

# Zamir Hussain

Associate Professor  
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## About

Dr. Zamir Hussain is working as Associate Professor in the School of Interdisciplinary Engineering & Sciences. Dr. Zamir Hussain has a PhD in Applied Statistics. Dr. Zamir Hussain has published 25 research articles & conference papers having a citation count of 203, carried out 3 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Applied Statistics</b> BZU, Multan , Pakistan	2005 - 2012
<b>MSc in (Statistics)</b> University of the Punjab , Pakistan	2000 - 2002
<b>BSc in (Math A, Math B And, Statistics)</b> University of Lahore , Pakistan	1998 - 2000

## Experience

<b>Associate Professor</b> School of Interdisciplinary Engineering & Sciences	2022- Present
<b>Associate Professor</b> Research Centre for Modelling & Simulation	2021 - 2022
<b>Assistant Professor</b> Research Centre for Modelling & Simulation	2013 - 2021
<b>Lecturer (BPS- 17)</b> Pakistan Institute of Development Economics , Pakistan Institute of Development Economics	2010 - 2013

## Research Projects

### National Projects

<b>Equitable Urban Heat Island Mapping: A Citizen Science Approach for Climate Justice</b> Funding Agency: NUST Amount: PKR 1,000,000.00 Status: Approved_inprocess	2024
<b>City-level vulnerability to COVID pandemic: Spatio-temporal analysis of land use and land cover type effect on COVID incidences”</b> Funding Agency: National Institute of Health (NIH), PAK Amount: PKR 1,980,000.00 Status: Approved_inprocess	2022

### International Projects

Industry Projects

National Projects

International Projects

Decentralization, Subnational Politics and Democratic Transition in Pakistan (2010-17)

2022

Client: Department of Political Science & International Relations, University of Gujrat

Amount: PKR 60,000.00

Status: Completed

Research Articles

Discovering promising drug candidates for Parkinson’s disease: integrating miRNA and DEG analysis with molecular dynamics and MMPBSA

2025

Bisma Ishtiaq Rehan Zafar Paracha Maryum Nisar Saima Ejaz Zamir Hussain

Journal of Computer-Aided Molecular Design , Volume:39, Issue:1, Article Number 8

Impact Factor: 3.000 | Quartile: 2 | Citations: 1

DOI: <https://doi.org/10.1007/s10822-025-00586-4>

A comparative analysis of L-moments, maximum likelihood, and maximum product of spacing methods for the four-parameter kappa distribution in extreme value analysis

2025

Muhammad Shafeeq ul Rehman Khan Zamir Hussain Sadaf Sher Muhammad Amjad Faisal Baig Ishfaq Ahmad Hamd Ullah

Scientific Reports , Vol: 15, Article number: 164, Pages:15

Impact Factor: 3.8 | Quartile: 1 | Citations: 1

DOI: <https://doi.org/10.1038/s41598-024-84056-1>

Quality, safety, and microbiological assessment of loose market milk and antibiotic resistance analysis of Escherichia coli isolates in different areas of Faisalabad, Pakistan

2024

Linta Khalid Aiman Fatima Shahid Nawaz Ayaz Khurram Zamir Hussain Imran Sajid

International Dairy Journal , Volume 154, Article Number 105936

Impact Factor: 3.100 | Quartile: 2

DOI: <https://doi.org/10.1016/j.idairyj.2024.105936>

Modeling of flood extremes using regional frequency analysis of sites of Khyber Pakhtunkhwa, Pakistan

2021

Muhammad Shafeeq ul Rehman Khan Zamir Hussain Ishfaq Ahmad Farzana Noor

Journal of Flood Risk Management, Volume14, Issue 4, Article Number e12751

Impact Factor: 3.884 | Quartile: 1 | Citations: 4

DOI: [10.1111/jfr3.12751](https://doi.org/10.1111/jfr3.12751)

Long non-coding RNAs and their targets as potential biomarkers in breast cancer

2021

Maryam Khalid Rehan Zafar Paracha Maryum Nisar Sumaira Malik Dr Zamir Hussain Salma Tariq Iqra Arshad Amnah Siddiq, Jamil Ahmad Amjad Ali

IET Systems Biology , Volume 15, Issue 5, Pages 137-147

Impact Factor: 1.615 | Quartile: 4 | Citations: 5

DOI: <https://doi.org/10.1049/syb2.12020>

Statistical modeling for analyzing grain yield of durum wheat under rainfed conditions in Azad Jammu Kashmir, Pakistan

2021

Kamran Abbas Zamir Hussain Mubasher Hussain Faisal Rahim Nasra Ashraf Qayyum Khan Ghulam Raza Amjad Ali Dost Muhammad Khan Umair Khalil

Nausheen Irshad

Brazilian Journal of Biology , Volume 82, Article Number e240199

Impact Factor: 1.651 | Quartile: 3 | Citations: 2

DOI: <https://doi.org/10.1590/1519-6984.240199>

Integrated analysis of microarray and RNA-Seq data for the identification of Hub genes and networks involved in the pancreatic cancer

