on Admin block, classrooms steps, construction of roads between hostels	1372.30
Total		3507.17 Million

COUNTRIES VISITED

Country	From	To	Nature	Purpose
China	01-Dec-2023	10-Dec-2023	Official	Conference
Saudi Arabia	23-05-2023	05-Jul-2023	Personal	Hajj
Saudi Arabia	10-Dec-2022	25-Dec-2022	Personal	Umrah
Cyprus	19-Mar-2019	24-Mar-2019	Official	Conference
Malaysia	13-Oct-2018	25-Oct-2018	Official	Conference
China	06-May-2018	11-May-2018	Official	Conference
UAE	03-May-2011	06-May-2018	Personal	Tourism
India	04-Dec-2014	12-Dec-2014	Official	Conference
Indonesia	24-Oct-2013	01-Nov-2013	Official	Trainer
USA	24-Aug-2013	10-Sep-2013	Official	Conference
Thailand	13-Aug-2013	23-Aug-2013	Personal	Tourism
Sri Lanka	06-Nov-2012	10-Nov-2012	Official	Conference
Japan	31-Jul-2011	13-Aug-2011	Official	Cultural Activities
Australia	10-Apr-2011	23-Apr-2011	Official	Conference
Jordan	31-Mar-2011	08-Apr-2011	Official	Workshop
Japan	01-Aug-2010	18-Mar-2011	Official	Visiting Researcher
Malaysia	25-Jul-2010	29-Jul-2010	Official	Conference
Thailand	23-Jan-2008	22-Dec-2012	Official	Doctoral Degree

BIBLOGRAPY

Dr. Muhammad Shahzad Sarfraz is a prominent figure in the fields of Computer Science and Geospatial Technologies. He spearheads key thematic areas including ICT tools for Health, Agriculture, Disaster Management, and Location-based Systems, with a keen focus on their applications for the Environment. Dr. Shahzad specializes in utilizing web-based and machine learning open-source tools for Remote Sensing & Geographical Information Systems.

His academic contributions are substantial, encompassing more than 60 journal and conference papers. Additionally, he has developed tools tailored to organizational needs, conducted readiness assessments, and evaluated eHealth initiatives. Dr. Shahzad boasts extensive experience in planning, initiating, and overseeing the Computer Science Department and Evening Programs at the University of Gujrat. Moreover, he has demonstrated adeptness in catalyzing and coordinating research activities within the department.

Currently serving as a Professor in the Computer Sciences department and Director at the Chiniot-Faisalabad campus of the university, Dr. Shahzad Sarfraz has held distinguished positions in various institutions. Before joining the FAST-National University of Computer and Emerging Sciences, he served as an Associate Professor, Chairperson of the Computer Science Department, and Director of Evening Programs at the University of Gujrat and COMSATS Institute of Information Technology. His academic journey includes roles as an Assistant Professor at NUCES and a Ph.D. scholar at the Asian Institute of Technology (AIT), Thailand.

Dr. Shahzad's global exposure extends to his tenure as a visiting researcher in the Digital Image Processing lab at the National Institute of Informatics (NII), Tokyo, Japan. He has actively participated in seminars and workshops, both nationally and internationally, fostering collaborative research across the globe. A member of esteemed international societies such as IEEE, ACM, ISPRS, Canadian Remote Sensing, International Association of Chinese Professionals in GIS, and more, Dr. Shahzad also serves as a resource person for the World Health Organization (WHO) and Pak One Health Alliance, Pakistan, facilitating capacity-building workshops on analytical skills and information utilization.