

MUHAMMAD YASEEN

Curriculum Vitae

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Profile

- **Data Scientist with twenty-two years of teaching & research experience** executing data driven decisions & solutions to increase efficiency & accuracy
- **Experienced at developing statistical models**, using predictive data modeling & analyzing data algorithms to deliver insights & implement action-oriented solutions to complex problems
- **Proficient in developing R package/software for statistical analysis & machine learning**
- **Looking to use my academic & professional qualification to manage statistical machine learning & data related solutions to achieve research & business goals**

Work Experience

Research Methodology & Monitoring & Evaluation Expert Asian Development Bank - BISP, Pakistan 2021-03-26 to Present

Assistant Professor	University of Agriculture, Faisalabad	2014-02-25 to 2021-03-25
Lecturer	University of Agriculture, Faisalabad	2003-10-25 to 2014-02-24
Teaching Assistant	Dept. of Statistics, UNL, Lincoln-NE, USA	2009-08-01 to 2012-05-11
Statistician	UNMC, Lincoln-NE, USA	2009-03-01 to 2012-05-11
Lecturer	Univ. of Agriculture, Faisalabad	2002-12-23 to 2003-10-24
Lecturer	G.C. University, Faisalabad	2002-11-01 to 2002-12-21

Education & Qualifications

Doctor of Philosophy (Statistics)	University of Nebraska, Lincoln-NE, USA	2012
Master of Philosophy (Statistics)	University of Agriculture, Faisalabad-Pakistan	2005
Master of Science (Statistics)	University of Agriculture, Faisalabad-Pakistan	2001

Awards & Academic Distinctions

- **Research Productivity Allowance (RPA-2012, Category G)** by the Pakistan Council of Science & Technology, Islamabad, Pakistan
- **Higher Education Commission (HEC) Pakistan Approved PhD Supervisor**
- **PhD scholarship** under the Faculty Development Program of University of Agriculture-Faisalabad
- **Teaching Assistant (TA)** at **University of Nebraska-Lincoln USA** during PhD studies
- **Research Assistant (RA)** at **University of Nebraska-Lincoln USA** during PhD studies
- **First Position in MPhil (Statistics)**
- **Second Position in MSc (Statistics)**

Software Skills

- Proficient in:

R	Python	SciPy	Pandas	SciKit-Learn	matplotlib
Seaborn	SparkR	tensorflow	SQL	L^AT_EX	markdown
git	SAS	SPSS	Eviews	Mathematica	Maxima

- Conducted **fifty-one** computer aided statistical workshops as a resource person
- On the training panel of National Institute of Banking & Finance (**NIBAF**), State Bank of Pakistan (**SBP**), Karachi, Pakistan & National Institute of Managmnt (**NIM**), Lahore, Pakistan

Software/Packages Developed

- Developed the following **R packages/software**:

<i>agriTutorial</i>	<i>Tutorial Analysis of Some Agricultural Experiments</i>
<i>bayesammi</i>	<i>Bayesian Estimation of the Additive Main Effects and Multiplicative Interaction Model</i>
<i>baystability</i>	<i>Bayesian Stability Analysis of Genotype by Environment Interaction (GEI)</i>
<i>DiallelAnalysisR</i>	<i>Diallel Analysis with R</i>
<i>dmai</i>	<i>Divisia Monetary Aggregates Index</i>
<i>eda4treeR</i>	<i>Experimental Design and Analysis for Tree Improvement</i>
<i>gvcR</i>	<i>Genotypic Variance Components</i>
<i>PakPC2017</i>	<i>Pakistan Population Census 2017</i>
<i>PakPMICS2014Ch</i>	<i>Multiple Indicator Cluster Survey (MICS) 2014 Child Questionnaire Data for Punjab, Pakistan</i>
<i>PakPMICS2014HH</i>	<i>Multiple Indicator Cluster Survey (MICS) 2014 Household Questionnaire Data for Punjab, Pakistan</i>
<i>PakPMICS2014HL</i>	<i>Multiple Indicator Cluster Survey (MICS) 2014 Household Listing Questionnaire Data for Punjab, Pakistan</i>
<i>PakPMICS2014Wm</i>	<i>Multiple Indicator Cluster Survey (MICS) 2014 Women Questionnaire Data for Punjab, Pakistan</i>
<i>PakPMICS2018</i>	<i>Multiple Indicator Cluster Survey (MICS) 2017-18 Data for Punjab, Pakistan</i>
<i>PakPMICS2018bh</i>	<i>Multiple Indicator Cluster Survey (MICS) 2017-18 Birth History of Children Questionnaire Data for Punjab, Pakistan</i>
<i>PakPMICS2018fs</i>	<i>Multiple Indicator Cluster Survey (MICS) 2017-18 Children Age 5-17 Questionnaire Data for Punjab, Pakistan</i>
<i>PakPMICS2018hh</i>	<i>Multiple Indicator Cluster Survey (MICS) 2017-18 Household Questionnaire Data for Punjab, Pakistan</i>
<i>PakPMICS2018mm</i>	<i>Multiple Indicator Cluster Survey (MICS) 2017-18 Maternal Mortality Questionnaire Data for Punjab, Pakistan</i>
<i>PakPMICS2018mn</i>	<i>Multiple Indicator Cluster Survey (MICS) 2017-18 Men Questionnaire Data for Punjab, Pakistan</i>
<i>ppcSpatial</i>	<i>Spatial Analysis of Pakistan Population Census</i>
<i>PSLM2015</i>	<i>Pakistan Social and Living Standards Measurement Survey 2014-15</i>
<i>qccrs</i>	<i>Quality Control Charts under Repetitive Sampling</i>
<i>rgsp</i>	<i>Repetitive Group Sampling Plan Based on Cpk</i>
<i>stability</i>	<i>Stability Analysis of Genotype by Environment Interaction (GEI)</i>
<i>StroupGLMM</i>	<i>R Codes and Datasets for Generalized Linear Mixed Models: Modern Concepts, Methods and Applications by Walter W. Stroup</i>
<i>SupMZ</i>	<i>Detecting Structural Change with Heteroskedasticity</i>
<i>VetResearchLMM</i>	<i>Linear Mixed Models: An Introduction with Applications in Veterinary Research</i>

- Developed the following \LaTeX packages/software:

UAFSynopsis \LaTeX class for the Synopsis of the University of Agriculture, Faisalabad-Pakistan

UAFThesis \LaTeX class for the Thesis of the University of Agriculture, Faisalabad-Pakistan

PakJAS \LaTeX class for Pakistan Journal of Agricultural Sciences

Research Interests

- Data Science
- Machine Learning
- R, Python, \LaTeX , markdown & Reproducible Research
- Statistical Modeling & Computing
- Spatial & Temporal Modeling
- Generalized Linear Mixed Models
- Multivariate Techniques & Analysis
- Design & Analysis of Experiments
- Econometrics

Publications

22 i10-index, 15 h-index & 1,176 Citations (Since 2007)

Books

1. Shah, D., Hussain, K. S., Khan, M. I., **Yaseen, M.**, Kakli, M. B., Piracha, Z. F., Zia, M. A., and Javed, M. I. (2021). *Pakistan Education Statistics 2017-18*. National Education Management Information System (NEMIS), Academy of Educational Planning & Management (AEPAM), Islamabad, Pakistan. ISBN: 978-969-444-115-3 <https://myaseen208.github.io/PakEduStat2017-18/>.