2021

Rumeza Hanif Rehan Zafar Paracha Mehak Rafiq Zamir Hussain Maryum Nisar Iqra Arshad Sidra Adil Sabaoon Zeb

Frontiers in Genetics, Volume 12, Article Number 663787

Impact Factor: 4.599 | Quartile: 2 | Citations: 18

DOI: [doi.org/10.3389/fgene.2021.663787](https://doi.org/10.3389/fgene.2021.663787)

A Computational Systems Analyses to Identify Biomarkers and Mechanistic Link in Psoriasis and Cutaneous Squamous Cell Carcinoma

2021

Sidra Adil Rehan Zafar Paracha Zamir Hussain Salma Tariq Maryum Nisar Sadaf Ijaz Afreenish Aamir Amnah Siddiq

Frontiers in Immunology, Volume 12, Article Number 662528

<b>Impact Factor: 7.561   Quartile: 1   Citations: 10</b> <b>DOI:</b> <a href="https://doi.org/10.3389/fimmu.2021.662528">https://doi.org/10.3389/fimmu.2021.662528</a>	
<b>Frequency analysis of annual maximum rainfall series of fifteen meteorological observatories of Sindh, Pakistan</b> <i>Uzma Nawaz Muhammad Shafeeq ul Rehman Khan Zamir Hussain Imran Rafi Khan Maryum Nisar</i> <i>Arabian Journal of Geosciences</i> , Volume 14, Issue 9, Article Number 749 <b>Impact Factor: N/A   Citations: 2</b> <b>DOI:</b> <a href="https://doi.org/10.1007/s12517-021-06981-z">https://doi.org/10.1007/s12517-021-06981-z</a>	2021
<b>Effects of L-Moments, Maximum Likelihood and Maximum Product of Spacing Estimation Methods in Using Pearson Type-3 Distribution for Modeling Extreme Values</b> <i>Muhammad Shafeeq ul Rehman Khan Zamir Hussain Ishfaq Ahmad</i> <i>Water Resources Management</i> , Volume 35, Pages 1415–1431 <b>Impact Factor: 4.426   Quartile: 1   Citations: 12</b> <b>DOI:</b> <a href="https://doi.org/10.1007/s11269-021-02767-w">https://doi.org/10.1007/s11269-021-02767-w</a>	2021
<b>Regional Flood Frequency Analysis, using L-moments, Artificial Neural Networks and OLS Regression, of Various Sites of Khyberpakhtunkhwa, Pakistan</b> <i>Muhammad Shafeeq ul Rehman Khan Zamir Hussain Ishfaq Ahmad</i> <i>Applied Ecology and Environmental Research</i> , Volume 19(1), Pages 471-489 <b>Impact Factor: 0.816   Quartile: 4   Citations: 6</b> <b>DOI:</b> <a href="http://dx.doi.org/10.15666/aeer/1901_471489">http://dx.doi.org/10.15666/aeer/1901_471489</a>	2021
<b>Design and Optimization of a Diffuser for a Horizontal Axis Hydrokinetic Turbine using Computational Fluid Dynamics based Surrogate Modelling</b> <i>Waleed Khalid Salma Sherbaz Adnan Maqsood Zamir Hussain</i> <i>Mechanika</i> , Volume 26(2), Pages 161-170 <b>Impact Factor: 0.597   Quartile: 4   Citations: 7</b> <b>DOI:</b> <a href="https://doi.org/10.5755/j01.mech.26.2.23511">https://doi.org/10.5755/j01.mech.26.2.23511</a>	2020
<b>Bayesian Estimation of Gumbel Type-II Distribution under Type-II Censoring with Medical Applications</b> <i>Kamran Abbas Zamir Hussain Noreen Rashid Amjad Ali Muhammad Taj Sajjad Ahmad Khan Sadaf Manzoor Umair Khalil Dost Muhammad Khan</i> <i>Computational and Mathematical Methods in Medicine</i> , Volume 2020, Article ID 1876073, 11 pages <b>Impact Factor: 2.238   Quartile: 3   Citations: 18</b> <b>DOI:</b> <a href="https://doi.org/10.1155/2020/1876073">10.1155/2020/1876073</a>	2020
<b>Rainfall Frequency Analysis using Frechet and Log-Logistic Distributions of Sites of Azad Jammu and Kashmir, Pakistan</b> <i>Zamir Hussain Kamran Abbas</i> <i>Applied Ecology and Environmental Research</i> , Vol.17(6), Pages 13607-13623 <b>Impact Factor: 0.712   Quartile: 4   Citations: 2</b> <b>DOI:</b> <a href="https://doi.org/10.15666/aeer/1706_1360713623">10.15666/aeer/1706_1360713623</a>	2019
<b>MicroRNAs and their target mRNAs as Potential Biomarkers among Smokers and Non-Smokers with Lung Adenocarcinoma</b> <i>Zamir Hussain Sumaria Malik Rehan Zafar Paracha Maryam Khalid Maryum Nisar Amnah Siddiq Raheel Nawaz Amjad Ali Jamil Ahmad</i> <i>IET Systems Biology</i> , Volume 13, Issue 2, Pages 69-76 <b>Impact Factor: 1.392   Quartile: 4   Citations: 2</b> <b>DOI:</b> <a href="https://doi.org/10.1049/iet-syb.2018.5040">10.1049/iet-syb.2018.5040</a>	2019
<b>A comparison of quadratic regression and artificial neural networks for the estimation of quantiles at ungauged sites in regional frequency analysis</b> <i>M. S. R Khan I. Ahmad Zamir Hussain</i> <i>Applied Ecology and Environmental Research</i> , Volume 17, Issue 3, Pages 6937-6959 <b>Impact Factor: 0.712   Quartile: 4   Citations: 6</b> <b>DOI:</b> <a href="https://doi.org/10.15666/aeer/1703_69376959">10.15666/aeer/1703_69376959</a>	2019
<b>Bayesian Analysis of Three-Parameter Frechet Distribution with Medical Applications</b> <i>Zamir Hussain Kamran Abbas Nosheen Yousaf Abbasi Amjad Ali Sajjad Ahmad Khan Sadaf Manzoor Alamgir Khalil Umair Khalil Dost Muhammad Khan Muhammad Altaf</i> <i>Computational and Mathematical Methods in Medicine</i> , Volume 2019, Article ID 9089856, 8 pages <b>Impact Factor: 1.770   Quartile: 3   Citations: 10</b> <b>DOI:</b> <a href="https://doi.org/10.1155/2019/9089856">10.1155/2019/9089856</a>	2019

