DR. HAFIZ MUHAMMAD TAHIR

PERSONAL INFORMATION

Father Name	Hafiz Abdul Malik
Date of Birth	September 5, 1982
Religion	Muslim
Nationality	Pakistani
Marital status	Married
CNIC	33202-1164688-3
Cell No.	+92 301 52 37 403
Office No.	+92 41 92 01 461
E-Mail Address	tahirqaustat@yahoo.com

Institutional Address	College of Statistical & Actuarial Sciences, University of the Punjab, Lahore, Pakistan

ACADEMICS

Ph. D. (Statistics)

Session:	2012-2017
Institution/University:	Department of Statistics, Quaid-i-Azam University, Islamabad, Pakistan
Title of Thesis:	Parameters Estimation of the 3-Component Mixture Models of Exponential Family under Bayesian Paradigm

M. Phil. (Statistics)

Session:	2004-2006
Institution/University:	Department of Statistics, Quaid-i-Azam University, Islamabad, Pakistan
Dissertation:	On Posterior Distribution of Time-to-Failure of a System

M. Sc. (Statistics)

Session:	2002-2003
Institution/University:	Department of Statistics, Quaid-i-Azam University, Islamabad, Pakistan

B. Sc. (Statistics, Mathematics A & B)

Session:	1999-2001
Institution/University:	Government Postgraduate College Jhang /

University of the Punjab, Lahore, Pakistan

Intermediate (Statistics, Mathematics and Arabic)

Session: 1997-1999

Institution/University: Government Postgraduate College Jhang /

B.I.S.E., Faisalabad, Pakistan

Matriculation (Science)

Session: 1995-1997

Institution/University: Government High School Jhang /

B.I.S.E., Faisalabad, Pakistan

JOB EXPERIENCE

- Associate Professor 31th May 2022 to date — College of Statistical & Actuarial Sciences, University of the Punjab Lahore, Pakistan

- Assistant Professor 11th April 2018 to 30th May 2022 — Department of Statistics, Government College University, Faisalabad, Pakistan

- Assistant Professor (OPS) 19th June 2017 to 10th April 2018 — Department of Statistics, Government College University, Faisalabad, Pakistan

- Lecturer 10th Sep 2009 to 18th June 2017 — Department of Statistics, Government College University, Faisalabad, Pakistan

- Lecturer 17th Dec 2008 to 9th Sep 2009 — Department of Statistics, Government College, Sillanwali, Sargodha, Pakistan

- Lecturer 31th March 2005 to 16th Dec 2008 — Department of Statistics, Government College, Pindi Gheb, Attock, Pakistan

TEACHING EXPERIANCE

Have been offering the following courses at postgraduate level since 2009:

i. Bayesian Analysis
ii. Mixture Distributions
iii. Probability Distributions-I
iv. Probability Distributions-II
v. Sampling Techniques-I
vi. Sampling Techniques-II
vii Estimation
viii. Hypothesis Testing

RESEARCH

(a) Research Papers in Impact Factor Journals

1. Abid, M., Sherwani, R.A.K., **Tahir, M.**, Nazir, Z.A. and Riaz, M. (2021). An improved and robust class of variance estimators. *Scientia Iranica-E (Industrial Engineering)* **28**(6): 3589-3601. (**IF-1.435**)

2. **Tahir, M.**, Almanjahie, I. M., Abid, M. and Ahmad, I. (2021). On estimation of three-component mixture of distributions via Bayesian and classical approaches. *Mathematical Problems in Engineering* **2021**: 1-19. Article ID 9944008. https://doi.org/10.1155/2021/9944008 (**IF-1.305**)

3. Abid, M., Nazir, Z.A., **Tahir, M.**, Riaz, M. and Tahir, A. (2020). A comparative analysis of robust dispersion control charts with application related to health care data. *Journal of Testing and Evaluation* **48**(1): 247-259. (**IF-0.711**)

4. **Tahir, M.**, Abid, M., Aslam, M. and Ali, S. (2019). Bayesian estimation of the mixture of Burr Type-XII distributions using doubly censored data. *Journal of King Saud University-Science* **31**(4): 1137-1150. (**IF-2.835**)

5. Abid, M., Ahmad, S., **Tahir, M.**, Nazir, Z.A. and Riaz, M. (2019). Improved ratio estimators of variance based on robust measures. *Scientia Iranica-E (Industrial Engineering)*. *Scientia Iranica-E (Industrial Engineering)* **26**(4): 2484-2494. (**IF-0.760**)

6. **Tahir, M.**, Aslam, M., Hussain, Z., Abid, M. and Bhatti, S. H. (2019). Bayesian analysis of heterogeneous doubly censored lifetime data using the 3-component mixture of Rayleigh distributions: A Monte Carlo simulation study. *Scientia Iranica-E (Industrial Engineering)* **26**(3): 1789-1808. (**IF-0.760**)