Refereed Research Papers

1. Mehmood, K., Bao, Y., Saifullah, Bibi, S., Dahlawi, S., **Yaseen, M.**, Abrar, M. M., Srivastava, P., Fahad, S., and Faraj, T. K. (2022). Contributions of Open Biomass Burning and Crop Straw Burning to Air Quality: Current Research Paradigm and Future Outlooks. *Frontiers in Environmental Science* **10**, 854292. <https://doi.org/10.3389/fenvs.2022.852492> (Impact Factor: 4.24).
2. Bao, Y., Mehmood, K., Saifullah, **Yaseen, M.**, Dahlawi, S., Abrar, M. M., Khan, M. A., Saud, S., Dawar, K., Fahad, S., and Kh.Faraj, T. (2021). Global research on the air quality status in response to the electrification of vehicles. *Science of The Total Environment* **795**(3), 148861. <https://doi.org/10.1016/j.scitotenv.2021.148861> (Impact Factor: 7.963).
3. Chattha, W. S., Ahmad, H. B., Farooq, M. A., Shafqat, W., **Yaseen, M.**, Ihsan, M. Z., Alghabari, F., and Alzamanan, S. M. (2021). A novel parent selection strategy for the development of drought-tolerant cotton cultivars. *Plant Genetic Resources* **19**(4), 299–307. <https://doi.org/10.1017/S1479262121000332> (Impact Factor: 1.08).
4. Chishti, S. A. S., Hassan, A., Ahmad, M., Nadeem, K., Shabbir, R. H., Iqbal, M., **Yaseen, M.**, and Najeebullah, M. (2021). Effect of repeated pollination on tomato hybrid seed yield under field conditions. *J. Agric. Res.* **59** (2), 127–132.
5. Fatma, S., Sabir, M., Aziz, T., Ahmad, H. R., **Yaseen, M.**, Rehman, M. Z. ur, and Hakeem, K. R. (2021). Comparison of Fine and Coarse Rice Varieties for Nickel Accumulation and Growth Response at Different Levels of Nickel. *CLEAN–Soil, Air, Water* **49** (6), 2000336. <https://doi.org/10.1002/clen.202000336> (Impact Factor: 1.77).
6. Gul, H., Ghazali, S. S. A., **Yaseen, M.**, and Qasim, H. (2021). A Study on Time Use of Nurses and Paramedical Staff, Working in Public Hospitals of District Rahim Yar Khan, Bahawalpur, Pakistan. *International Journal of Innovation, Creativity and Change* **15**(3), 931–944. (Impact Factor: 0.26).

7. Haq, M. E. ul, Kamran, M., Sahib, A., **Yaseen, M.**, Anwar, M. F., Abbas, H., Chand, S. A., Hameed, A., Rashid, A., Khan, Q. A. T., Shahbaz, M. U., Abbas, W., and Ali, S. (2021). Nitrogen application accelerates the downy mildew disease severity with leaf age in canola plants. *Archives of Phytopathology and Plant Protection* **54**(19-20), 1569–1577. <https://doi.org/10.1080/03235408.2021.1929041> (**Impact Factor: 0.735**).
8. Jamil, S., Shahzad, R., Rahman, S. U., Iqbal, M. Z., **Yaseen, M.**, Ahmad, S., and Fatima, R. (2021). The level of Cry1Ac endotoxin and its efficacy against *H. armigera* in Bt cotton at large scale in Pakistan. *GM Crops and Food* **12**(1), 1–17. <https://doi.org/10.1080/21645698.2020.1799644> (**Impact Factor: 3.444**).
9. Qasim, H., Ghazali, S. S. A., **Yaseen, M.**, and Gul, H. (2021). Pensioners and their Time Use: A Case Study of District Rahimyar Khan, Pakistan. *International Journal of Innovation, Creativity and Change* **15**(3), 1050–1060. (**Impact Factor: 0.26**).
10. Ahmad, M., Chand, S., and **Yaseen, M.** (2020). High resolution Bayesian Spatio-Temporal precipitation modelling in Pakistan for the appraisal of trends. *Pak. J. Agri. Sci.* **57** (6), 1669–1680. <https://doi.org/10.21162/PAKJAS/20.32> (**Impact Factor: 1.049**).
11. Bashir, M. R., **Yaseen, M.**, Mahmood, A., Din, A. M. ud, and Khan, Q. A. T. (2020). Adaptability trials of sesame germplasm against *Macrophomina phaseolina* (tassi) Goid by using ammi biplot analysis in Pakistan. *International Journal of Agriculture and Biology* **23**, 851–856. <https://doi.org/10.17957/IJAB/15.1361> (**Impact Factor: 0.89**).
12. Chattha, W. S., Shakeel, A., Iqbal, M., **Yaseen, M.**, Amin, M., and Mahmood, N. (2020). Quantifying the Effect of Water Deficit on Cotton Genotypes Using Agro-physiological and Biochemical Parameters. *Journal of Natural Fibers*. <https://doi.org/10.1080/15440478.2019.1710654> (**Impact Factor: 3.370**).
13. Jameel, H. T., Panatik, S. A., Nabeel, T., Sarwar, F., **Yaseen, M.**, Jokerst, T., and Faiz, Z. (2020). Observed social support and willingness for the treatment of patients with schizophrenia. *Psychology Research and Behavior Management* **13**, 193–201. <https://doi.org/10.2147/PRBM.S243722> (**Impact Factor: 2.03**).
14. Bashir, M. R., Mahmood, A., Atiq, M., **Yaseen, M.**, Rajput, N. A., Aftab, M., Din, A. M. U., Mohsan, M., and Khan, Q. A. T. (2019). Assessment of genetic variability in mustard against *Alternaria* leaf spot disease through natural field conditions. *Pakistan Journal of Phytopathology* **31** (02), 211–216. <https://doi.org/> (**Impact Factor: 0.11**).
15. Rehman, F., Saeed, A., **Yaseen, M.**, Shakeel, A., Ziaf, K., Munir, H., Tariq, S. A., Raza, M. A., and Riaz, A. (2019). Genetic evaluation and characterization using cluster heat map to assess NaCl tolerance in tomato germplasm at the seedling stage. *Chilean Journal of Agricultural Research* **79**(1), 56–65. <https://doi.org/10.4067/S0718-58392019000100056> (**Impact Factor: 0.883**).
16. Ishaq, K., Iqbal, M. F., Younas, M., Yaqoo, M., Ahmed, T., **Yaseen, M.**, and Hashim, M. M. (2017). *Effect of source of procurement of milk on the composition of milk supplied in Rawalpindi city*. <http://rizingnation.pk/detail/Effect-of-source-of-procurement-of-milk-on-the-composition-of-milk-supplied-in-Rawalpindi-city/ZgQ6Ht09ZKa5bwjE8qi1qr4rcwm9er8TLviniP3\P3c>. *The Rizing Nation*.
17. Jameel, H. T., Nabeel, T., and **Yaseen, M.** (2017). Effects of training for in-hand manipulation on legibility of Urdu handwriting. *Journal of Inclusive Education* **1**, 7–18.
18. Murtaza, G., Murtaza, B., Kahlon, U. Z., and **Yaseen, M.** (2017). A comparative study of different amendments on amelioration of saline-sodic soils irrigated with water having different EC: SAR ratios. *Communications in Soil Science & Plant Analysis* **48**(22), 2630–2641. <https://doi.org/10.1080/00103624.2017.1416130> (**Impact Factor: 1.327**).
19. Raza, M. M., Khan, M. A., **Yaseen, M.**, Munawar, A., and Sabir, Z. (2016). Exploring the Potential of Multivariate Analysis to Study the Impact of Cotton Leaf Curl Disease on Yield Traits. *Pak. J. Agri. Sci.* **53**(3), 339–347. (**Impact Factor: 1.049**).
20. Ansari, T. M., Hanif, M. A., Rasool, T., Ali, M., Nadeem, R., and **Yaseen, M.** (2015). Reclamation of wastewater containing Cu(II) using alginate *Mentha spicata* biomass. *Desalination & Water Treatment*, 1–10. (**Impact Factor: 1.173**).
21. Aslam, M., Maqbool, M. A., **Yaseen, M.**, and Qamar-U-Zaman (2015). AMMI Biplot analysis for comparative evaluation of maize genotypes under different saline environments. *Pak. J. Agri. Sci.* **52**(2), 339–347. (**Impact Factor: 1.049**).
22. Fatima, K., Khan, M. A., Raza, M. M., **Yaseen, M.**, Iqbal, M. A., and Shahbaz, M. (2015). Identification of resistant source in lentil germplasm against *Fusarium* wilt in relation to environmental factors. *Academic Research Journal of Agricultural Science & Research* **3**(4), 60–70.

