

HUMERA BATOOL GILL

Lecturer, Institute of Computer Science & Information Technology

The Women University Multan, Pakistan

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PERSONAL INFORMATION

CNIC: 36101-8311351-8

DOB: 06 September 1981

Date of Joining: 29 August 2022

Employee ID: 6528

Designation: Lecturer (BPS-18)

Employment Type: Permanent

ACADEMIC QUALIFICATIONS

Degree	Board/ University	Year
Ph. D Information Technology Research Work in progress	Islamia University Bahawalpur	2022-
M.Ed	Allama Iqbal Open University, Islamabad	2022
MS Information Technology	Bahauddin Zakariya University, Multan	2013-2015
B.Ed	Allama Iqbal Open University, Islamabad	2016
Masters in Computer Science (MCS)	Bahauddin Zakariya University, Multan	2003-2005
Bachelors in Computer Science	Bahauddin Zakariya University, Multan	2001-2003
F.Sc (Pre-Medical)	BISE , MULTAN	1998-2000
Matriculation	BISE , MULTAN	1996-1998

TEACHING EXPERIENCE

Lecturer (BPS-18), Permanent | The Women University Multan

August 29, 2022 – Present

- Teaching undergraduate courses in Computer Science and Information Technology
- Also served as Visiting Lecturer at The Women University Multan prior to permanent appointment

Visiting Lecturer | Bahauddin Zakariya University, Multan

- Taught undergraduate courses in Computer Science

Visiting Lecturer | The Education University, Multan Campus

- Taught undergraduate courses in Computer Science and Information Technology

IT Teacher | SED Punjab

31 May 2006 – 28 August 2022

- Taught High & Higher classes
- Computer Science Practical Examiner, BISE Multan (2007-2022)
- Computer Graduate Practical Examiner, Bahauddin Zakariya University, Multan (Since 2009)

IT Master Trainer | Govt. Girls Excellent Laboratory Higher Secondary School, Multan

- Provided IT trainings to Heads of High and Higher Secondary Schools
- Provided IT trainings to teachers of High and Middle Schools

Inspection Team Member | District Khanewal

2009

- Deployment and validation of Computer Labs across District Khanewal

Software Developer | Khawateen Computer College, Multan

2005

- Developed and coordinated software projects

- Taught students of F.Sc and B.Sc
- Conducted entry test preparation classes

RESEARCH EXPERIENCE & SPECIALIZATION

Research Focus: Artificial Intelligence (Deep Learning, Machine Learning), Data Mining, High Performance Computing, Wireless Sensor Networks (WSNs) & 6G Communication, Medical Data Analysis & Disease Prediction, Software Requirement Engineering, Emerging Data Storage Technologies

- Automated detection of gallstone disease using machine learning techniques
- Lung cancer detection using deep ensemble methods with SMOTE
- Hepatitis C disease classification using ensemble learning models
- Performance evaluation of cluster head selection algorithms in Wireless Sensor Networks (WSNs)
- Channel selection strategies for improved quality of service in 6G wireless networks
- Requirement elicitation technique selection for software development methodologies
- DNA, graphene, and neural encoding approaches for future data storage systems
- Blockchain and big data applications in archaeological photogrammetry

PUBLICATIONS METRICS

Research Profile: Humera Batool Gill https://www.researchgate.net/profile/Humera-Batool-Gill-2?ev=hdr_xprf

h-index: 2

ORCID: 0000-0001-5388-9171

Peer-Reviewed Journal Articles: 11

RESEARCH PUBLICATIONS

A. Peer-Reviewed Journal Articles

- Gill, H. B., et al. From Molecules to Mind: Simulating the Future of Data Storage with DNA, Graphene and Neural Encoding. Kashf Journal of Multidisciplinary Research. (October 2025).
- Gill, H. B., et al. Automated Detection of Gallstone Disease Using Machine Learning Techniques: A Data-Driven Approach. Statistics, Computing and Interdisciplinary Research. (September 2025).
- Gill, H. B., et al. Performance Evaluation of Various Algorithms for Cluster Head Selection in WSNs. (October 2024).
- Gill, H. B., et al. Selecting Suitable Requirement Elicitation Technique for Development Methodologies. Machines and Algorithms. (August 2024).
- Gill, H. B., et al. An Effective Paradigm for Selecting Channels in 6G Wireless Networks with Improved Quality of Service. Proceedings of Pakistan Academy of Sciences A: Physical and Computational Sciences. (June 2024).
- Gill, H. B., et al. Effective Deep Ensemble Methods for the Detection of Lung Cancer with SMOTE. Research. (March 2024).
- Gill, H. B., et al. Ensemble Learning Model for Classification of Hepatitis C Disease. Machines and Algorithms. (October 2023).
- Gill, H. B., et al. Blockchain and Big Data to Revolutionize Archaeological Photogrammetry (AP): A Safe and Effective Method. Journal of Biomedical Informatics X. (June 2023).
- Gill, H. B., et al. Performance Evaluation of Various Algorithm for Cluster Head Selection in WSNs. The Nucleus. (April 2023).
- Gill, H. B., et al. An Efficient Algorithm to Enhance Nonoverlapping Coverage Area with Less Energy Consumption in WSN. Wireless Communications and Mobile Computing. (December 2022).
- Gill, H. B., et al. Influence of Project Management in Requirement Engineering Process for Global Software Development. International Journal of Computer Applications in Technology. (October 2018).