7. Abid, M., Naeem, A, Hussain, Z, Riaz, M and **Tahir, M.** (2019). Investigating the impact of simple and mixture priors on estimating sensitive proportion through a general class of randomized response models. *Scientia Iranica-E (Industrial Engineering)* **26**(2): 1009-1022. (**IF-0.760**)

8. Bhatti, S. H., Hussain, S., Ahmad, T., Aftab, M., Raza, M. A., and **Tahir, M.** (2019). Efficient estimation of Pareto model using modified maximum likelihood estimators. *Scientia Iranica-E (Industrial Engineering)* **26**(1): 605-614. (**IF-0.760**)

9. Abid, M., Nazir, H. Z., Riaz, M., Lin, Z. and **Tahir, M.** (2018). Improved ratio estimators using some robust measures. *Hacettepe Journal of Mathematics and Statistics* **47**(5): 1375-1393. (**IF-0.558**)

10. Abbas, N., Abid, M., **Tahir, M.,** Abbas, N. and Hussain, Z. (2018). Enhancing ratio estimators for estimating population mean using maximum value of auxiliary variable. *Journal of the National Science Foundation of Sri Lanka* **46**(3): 453-463. (**IF-0.305**)

11. Aslam, M., **Tahir, M.** and Hussain, Z. (2018). Reliability analysis of 3-component mixture of distributions. *Scientia Iranica-E (Industrial Engineering)* **25**(3): 1768-1781. (**IF-0.475**)

12. Abid, M., Nazir, H. Z., **Tahir, M.** and Riaz, M. (2018). On designing a new cumulative sum Wilcoxon signed rank chart for monitoring process location. *PLOS ONE* **13**(4):1-18. April 17, 2018. DOI: 10.1371/journal.pone.0195762. (**IF-2.766**)

13. **Tahir, M.**, Aslam, M. and Hussain, Z. (2018). On the 3-component mixture of Exponential, Rayleigh and Burr Type-XII distributions: a simulation study in Bayesian framework. *Chiang Mai Journal of Science* **45**(2): 1161-1180. (**IF-0.409**)

14. Hussain, S., Bhatti, S. H., Ahmad, T., Aftab, M., and **Tahir, M.** (2018). Parameter estimation of Pareto distribution: some modified moment estimators. *Maejo International Journal of Science and Technology* **12**(1): 11-27. (**IF-0.469**)

15. **Tahir, M.,** Aslam, M. and Hussain, Z. (2016). Bayesian estimation of finite 3-component mixture of Burr Type-XII distributions assuming type-I right censoring scheme. *Alexandria Engineering Journal* **55**(4): 3277–3295. (**IF-2.46**)

16. Khan, A. A., Aslam, M., Hussain, Z. and **Tahir, M.** (2016). Comparison of loss functions for estimating the scale parameter of Log-Normal distribution using non-Informative priors. *Hacettepe Journal of Mathematics and Statistics* **45**(6): 1831-1845. (**IF-0.277**)

17. **Tahir, M.**, Aslam, M. and Hussain, Z. (2016). Estimation of parameters of the 3-component mixture of Pareto distributions using type-I right censoring under Bayesian paradigm. *Journal of the National Science Foundation of Sri Lanka* **44**(3): 329-345. (**IF-0.277**)

18. **Tahir, M.**, Aslam, M. and Hussain, Z. (2016). Bayesian analysis of type-I right censored data using the 3-component mixture of Burr distributions. *Scientia Iranica-E (Industrial Engineering)* **23**(5): 2374-2390. (**IF-0.679**)

19. **Tahir, M.**, Aslam, M. and Hussain, Z. (2016). On the Bayesian analysis of 3-componen mixture of Exponential distribution under different loss functions. *Hacettepe Journal of Mathematics and Statistics* **45**(2): 609-628. (**IF-0.277**)

20. **Tahir, M.** and Aslam, M. (2015). Bayesian analysis of the 3-component mixture of Exponential distribution assuming the non-Informative priors. *Revista Colombiana de Estadística* **38**(2): 431-452. (**IF-0.179**)

21. Aslam, M., **Tahir, M.,** Hussain, Z. and Al-Zahrani, B. (2015). A 3-component mixture of Rayleigh distributions: properties and estimation in Bayesian framework. *PLOS ONE* **10**(5): 1-14. May 20, 2015. DOI:10.1371/journal.pone.0126183. (**IF-3.234**)

22. Aslam, M. and **Tahir, M.** (2010). Bayesian and classical analysis of time-to-failure model with comparison of uninformative priors. *Pakistan Journal of Statistics* **26**(2): 407-415. (**IF-0.156**)

(b) Research Papers in ISI Master List and HEC Recognized Journals

23. **Tahir, M.**, Ahsanullah, M., Mohsin, S. and Abid, M. (2021). On finite 3-component mixture of Rayleigh distributions: A classical look. *Journal of Statistical Theory and Applications* **20**(2): 204-218. (**ISI Master List**)