23. Jabran, K., Ullah, E., Hussain, M., Farooq, M., Zaman, U., **Yaseen, M.**, and Chauhan, B. S. (2015). Mulching Improves Water Productivity, Yield and Quality of Fine Rice under Water-saving Rice Production Systems. *Journal of Agronomy & Crop Science* **201**(2015), 389–400. (**Impact Factor: 2.444**).
24. Tanveer, A., Javaid, M. M., Irfan, M., Khaliq, A., and **Yaseen, M.** (2015). Yield Losses in Chickpea (*Cicer arietinum* L.) with Varying Densities of *Euphorbia dracunculoides* L. *Weed Science* **63**, 522–528. (**Impact Factor: 1.87**).
25. Novacek, M. J., Mason, S. C., Galusha, T. D., and **Yaseen, M.** (2014). Bt transgenes minimally influence maize grain yield and lodging across plant populations. *Maydica* **59**(1), 90–95. (**Impact Factor: 0.534**).
26. **Yaseen, M.**, Griess, J. K., Mason, S. C., and Jackson, D. S. (2014). Potential use of GGE Bi-plot analysis to evaluate white Sorghum grain attributes for end uses. *Pak. J. Agri. Sci* **51**(1), 263–271. (**Impact Factor: 1.049**).
27. Lum, A., Albrecht, J. A., **Yaseen, M.**, Litchfield, R., and Ritter-Gooder, P. (2013). Food-handling Practices and Knowledge among Families with Young Children. *Food Protection Trends* **33**(6), 358–375.
28. Novacek, M. J., Mason, S. C., Galusha, T. D., and **Yaseen, M.** (2013). Twin Rows Minimally Impact Irrigated Maize Yield, Morphology, and Lodging. *Agronomy Journal* **105**(1), 268–276. (**Impact Factor: 1.542**).
29. Shahzad, M. W., Razaq, M., Hussain, A., **Yaseen, M.**, Afzal, M., and Mehmood, M. K. (2013). Yield and Yield Components of Wheat (*Triticum Aestivum* L.) affected by Aphid feeding and sowing time at Multan, Pakistan. *Pak. J. Bot* **45**(6), 2005–2011. (**Impact Factor: 1.207**).
30. Zakria, M., **Yaseen, M.**, Muhammad, F., and Mahmood, S. (2013). Modelling Fertility Patterns of Pakistan during 1984–2007. *Pakistan Journal of Statistics* **29**(4), 479–486. (**Impact Factor: 0.336**).
31. Jabran, K., Ali, A., Sattar, A., Ali, Z., **Yaseen, M.**, Mubshir, H., Iqbal, J., and Munir, M. K. (2012). Cultural, mechanical and chemical weed control in wheat. *Crop & Environment* **3**(1-2), 50–53.
32. Masood, M. A., Raza, I., and **Yaseen, M.** (2012). Estimation of Optimum Field Plot Size and Shape in Paddy Yield Trial. *Pakistan J. Agric. Res.* **25**(4), 280–287.
33. McFarland, K. K., Reinhardt, J. W., and **Yaseen, M.** (2012). Rural dentists Does growing up in a small community matter? *The Journal of the American Dental Association* **143**(9), 1013–1019. (**Impact Factor: 1.822**).
34. Griess, J., Mason, S., Jackson, D., Galusha, T., Pedersen, J., and **Yaseen, M.** (2011). Environment and Hybrid Influences on Rapid-Visco-Analysis Flour Properties of Food-Grade Grain Sorghum. *Crop Science* **51**, 1757–1766. (**Impact Factor: 2.02**).
35. McFarland, K., Salama, F., and **Yaseen, M.** (2011). Access to Dental Care for Rural Children: A Survey of Nebraska General Dentists. *The Journal of Rural Health* **27**, 205–210. (**Impact Factor: 1.429**).
36. Yamin, M., Tahir, A., Nasir, A., and **Yaseen, M.** (2011). Studying the impact of farm mechanization on wheat production in Punjab-Pakistan. *Soil & Environment* **30**(2), 151–154.
37. Griess, J., Mason, S., Jackson, D., Galusha, T., **Yaseen, M.**, and Pedersen, J. (2010). Environment and Hybrid Influences on Food-Grade Sorghum Grain Yield and Hardness. *Crop Science* **50**(4), 1480–1489. (**Impact Factor: 2.02**).
38. McFarland, K., Reinhardt, J., and **Yaseen, M.** (2010). Rural Dentists of the Future: Dental School Enrollment Strategies. *Journal of Dental Education* **74**(8), 830–835. (**Impact Factor: 1.108**).
39. Saddiqi, H. A., Iqbal, Z., Khan, M. N., Sarwar, M., Muhammad, G., **Yaseen, M.**, and Jabbar, A. (2010). Evaluation of three Pakistani sheep breeds for their natural resistance to artificial infection of *Haemonchus contortus*. *Veterinary Parasitology* **168**, 141–145. (**Impact Factor: 2.331**).
40. Saeed, M., Iqbal, Z., Jabbar, A., Masood, S., Babar, W., Saddiqi, H., **Yaseen, M.**, Sarwar, M., and Arshad, M. (2010). Multiple anthelmintic resistance and the possible contributory factors in Beetal goats in an irrigated area (Pakistan). *Research in Veterinary Science* **88**, 267–272. (**Impact Factor: 1.33**).
41. Arshad, M., Suhail, A., Gogi, M., **Yaseen, M.**, Asghar, M., Tayyib, M., Karar, H., Hafeez, F., and Ullah, U. (2009). Farmers' perceptions of insect pests and pest management practices in Bt cotton in the Punjab, Pakistan. *International Journal of Pest Management* **55**(1), 1–10. (**Impact Factor: 0.602**).
42. Saifullah, Ghafoor, A., Sabir, M., Zia-Ur-Rehman, M., and **Yaseen, M.** (2008). Removal of Lead from Calcareous Contaminated Soils by Organic Acids. *International Journal of Agriculture & Biology* **10**(2), 173–178. (**ISI**).
43. Yasmeen, F., Mahmood, S., Hassan, M., Akhtar, N., and **Yaseen, M.** (2008). Comparative productive performance and egg characteristics of pullets and spent layers. *Pakistan Veterinary Journal* **28**(1), 5–8. (**ISI**).

