### **Zamir Hussain**

#### Associate Professor

School of Interdisciplinary Engineering & Sciences

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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

PhD in Applied Statistics BZU, Multan , Pakistan	2005 - 2012
MSc in (Statistics) University of the Punjab , Pakistan	2000 - 2002
BSc in (Math A, Math B And, Statistics) University of Lahore , Pakistan	1998 - 2000
Experience	
Associate Professor School of Interdisciplinary Engineering & Sciences	2022- Present
Associate Professor	2021 - 2022

## Research Centre for Modelling & Simulation

Assistant Professor

Research Centre for Modelling & Simulation

Lecturer (BPS- 17)

Pakistan Institute of Development Economics , Pakistan Institute of Development Economics

2010 - 2013

2024

2022

2013 - 2021

## **Research Projects**

## **National Projects**

Equitable Urban Heat Island Mapping: A Citizen Science Approach for Climate Justice

Funding Agency: NUST Amount: PKR 1,000,000.00

City-level vulnerability to COVID pandemic: Spatio-temporal analysis of land use and land cover type

effect on COVID incidences"

Status: Approved\_inprocess

Funding Agency: National Institute of Health (NIH), PAK

Amount: PKR 1,980,000.00 Status: Approved\_inprocess

## **International Projects**

#### **National Projects**

#### International Projects

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

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

2022

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

2024

of Escherichia coli isolates in different areas of Faisalabad, Pakistan

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,

2021

Muhammad Shafeeq ul Rehman Khan Zamir Hussain Ishfaq Ahmad Farzana Noor Journal of Flood Risk Management, Volume14, Issue 4, Article Number e12751

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

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

DOI: 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 Siddiqa, 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

# A Computational Systems Analyses to Identify Biomarkers and Mechanistic Link in Psoriasis and

2021

**Cutaneous Squamous Cell Carcinoma** 

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

Impact Factor: 7.561 | Quartile: 1 | Citations: 10 DOI: https://doi.org/10.3389/fimmu.2021.662528

Frequency analysis of annual maximum rainfall series of fifteen meteorological observatories of Sindh,

2021

**Pakistan** 

Uzma Nawaz Muhammad Shafeeq ul Rehman Khan Zamir Hussain Imran Rafi Khan Maryum Nisar

Arabian Journal of Geosciences, Volume 14, Issue 9, Article Number 749

Impact Factor: N/A  $\mid$  Citations: 2

DOI: https://doi.org/10.1007/s12517-021-06981-z

Effects of L-Moments, Maximum Likelihood and Maximum Product of Spacing Estimation Methods in

2021

Using Pearson Type-3 Distribution for Modeling Extreme Values

Muhammad Shafeeq ul Rehman Khan Zamir Hussain Ishfaq Ahmad Water Resources Management, Volume 35, Pages 1415–1431

Impact Factor: 4.426 | Quartile: 1 | Citations: 12 DOI: https://doi.org/10.1007/s11269-021-02767-w

Regional Flood Frequency Analysis, using L-moments, Artificial Neural Networks and OLS Regression,

2021

of Various Sites of Khyberpakhtunkhwa, Pakistan

Muhammad Shafeeg ul Rehman Khan Zamir Hussain Ishfag Ahmad

Applied Ecology and Environmental Research, Volume 19(1), Pages 471-489

Impact Factor: 0.816 | Quartile: 4 | Citations: 6

DOI: http://dx.doi.org/10.15666/aeer/1901\_471489

Design and Optimization of a Diffuser for a Horizontal Axis Hydrokinetic Turbine using Computational

2020

Fluid Dynamics based Surrogate Modelling

Waleed Khalid Salma Sherbaz Adnan Maqsood Zamir Hussain

Mechanika, Volume 26(2), Pages 161-170

Impact Factor: 0.597 | Quartile: 4 | Citations: 7

DOI: https://doi.org/10.5755/j01.mech.26.2.23511

Bayesian Estimation of Gumbel Type-II Distribution under Type-II Censoring with Medical Applications

2020

2019

2019

2019

Kamran Abbas Zamir Hussain Noreen Rashid Amjad Ali Muhammad Taj Sajjad Ahmad Khan Sadaf Manzoor Umair Khalil Dost Muhammad Khan

Computational and Mathematical Methods in Medicine, Volume 2020, Article ID 1876073, 11 pages

Impact Factor: 2.238 | Quartile: 3 | Citations: 18

**DOI:** 10.1155/2020/1876073

Rainfall Frequency Analysis using Frechet and Log-Logistic Distributions of Sites of Azad Jammu and

Kashmir, Pakistan

Zamir Hussain Kamran Abbas

Applied Ecology and Environmental Research, Vol.17(6), Pages 13607-13623

Impact Factor: 0.712 | Quartile: 4 | Citations: 2 DOI: 10.15666/aeer/1706\_1360713623

MicroRNAs and their target mRNAs as Potential Biomarkers among Smokers and Non-Smokers with

Lung Adenocarcinoma

Zamir Hussain Sumaria Malik Rehan Zafar Paracha Maryam Khalid Maryum Nisar Amnah Siddiga Raheel Nawaz Amjad Ali Jamil Ahmad

IET Systems Biology , Volume 13, Issue 2, Pages 69-76

Impact Factor: 1.392 | Quartile: 4 | Citations: 2

DOI: 10.1049/iet-syb.2018.5040

A comparison of quadratic regression and artificial neural networks for the estimation of quantiles at

ungauged sites in regional frequency analysis

M. S. R Khan I. Ahmad Zamir Hussain

Applied Ecology and Environmental Research, Volume 17, Issue 3, Pages 6937-6959

Impact Factor: 0.712 | Quartile: 4 | Citations: 6

DOI: 10.15666/aeer/1703\_69376959

Bayesian Analysis of Three-Parameter Frechet Distribution with Medical Applications

2019

Zamir Hussain Kamran Abbas Nosheen Yousaf Abbasi Amjad Ali Sajjad Ahmad Khan Sadaf Manzoor Alamgir Khalil Umair Khalil Dost Muhammad Khan

Computational and Mathematical Methods in Medicine, Volume 2019, Article ID 9089856, 8 pages

Impact Factor: 1.770 | Quartile: 3 | Citations: 10

**DOI:** 10.1155/2019/9089856

Muhammad Altat

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  Zamir Hussain Mirza Naveed Shahzad Kamran Abbas	2016
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	2011
River, Pakistan	
Zamir Hussain Water Resources Management, Volume 25, Issue 11, Pages 2797-2822	
Impact Factor: 2.054   Quartile: 1   Citations: 33	
<b>DOI:</b> 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	
<b>DOI:</b> 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	
<b>DOI:</b> 10.1109/IBCAST.2015.7058532	