24. **Tahir, M.**, Aslam, M., Abid, M., Ali, S. and Ahsanullah, M. (2020). A 3-component mixture of exponential distribution assuming doubly censored data: properties and Bayesian estimation. *Journal of Statistical Theory and Applications* **19**(2): 197-211. (**ISI Master List**)

25. **Tahir, M.**, Aslam, M., Hussain, Z. and Abbas, N. (2017). On the finite mixture of Exponential, Rayleigh and Burr type-XII distributions: estimation of parameters in Bayesian framework. *Electronic Journal of Applied Statistical Analysis* **10**(1): 271-293. (**ISI Master List**)

26. **Tahir, M.**, Aslam, M. and Hussain, Z. (2017). Bayesian analysis of a 3-component mixture of Rayleigh distribution under type-I right censoring scheme. *Journal of Statistical Theory and Applications* **16**(1): 117-136. (**ISI Master List**)

27. **Tahir, M.**, Aslam, M., Hussain, Z. and Khan, A. A. (2016). On finite 3-component mixture of Exponential distributions: properties and estimation. *Cogent Mathematics* **3**(1): 1-23. (**ISI Master List**)

28. Akbar, A. A., Aslam, M., Hussain Z., Khalil, A. and **Tahir M.** (2016). On the posterior distribution of location parameter of log normal distribution. *Pakistan Journal of statistics* **32**(6): 497-515. (**HEC Recognized, X Category**)

29. **Tahir, M.** and Saleem, M. (2011). A comparison of priors for the parameter of the time-to-failure model. *Pakistan Journal of Science* **63**(1): 49-52. (**HEC Recognized, X Category**)

30. **Tahir, M.**, Saleem, M. and Aslam, M. (2011). Comparison of informative and non-informative priors for the number of defects model. *Journal of Statistical Theory and Applications* **10**(1): 11-22. (**ISI Master List**)

31. **Tahir, M.** and Saleem, M. (2010). On relationship between some Bayesian and classical estimators. *Pakistan Journal of Life and Social Sciences* **8**(2): 159-161. (**ISI Master List, HEC Recognized**)

(c) Research Papers in International Journals

32. Irfan, M., Irfan, M. and **Tahir, M.** (2011). Modeling the province wise yield of rice crop in Pakistan using GARCH model. *International Journal of Science and Technology* **1**(6): 224-228.

33. **Tahir, M.** and Hussain, Z. (2008). Comparison of non-informative priors for number of defects (Poisson) model. *InterStat* **#2** April.

SUPERVISION FOR M. PHIL & PHD DISSERTATIONS

❖ Supervising one Doctorate student on topic of Bayesian estimation of mixture distribution.

❖ Supervised 8 students for writing their M. Phil. (Statistics) dissertations on following Topics:

1. Bayesian Exploration of 4-Component Mixture of Burr Type-XII Distributions using Monte Carlo Simulation (2022). (*Kainat Rasool*)

2. Parameters Estimation of 4-Fold Mixture of Pareto Distribution under Bayesian Paradigm (2022). (*Mariam*)

3. An Improved cumulative Control Chart for a 3-Component Mixture Model under Bayesian Setup (2021). (*Qamar Zamaan*)

4. On Posterior Distribution of a 4-Component Mixture of Rayleigh Distribution: Properties and Estimation using Monte Carlo Simulation (2021). (*Saba Parveen*)

5. The 3-Fold Mixture of Power Distribution: A Bayesian Look with Monte Carlo Simulation (2020). (*Samavia*)

6. Bayesian Estimation of a 4-Component Mixture of Exponential Distribution under Symmetric and Asymmetric Loss Function (2019). (*Amina Ilyass*)

7. Properties and Estimation of a 3-Component Mixture of Power Distributions: A Simulation Study (2018). (*Umar Waqas*)

8. On the Finite 3-Component Mixture of Rayleigh Distributions: Properties and Estimation in Classical Framework (2017). (*Sidra Sarwar*).

RESEARCH PROJECTS

- Higher Education Commission Start-up Research Grant Program as a Co-Principal Investigator (Co-PI)
  Title: Enhancing the Performance of Control Charting Strategies. (Completed)

SERVICES TO THE PROFESSION

- Controller of Examination in the Department of Statistics, Government College University, Faisalabad, Pakistan. (2016-2019)

- Member of the admission committees for M. Phil and PhD (Statistics), Government College University, Faisalabad, Pakistan. (2016-2022)

- Member of Board of Faculty, Government College University, Faisalabad, Pakistan. (2018-2021)

REFERENCES

1. Prof. Dr. Muhammad Aslam, Head of the Department of Statistics, Riphah International University, Islamabad, Pakistan. Former Chairman Department of Statistics, Quaid-i-Azam University, Islamabad, Pakistan.
   E-mail address: aslamsdqu@yahoo.com
   Cell No. +92-300-5191826

2. Prof. Dr. Muhammad Riaz, Department of Mathematics and Statistics, King Fahad University of Petroleum and Minerals, Saudi Arabia.
   E-mail address: mriaz@kfupm.edu.sa
   Cell No. +966-505714271