44. Iqbal, Z., Sarwar, M., Jabbar, A., Ahmed, S., Nisa, M., Sajid, M., Khan, M., Mufti, K., and **Yaseen, M.** (2007). Direct and indirect anthelmintic effects of condensed tannins in sheep. *Veterinary Parasitology* **144**, 125–131. (**Impact Factor: 2.016**).
45. Jabbar, A., Zaman, M., Iqbal, Z., **Yaseen, M.**, and Shamim, A. (2007). Anthelmintic activity of *Chenopodium album* (L.) and *Caesalpinia crista* (L.) against trichostrongylid nematodes of sheep. *Journal of Ethnopharmacology* **114**(1), 86–91. (**Impact Factor: 2.049**).
46. Malik, M. A., Iqbal, Z., Javed, A., Malik, N. A., Munir, I., Ahmad, M., Bashir, T., and **Yaseen, M.** (2007). Alpha (α)-Adrenergic Blocker (Doxazosin): Role in Medical Management of Ureteric Stone. *Saudi German Hospitals Medical Journal* **2**(1), 30–35.
47. Munir, M., Malik, M., and **Yaseen, M.** (2007). Performance of sunflower in response to nitrogen management at different stages. *Pakistan Journal of Agricultural Sciences* **44**(1), 12–15. (**ISI**).
48. Nadeem, M., Khan, M., Iqbal, Z., Sajid, M., Arshad, M., and **Yaseen, M.** (2007). Determinants influencing prevalence of louse infestations on layers of District Faisalabad (Pakistan). *British Poultry Science* **48**(5), 546–550. (**Impact Factor: 1.005**).
49. Raza, M. A., Iqbal, Z., Jabbar, A., and **Yaseen, M.** (2007). Point prevalence of gastrointestinal helminthiasis in ruminants in southern Punjab, Pakistan. *Journal of Helminthology* **81**(03), 323–328. (**Impact Factor: 1.229**).
50. **Yaseen, M.**, Zakria, M., Shahzad, I., Khan, M., and Javed, M. (2005). Modeling and forecasting the sugarcane yield of Pakistan. *International Journal of Agriculture & Biology* **7**(2), 180–183. (**ISI**).

R Packages/Software

1. Edmondson, R., Piepho, H.-P., and **Yaseen, M.** (2019). *agriTutorial: Tutorial Analysis of Some Agricultural Experiments*. <https://cran.r-project.org/web/packages/agriTutorial/index.html>. R package version 0.1.5.
2. **Yaseen, M.** (2019). *PakPMICS2018: Multiple Indicator Cluster Survey (MICS) 2017-18 Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2018/index.html>. R package version 0.1.0.
3. **Yaseen, M.** and Nadeem, A. (2019). *dmai: Divisia Monetary Aggregates Index*. <https://cran.r-project.org/web/packages/dmai/index.html>. R package version 0.1.0.
4. **Yaseen, M.**, Ullah, S., and Haider, G. (2019). *SupMZ: Multiple Indicator Cluster Survey (MICS) 2017-18 Birth History of Children Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/SupMZ/index.html>. R package version 0.1.0.
5. **Yaseen, M.** and Usman, M. (2019a). *PakPMICS2018bh: Multiple Indicator Cluster Survey (MICS) 2017-18 Birth History of Children Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2018bh/index.html>. R package version 0.1.0.
6. **Yaseen, M.** and Usman, M. (2019b). *PakPMICS2018fs: Multiple Indicator Cluster Survey (MICS) 2017-18 Children Age 5-17 Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2018fs/index.html>. R package version 0.1.0.
7. **Yaseen, M.** and Usman, M. (2019c). *PakPMICS2018hh: Multiple Indicator Cluster Survey (MICS) 2017-18 Household Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2018hh/index.html>. R package version 0.1.0.
8. **Yaseen, M.** and Usman, M. (2019d). *PakPMICS2018mm: Multiple Indicator Cluster Survey (MICS) 2017-18 Maternal Mortality Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2018mm/index.html>. R package version 0.1.0.
9. **Yaseen, M.** and Usman, M. (2019e). *PakPMICS2018mn: Multiple Indicator Cluster Survey (MICS) 2017-18 Men Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2018mn/index.html>. R package version 0.1.0.
10. **Yaseen, M.**, Aslam, M., Ullah, S., Azam, M., Jun, C.-H., and Kashif, M. (2018). *qccrs: Quality Control Charts under Repetitive Sampling*. <https://cran.r-project.org/web/packages/qccrs/index.html>. R package version 0.1.0.
11. **Yaseen, M.**, Aslam, M., Ullah, S., and Kashif, M. (2018). *rgsp: Repetitive Group Sampling Plan Based on Cpk*. <https://cran.r-project.org/web/packages/rgsp/index.html>. R package version 0.1.0.
12. **Yaseen, M.** and Dilber, M. A. (2018a). *PakPC2017: Pakistan Population Census 2017*. <https://cran.r-project.org/web/packages/PakPC2017/index.html>. R package version 1.0.0.