B. Conference Abstracts / Proceedings

- Multimodal Aspect Based Sentiment analysis in Crises Communication (International Conference on Artificial Intelligence and Emerging Technologies Nov 2023 by MNUA Multan)
- Machine Learning Techniques on Celiac Disease(International Conference on Food & Applied Sciences ICFAS 2023 University of Peshawar Kumrat)
- Exploring the Power of Generative AI: Enhancing Capabilities and Eradicating Limitations(International Conference on Food & Applied Sciences ICFAS 2023 University of Peshawar Kumrat)
- A review on Machine Learning Models for Predicting Dementia(1st International Conference on Emerging Trends and Challenges in Artificial Intelligence (ICETCAI 2024 WUM)
- Real Time Face Mask detection and crowd Sensing(International Conference on Food and Applied Sciences Nathia Gali May 2024)
- Focusing on the Diseased Mind: Attention Based CNNs for Schizophrenia Detection from Brain MRI (2nd International Conference on Artificial Intelligence, Computing & Data Sciences (AICD-2025) Institute of CS & IT, The Women University Multan)

CONFERENCES, SEMINARS & WORKSHOPS

- Organizer TechXPO-2025, Institute of CS & IT, The Women University Multan
- TechXPO-2024 by Institute of CS & IT, The Women University Multan
- 2nd International Conference on Artificial Intelligence, Computing & Data Sciences (AICD-2025) Institute of CS & IT, The Women University Multan
- TechExpo-2024 by Institute of CS & IT, The Women University Multan
- Co-Organizer 1st International Conference on Emerging Trends and Challenges in Artificial Intelligence (ICETCAI 2024) Institute of CS & IT, The Women University Multan
- 1st International Conference on Mathematics for Sustainable Future three days conference organized Department of Mathematics WUM , December 2024
- Participation in 10th Anniversary Celebration Event as Alumni(2024)
- Organized two-day workshop on “Hands on Machine Learning”
- Organized One day seminar on “Freelancing as a Career” presented by “AIHAWKS”
- Participated as Presenter in International Conference on Food & Applied Sciences ICFAS 2023 University of Peshawar Kumrat
- Participated as Presenter in International Conference on Artificial Intelligence and Emerging Technologies Nov 2023 by MNUA Multan)
- Participated in 3rd International Conference on “Economic Issues & Sustainable Development (EISD 2023) December 2023
- Hosted and Managed Stage of One-day seminar on React Native
- Seminar on “Technology Develop Fund” held on 6 Dec, 2022 organized by MNSUA Multan
- Workshop on Ethical Hacking. Institute of Computer Science and Information Technology, The Women University Multan.
- National Seminar on Internet of Things: Challenges and Opportunities in Pakistan. Institute of Computer Science and Information Technology, The Women University Multan.

DUTIES/SERVICES RENDERED

- Discipline Committee Member 5th convocation 2023 of The Women University Multan.
- Pink ribbon Day 2022-2024
- Organized two-day workshop on “Hands on Machine Learning”
- Organized Annual lunch 2024
- Organized One-day seminar on React Native
- Organized Study Tour “ Arfa Karim IT Tower” Lahore
- Organized Tour “ Bahawalpur City”
- Organized Tour International Conference on Food and Applied Sciences Nathia Gali May 2024

- Co-Organizer 1st International Conference on Mathematics for Sustainable Future three days conference organized by Department of Mathematics WUM , December 2024
- Organizer TechXPO-2026

Responsibility	Period
Discipline In charge	Since 2023
Examination Incharge – BSIT Program	2023-2025
Visiting Faculty Committee Member	2024-2025
BS Information Technology Program Coordinator	July 2022– July 2024
Member, Admission Committee – BSIT	October 2022 – July 2025
Focal Person – Final Year Project Coordinator Seminar	2025- To Date
/Conferences/ Functions	Sep 2022- 2024

TECHNICAL SKILLS & EXPERTISE

Programming & Tools

- Languages: Java, C++, Visual C++, C#
- Tools & Software: Java Media Framework, Rational Rose 2000, MATLAB, MS Office 365, MS Visio
- Platforms: Unix, Linux

Courses Taught

- Software Engineering, Computer Architecture, Data Mining, Human Computer Interaction, Parallel and Distributed Computing, Professional Practices, Formal Methods in Software Engineering, Fundamentals of Computers, Computer Networks, Data Structures, Database Systems, Object Oriented Programming (C++), Web Technologies, System Analysis and Design, Financial Accounting

Soft Skills

- Curriculum Development | Student Mentoring | Team Leadership | Time Management | Analytical & Critical Thinking

HONOR & ACHIEVEMENTS

- Received HEC Scholarship for Top 8 Students MCS(2003-2005), awarded by UGC, BZU Multan
- Participation in Speech and Debate Competitions
- Received Laptop on Merit Scholarship during MS(IT) 2014, BZU Multan
- Received 4 times Incentive Cash Prize on 100% Results in School Education Department (SED)
- Master Trainer IT Since 2009 (SED)
- Girl Guide