- Influences on Freshman Attitudes toward Engineering: Lessons from a Case Study of a Major Engineering University in Pakistan** 2017
- Qaiser Hameed Malik Zamir Hussain Naveed Zafar JAMES C. WITTE*  
*International Journal of Engineering Education*, Volume 33, Issue 2, Pages 596-609,  
**Impact Factor:** 0.575 | **Quartile:** 4  
**DOI:** <https://www.ijee.ie/contents/c330217A.html>
- Estimation of flood quantiles at gauged and ungauged sites of the four major rivers of Punjab, Pakistan** 2016
- Zamir Hussain*  
*Natural Hazards*, Volume: 86 Issue: 1 Pages: 107-123  
**Impact Factor:** 1.833 | **Quartile:** 2 | **Citations:** 7  
**DOI:** 10.1007/s11069-016-2676-3
- Application of Regional Rainfall Frequency Analysis on Seven Sites of Sindh, Pakistan** 2016
- Zamir Hussain Mirza Naveed Shahzad Kamran Abbas*  
*KSCE Journal of Civil Engineering, Print*, Volume: 21 Issue: 5 Pages: 1812-1819  
**Impact Factor:** 0.812 | **Quartile:** 3 | **Citations:** 9  
**DOI:** 10.1007/s12205-016-0946-y
- Bayesian Estimation of Exponentiated Pareto Distribution** 2016
- Kamran Abbas Irshad Ahmed Arshad Zamir Hussain Khuram Shehzad Khan*  
*Pakistan Journal of Statistics*, Volume 32, Issue 5, Pages 349-370  
**Impact Factor:** -  
**DOI:** <https://www.scopus.com/record/display.uri?eid=2-s2.0-85003601547&origin>
- Application of the Regional Flood Frequency Analysis to the Upper and Lower Basins of the Indus River, Pakistan** 2011
- Zamir Hussain*  
*Water Resources Management*, Volume 25, Issue 11, Pages 2797-2822  
**Impact Factor:** 2.054 | **Quartile:** 1 | **Citations:** 33  
**DOI:** 10.1007/s11269-011-9839-5
- Regional Frequency Analysis of the Seven Sites of Punjab, Pakistan, Using L-moments.** 2009
- G. R. Pash Zamir Hussain*  
*Water Resources Management*, Volume: 23 Issue: 10 Pages: 1917-1933  
**Impact Factor:** 2.013 | **Quartile:** 1 | **Citations:** 48  
**DOI:** 10.1007/s11269-008-9360-7

## Conference Proceedings

- Quantitative evaluation of Security and Privacy perceptions in online social networks: A case study** 2017
- Asma Bibi Zamir Hussain Fawad Khan Adnan Maqsood*  
*2017 14th International Bhurban Conference on Applied Sciences and Technology (IBCAST)*, res.country(177.)  
**Citations:** N/A  
**DOI:** 10.1109/IBCAST.2017.7868089
- Shape optimization of non-linear swept ceiling fan blades through RANS simulations and Response Surface Methods** 2015
- Ehsan Adeeb Adnan Maqsood Ammar Mushtaq Zamir Hussain*  
*2015 12th International Bhurban Conference on Applied Sciences and Technology (IBCAST)*, res.country(177.)  
**Citations:** N/A  
**DOI:** 10.1109/IBCAST.2015.7058532