13. Yaseen, M. and Dilber, M. A. (2018b). *ppcSpatial: Spatial Analysis of Pakistan Population Census*. <https://cran.r-project.org/web/packages/ppcSpatial/index.html>. R package version 0.1.0.
14. Yaseen, M. and Dilber, M. A. (2018c). *ppcSpatial: Spatial Analysis of Pakistan Population Census*. <https://cran.r-project.org/web/packages/ppcSpatial/index.html>. R package version 0.2.0.
15. Yaseen, M. and Eskridge, K. M. (2018a). *stability: Stability Analysis of Genotype by Environment Interaction (GEI)*. <https://cran.r-project.org/web/packages/stability/index.html>. R package version 0.1.0.
16. Yaseen, M. and Eskridge, K. M. (2018b). *stability: Stability Analysis of Genotype by Environment Interaction (GEI)*. <https://cran.r-project.org/web/packages/stability/index.html>. R package version 0.2.0.
17. Yaseen, M., Eskridge, K. M., and Murtaza, G. (2018). *stability: Stability Analysis of Genotype by Environment Interaction (GEI)*. <https://cran.r-project.org/web/packages/stability/index.html>. R package version 0.5.0.
18. Yaseen, M., Jarquin, D., Perez-Elizalde, S., Burgueno, J., and Crossa, J. (2018). *baystability: Bayesian Stability Analysis of Genotype by Environment Interaction (GEI)*. <https://cran.r-project.org/web/packages/baystability/index.html>. R package version 0.1.0.
19. Yaseen, M. and Ullah, S. (2018a). *eda4treeR: Experimental Design and Analysis for Tree Improvement*. <https://cran.r-project.org/web/packages/eda4treeR/index.html>. R package version 0.1.0.
20. Yaseen, M. and Ullah, S. (2018b). *eda4treeR: Experimental Design and Analysis for Tree Improvement*. <https://cran.r-project.org/web/packages/eda4treeR/index.html>. R package version 0.2.0.
21. Yaseen, M. and Ullah, S. (2018c). *gvcR: Genotypic Variance Components*. <https://cran.r-project.org/web/packages/gvc/index.html>. R package version 0.1.0.
22. Yaseen, M. (2017a). *PakPC2017: Pakistan Population Census 2017*. <https://cran.r-project.org/web/packages/PakPC2017/index.html>. R package version 0.1.0.
23. Yaseen, M. (2017b). *PakPC2017: Pakistan Population Census 2017*. <https://cran.r-project.org/web/packages/PakPC2017/index.html>. R package version 0.2.0.
24. Yaseen, M. (2017c). *PakPC2017: Pakistan Population Census 2017*. <https://cran.r-project.org/web/packages/PakPC2017/index.html>. R package version 0.3.0.
25. Yaseen, M. and Dilber, M. A. (2017a). *PakPC2017: Pakistan Population Census 2017*. <https://cran.r-project.org/web/packages/PakPC2017/index.html>. R package version 0.4.0.
26. Yaseen, M. and Dilber, M. A. (2017b). *PSLM2015: Pakistan Social and Living Standards Measurement Survey 2014-15*. <https://cran.r-project.org/web/packages/PSLM2015/index.html>. R package version 0.1.0.
27. Yaseen, M. and Dilber, M. A. (2017c). *PSLM2015: Pakistan Social and Living Standards Measurement Survey 2014-15*. <https://cran.r-project.org/web/packages/PSLM2015/index.html>. R package version 0.2.0.
28. Yaseen, M., Duchateau, L., Janssen, P., and Rowlands, J. (2017). *VetResearchLMM: Linear Mixed Models - An Introduction with Applications in Veterinary Research*. <https://cran.r-project.org/web/packages/VetResearchLMM/index.html>. R package version 0.2.0.
29. Yaseen, M. and Usman, M. (2017a). *PakPMICS2014Ch: Multiple Indicator Cluster Survey (MICS) 2014 Child Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2014Ch/index.html>. R package version 0.1.0.
30. Yaseen, M. and Usman, M. (2017b). *PakPMICS2014HH: Multiple Indicator Cluster Survey (MICS) 2014 Household Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2014HH/index.html>. R package version 0.1.0.
31. Yaseen, M. and Usman, M. (2017c). *PakPMICS2014HL: Multiple Indicator Cluster Survey (MICS) 2014 Household Listing Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2014HL/index.html>. R package version 0.1.0.
32. Yaseen, M. and Usman, M. (2017d). *PakPMICS2014Wm: Multiple Indicator Cluster Survey (MICS) 2014 Women Questionnaire Data for Punjab, Pakistan*. <https://cran.r-project.org/web/packages/PakPMICS2014Wm/index.html>. R package version 0.1.0.
33. Yaseen, M., Duchateau, L., Janssen, P., and Rowlands, J. (2016a). *VetResearchLMM: Linear Mixed Models - An Introduction with Applications in Veterinary Research*. <https://cran.r-project.org/web/packages/VetResearchLMM/index.html>. R package version 1.0.0.
34. Yaseen, M., Duchateau, L., Janssen, P., and Rowlands, J. (2016b). *VetResearchLMM: Linear Mixed Models - An Introduction with Applications in Veterinary Research*. <https://cran.r-project.org/web/packages/VetResearchLMM/index.html>. R package version 0.1.0.

35. **Yaseen, M.** and Eskridge, K. M. (2016). *DiallelAnalysisR: Diallel Analysis with R*. <https://cran.r-project.org/web/packages/DiallelAnalysisR/index.html>. R package version 0.1.1.
36. **Yaseen, M.**, Munawar, A., Stroup, W. W., and Eskridge, K. M. (2016). *StroupGLMM: R Codes and Datasets for Generalized Linear Mixed Models: Modern Concepts, Methods and Applications by Walter W. Stroup*. <https://cran.r-project.org/web/packages/StroupGLMM/index.html>. R package version 0.1.0.

Publications in Conference Proceedings

1. Batool, Z. and **Yaseen, M.** (2016a). Time Series Analysis and Forecasting of Water Reservoir in Pakistan. In: *14-th International Conference on Statistical Sciences, Karachi, Pakistan*. Vol. 29, pp.195–202.
2. Shafiq, F., Arif, M., and **Yaseen, M.** (2016). Impulse Response Function Analysis: An Application to Macroeconomic Data of Pakistan. In: *14-th International Conference on Statistical Sciences, Karachi, Pakistan*. Vol. 29, pp.67–76.
3. Zafar, H., Arif, M., and **Yaseen, M.** (2016a). An Empirical Investigation of Economic Variables of Pakistan by Using Autoregressive Distributed LAG Model. In: *14-th International Conference on Statistical Sciences, Karachi, Pakistan*. Vol. 29, pp.203–214.
4. Naveed, M., Saifullah, Bibi, S., **Yaseen, M.**, and Murtaza, G. (2015). Grain Cadmium concentration decreased in Rice (*Oryza sativa* L.) while managing different Water Regimes. In: *International Conference on Soil Sustainability for Food Security, Univ. of Agri., Faisalabad, Pakistan*.
5. Batool, S. and **Yaseen, M.** (2014a). Spatial Analysis of Hepatitis C Epidemiology in Faisalabad District. In: *12-th International Conference on Statistical Sciences, Karachi, Pakistan*. Vol. 26, pp.391–396.
6. Saleem, S. and **Yaseen, M.** (2014a). Modeling Survival Rates of Cardiovascular Patients in Faisalabad. In: *12-th International Conference on Statistical Sciences, Karachi, Pakistan*. Vol. 26, pp.397–402.
7. Zakria, M., **Yaseen, M.**, Muhammad, F., and Mahmood, J. (2012a). Modelling the Age Specific Fertility Rates of Rural and Urban Areas of Pakistan During 1984-2007. In: *Proc. ICCS-12, Doha, Qatar*. Vol. 23, pp.607–618.

Abstracts Published in Conferences

1. Jabeen, S., Usman, M., and **Yaseen, M.** (2018). Factors affecting C-section deliveries in Punjab. In: *16-th International Conference on Statistical Sciences: Advances in Statistics and Data Management: It's Role in National Growth and Socio-Economic Developments, Peshawar, Khyber Pakhtunkhwa, Pakistan*.
2. Saleem, S., Munir, R., and **Yaseen, M.** (2018). Empirical Comparison of Partial Least Squares, Principal Component and Ridge Regression in the presence of multicollinearity. In: *16-th International Conference on Statistical Sciences: Advances in Statistics and Data Management: It's Role in National Growth and Socio-Economic Developments, Peshawar, Khyber Pakhtunkhwa, Pakistan*.
3. Ishaq, K., Younas, M., **Yaseen, M.**, Ali, M., and Riaz, M. (2017). Effect of physical form of feed and addition of live yeast culture (*saccharomyces cerevisiae*) on the growth performance and carcass traits of beetal male kids under high input feeding system. In: *2017 International Conference on Agricultural and Food Science (ICAFS2017) & 7-th International Conference on Biotechnology and Bioengineering (7-th ICBB) ICAFS&ICBB2017, Lahore, Pakistan*.
4. Batool, Z. and **Yaseen, M.** (2016c). Time Series Analysis and Forecasting of Water Reservoir in Pakistan. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan*.
5. Irfan, M. and **Yaseen, M.** (2016). Bayesian network for modeling relationships among variables of neonatal sepsis. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan*.
6. Jameel, H. T., Nabeel, T., and **Yaseen, M.** (2016). Development of a Tool for the Assessment of English and Urdu Handwriting. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan*.
7. Khan, S., **Yaseen, M.**, Idress, N., and Ghamkhar, M. (2016). Structural Equation Modeling to study the relationship of Cotton fiber traits. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan*.
8. Khan, U. W., **Yaseen, M.**, and Arif, M. (2016). Bayesian Approach: An Alternative of Additive Main effect and Multiplicative Interaction (AMMI) model for Genotype-by-Environment Interaction (GEI). In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan*.

9. Lodhi, T. S. and **Yaseen, M.** (2016). Drought Forecasting using Seasonal Autoregressive Integrated Moving Average Models and Artificial Neural Networks. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan.*
10. Munawar, A., Arif, M., **Yaseen, M.**, Ullah, S., and Ahmad, H. R. (2016). Interpolating CD Metal in Soil Using Spatial Techniques in Metropolis Areas of Faisalabad. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan.*
11. Nazir, N. and **Yaseen, M.** (2016). Assessing the In-control Robustness of Progressive Mean Control Chart. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan.*
12. Raza, M. M., Khan, M. A., **Yaseen, M.**, and Nutter, F. (2016). Exploring the slow rusting potential of wheat genotypes against leaf and strip rust of wheat. In: *APS Annual Meeting, Tampa, Florida, USA.*
13. Rehman, F., Saeed, A., Munir, H., Shakeel, A., Saleem, M. F., Ziaf, K., **Yaseen, M.**, and Raza, M. A. (2016). Genotype \times Environment interaction for NaCl tolerance in *Solanum lycopersicum* L. at seedling stage. In: *2-nd International Conference on Horticultural Sciences (ICH2016), University of Agriculture, Faisalabad, Pakistan.*
14. Shafique, F., Arif, M., and **Yaseen, M.** (2016). Impulse Response Function Analysis: An Application to Macroeconomic Data of Pakistan. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan.*
15. Zafar, H., Arif, M., and **Yaseen, M.** (2016b). An Empirical Investigation of Economic Variables of Pakistan by using Autoregressive Distributed Lag Model. In: *14-th International Conference on Statistical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan.*
16. Raza, M. M., Khan, A., M., **Yaseen, M.**, Atiq, M., Mushtaq, A., Ikram, A., and Riaz, K. (2015). Biorational management of leaf rust of wheat caused by *Puccinia recondita* rob.ex. Desm. f. *Sp. tritici*. In: *10-th Biennial International Conference of Pakistan Society for Microbiology. Microbiology and Molecular Genetics, Punjab University, Lahore, Pakistan.*
17. **Yaseen, M.** and Eskridge, K. M. (2015). Linear System of Simultaneous Equations with Random Effects. In: *International Conference on Management, Education & Social Sciences Research, University of Karachi, Karachi, Pakistan.*
18. Batool, S. and **Yaseen, M.** (2014b). Spatial Analysis of Hepatitis C Epidemiology in Faisalabad District. In: *12-th International Conference on Statistical Sciences, Karachi, Pakistan.*
19. Chattha, W. S., Shakeel, A., Akram, H. M., Saeed, A., Saleem, M. F., and **Yaseen, M.** (2014). Evaluating genetic variability for water-deficit tolerance in *Gossypium hirsutum* L. In: *5-th International Conference on Agriculture, Food Security & Climate Change, University of Poonch, Rawalakot, Azad Kashmir, Pakistan.*
20. Ishaq, K., Younas, M., Yaqoob, M., Mirza, M. A., **Yaseen, M.**, and Rafiq, M. (2014). Effect of Dietary Protein Levels and Age of Weaning on the Growth Performance of Beetal Male Kids under High Input Feeding System. In: *International Participated Small Ruminant Congress, Konya, Turkiye.*
21. Saleem, S. and **Yaseen, M.** (2014b). Modeling Survival Rates of Cardiovascular Patients in Faisalabad. In: *12-th International Conference on Statistical Sciences, Karachi, Pakistan.*
22. **Yaseen, M.** and Eskridge, K. M. (2014a). Combining Experiments - A tool for selection of Superior and Stable Genotypes tested in diverse Environments. In: *12-th International Conference on Statistical Sciences, Dow University of Health Sciences, Karachi, Pakistan.*
23. **Yaseen, M.** and Eskridge, K. M. (2014b). Linear Model- A Unified Approach for Regression, ANOVA, and ANCOVA. In: *12-th International Conference on Statistical Sciences, Dow University of Health Sciences, Karachi, Pakistan.*
24. **Yaseen, M.**, Eskridge, K. M., Arif, M., and Nadeem, A. (2014). Fitting Simultaneous Equations using Multivariate Approach. In: *12-th International Conference on Statistical Sciences, Dow University of Health Sciences, Karachi, Pakistan.*
25. Rafiq, M., Younas, M., Ishaq, K., Yaqoob, M., Shahzad, A., and **Yaseen, M.** (2013). Effect of feeding systems on growth performance and blood urea concentration of beetal and teddy male kids. In: *Proceedings of the 2-nd Workshop on Dairy Science Park, Peshawar-25120, Pakistan, pp.98.*
26. Zakria, M., **Yaseen, M.**, Muhammad, F., and Mahmood, J. (2012b). Modelling the Age Specific Fertility Rates of Rural and Urban Areas of Pakistan During 1984-2007. In: *The 12-th Islamic Countries Conference on Statistical Sciences (ICCS-12), Doha, Qatar.*
27. Abbas, R. Z., Iqbal, Z., and **Yaseen, M.** (2008). Anticoccidial Activity of Salinomycin Sodium in Broilers. In: *The 1st International Veterinary Poultry Congress, Tehran, Iran.*

28. Mustafa, G., Yasmin, I., **Yaseen, M.**, and Ullah, S. (2008). Modeling and Forecasting Gross Domestic Product Deflator for Pakistan. In: *The 4th National Conference on Statistical Sciences, University of Gujrat, Gujrat, Pakistan*.
29. Saeed, M., Iqbal, Z., Jabbar, A., **Yaseen, M.**, and Arshad, M. (2008). Anthelmintic Resistance: Beetal Goats in Punjab (Pakistan). In: *The Parasitology Conference, Kalampura, Malaysia*.
30. Ahmad, I., Arif, M., **Yaseen, M.**, Idrees, N., Ahmad, I. J., and Hassan, M. U. (2007). Latent Variables Approach for handling Multicollinearity Problem. In: *International Conference on Statistical Sciences with Special Reference to Survival Data Analysis, G.C University Lahore, Lahore, Pakistan*.
31. Ullah, S., **Yaseen, M.**, and Arif, M. (2007). Exploring Uses and Abuses of internet by using Correspondence Analysis. In: *International Conference on Statistical Sciences with Special Reference to Survival Data Analysis, G.C University Lahore, Lahore, Pakistan*.
32. **Yaseen, M.** (2007). Comparison of proposed Estimators of Box's correction in Single Factor Experiments having three Repeated Measures on the same subjects. In: *The 3rd National Conference on Statistical Sciences and its application to Engineering, Biostatistics, Industrial, Computer & Telecom Technology, National University of Computer and Emerging Sciences FAST-NU, Lahore, Pakistan*.
33. Jabbar, A., Zaman, M. A., Iqbal, Z., **Yaseen, M.**, and Shmim, A. (2006). Anthelmintic Activity of *Chenopodium album* (L.) and *Caesalpinia crista* (L.) against *Trichostrongylid* Nematodes of Sheep. In: *The 9th International Congress on Ethnopharmacology, Nanning, Guangxi, P.R. China*.

Manuals

1. Khan, M. I., **Yaseen, M.**, and Arif, M. (2006). *Manual for Biometric Techniques for Agriculture Research in Pakistan using STATISTICA*. Department of Mathematics & Statistics, Univ. of Agriculture, Faisalabad.

Statistical Training & Workshops Offered

1. **L^AT_EX: A Typesetting for Official and Scientific Writing** held on June 13-14, 2022 at National Institute of Banking & Finance (NIBAF), Karachi, Pakistan
2. **In-Service Eight Weeks Mandatory Pre-Promotion Training Research Officer (BS-17) to Senior Research Officer (BS-18) 1st Session** held on January 29, 2021 & February 29, 2021 at Forest Services Academy Ghoragali, Murree, Pakistan
3. **In-Service Eight Weeks Mandatory Pre-Promotion Training Research Officer (BS-17) to Senior Research Officer (BS-18) 1st Session** held on January 22, 27-28, 2021 at Forest Services Academy Ghoragali, Murree, Pakistan
4. **In-Service Eight Weeks Mandatory Pre-Promotion Training Research Officer (BS-17) to Senior Research Officer (BS-18) 1st Session** held on January 19-20, 2021 at Forest Services Academy Ghoragali, Murree, Pakistan
5. **Training Course on Capacity Building of NARS Scientists in Advance Analytical Techniques** held on October 27-29, 2020 at Ayub Agricultural Research Institute (AARI), Faisalabad, Pakistan
6. **Training Course on Capacity Building of NARS Scientists in Advance Analytical Techniques** held on November 25-28, 2019 at National Agricultural Research Centre, Islamabad, Pakistan
7. **Econometrics using STATA** held during July 29, 2019 to August 2, 2019 at National Institute of Banking & Finance (NIBAF), Karachi, Pakistan
8. **1st International Workshop on Scholarly Writing and Publishing** held on March 18-21, 2019 at the University of Agriculture, Faisalabad, Pakistan
9. **Python: Programming for Statistics** held on February 18, 2019 at Department of Statistics, Bahauddin Zakariya University, Multan, Pakistan
10. **An Introduction to Statistics using SPSS** held on August 16-17, 2018 at National Textile University, Faisalabad, Pakistan

11. ***Emerging Technologies in Research: Google Apps and SPSS*** held on May 15-16, 2018 at Ayub Agriculture Research Institute, Faisalabad, Pakistan
12. ***An introduction to R for Agricultural Research*** held on May 09-11, 2018 at Ayub Agriculture Research Institute, Faisalabad, Pakistan
13. ***Structural Equation Modeling with Latent Variables using R*** during ***Symposium on Professional Development of New Generation of Research Scholars*** held on December 14, 2017 at COMSATS Institute of Information Technology, Lahore, Pakistan
14. ***Applied Econometrics*** during ***Statistical Officers Training Scheme (SOTS-7)*** held on December 12-13, 2017 at National Institute of Banking & Finance (NIBAF), Islamabad, Pakistan
15. ***Statistical Methods for Researchers using R*** held on August 10-12, 2017 at the University of Agriculture, Faisalabad, Pakistan
16. ***Statistical Methods for Researchers using R*** held on August 07-09, 2017 at the University of Agriculture, Faisalabad, Pakistan
17. ***An Introduction to R & Bioconductor for Computational Biology & Bioinformatics*** during one day international workshop on ***Application of Computational Biology in Biotechnology*** held on July 31, 2017 at National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad, Pakistan
18. ***An Introduction to L^AT_EX: UAF Synopsis and Thesis*** held on July 26-28, 2017 at the University of Agriculture, Faisalabad, Pakistan
19. ***Statistics for Veterinary and Animal Science using R*** held on July 17-19, 2017 at the University of Agriculture, Faisalabad, Pakistan
20. ***Statistics for Veterinary and Animal Science using R*** held on July 17-19, 2017 at the University of Agriculture, Faisalabad, Pakistan
21. ***Generalized Linear Mixed Modeling for Agricultural Sciences*** held on February 25, 2017 at Bahauddin Zaria University, Multan, Pakistan
22. ***Technical and Patent Writing*** held on January 28, 2017 at the University of Agriculture, Faisalabad, Pakistan
23. ***Generalized Linear Mixed Models using R*** held on December 13, 2016 during ***14-th Islamic Countries Conference on Statistical and Allied Sciences (ICCS-14)*** held on December 12-15, 2016 at Multan, Pakistan
24. ***An Introduction to L^AT_EX*** held on December 13, 2016 during ***14-th Islamic Countries Conference on Statistical and Allied Sciences (ICCS-14)*** held on December 12-15, 2016 at Multan, Pakistan
25. ***An Introduction to Econometrics with R*** held on February 22-25, 2016 at National Institute of Banking & Finance (NIBAF), State Bank of Pakistan, Karachi, Pakistan
26. ***Statistics: The Art and Science of Learning from Data*** held on February 6, 2016 at the University of Agriculture Faisalabad, Pakistan
27. ***Quantitative Techniques for Decision Making*** during 20-th Mid-Career Management Course (MCMC) held on Aug 21, 24-25, 2015 at National Institute of Management, Lahore, Pakistan
28. ***An Introduction to L^AT_EX*** held on May 27, 2015 at National Institute of Banking & Finance (NIBAF), State Bank of Pakistan, Karachi, Pakistan
29. ***An Introduction to R*** held on May 25-26, 2015 at National Institute of Banking & Finance (NIBAF), State Bank of Pakistan, Karachi, Pakistan
30. ***Structural Equation Modeling with R*** held on May 24, 2015 at Iqra University, Karachi, Pakistan

31. *Generalized Method of Moments Estimation with R* held on April 06, 2015 at Iqra University, Karachi, Pakistan
32. *An Introduction to R* held on March 28, 2015 at the University of Agriculture Faisalabad, Pakistan
33. *An Introduction to L^AT_EX* held on August 13, 2014 at National Institute of Banking & Finance (NIBAF), State Bank of Pakistan, Karachi, Pakistan
34. *An Introduction to R* held on August 11-12, 2014 at National Institute of Banking & Finance (NIBAF), State Bank of Pakistan, Karachi, Pakistan
35. *An Introduction to R-Programming Language for Statistical Computing* held on May 24 to June 14, 2013 (16 Contact Hours) at University of Agriculture Faisalabad, Pakistan
36. Training Course on *Statistical and Economic Analysis of Experimental Data using Statistical Software* held on December 17-21, 2012 at Agricultural Research Institute (ARI), Muzaffarabad, AJK, Pakistan
37. *SPSS Training for Social Sciences* held on August 13-20, 2007 at University of Agriculture Faisalabad, Pakistan
38. *Design and Analysis of Agricultural Research Experiments using STATISTICA/Minitab (Biological Sciences)* held on August 06-11, 2007 at University of Agriculture Faisalabad, Pakistan
39. *Statistical and Economical Analysis of Field Experiments* held on May 21-25, 2007 at AZRE, Quetta, Balochistan, Pakistan
40. *Advanced Econometric Techniques using EViews* held on August 24-29, 2006 at Department of Mathematics & Statistics, University of Agriculture, Faisalabad, Pakistan
41. *Workshop on Applied Multivariate Statistical Techniques Using Different Statistical Packages* held on June 05-10, 2006 at Department of Mathematics & Statistics, University of Agriculture, Faisalabad, Pakistan
42. *STATISTICA Training Workshop of Biological Scientists* held on August 08-13, 2005 at Department of Mathematics & Statistics, University of Agriculture, Faisalabad, Pakistan
43. *SPSS Training Workshop of Social Scientists* held on August 01-06, 2005 at Department of Mathematics & Statistics, University of Agriculture, Faisalabad, Pakistan
44. *Advanced Biometric Techniques for Agricultural Research in Pakistan* held on June 20-25, 2005 at Department of Mathematics & Statistics, University of Agriculture, Faisalabad, Pakistan
45. *Training Course on Design and Analysis of Agricultural Field Experiments using STATISTICA* held on Feb 21-25, 2005 at Social Sciences Institute, National Agriculture Research Center, Islamabad, Pakistan
46. *Research Methodology and Analytical Techniques* held from 21-06-04 to 03-07-04 in the Department of Mathematics & Statistics, University of Agriculture, Faisalabad, Pakistan

Training & Workshops Attended

1. *Introduction to TileDB for R* in *The R User Conference, useR! 2021*, during July 5-9, 2021
2. *Introduction to Responsible Machine Learning* in *The R User Conference, useR! 2021*, during July 5-9, 2021
3. *The R User Conference, useR! 2021*, July 5-9, 2021 online

4. **5th Workshop on Advanced Techniques for Scientific Programming and Management of Open Source Software Packages Science** organized by The Abdus Salam International Centre for Theoretical Physics (ICTP), in collaboration Sharif University of Technology, Tehran, Iran held on March 04-15, 2017, at Sharif University of Technology, Tehran, Iran
5. **Second Consultative Workshop on Multiple Indicator Cluster Survey (MICS) Punjab 2017** held on January 31, 2017 at Faisalabad Institute of Cardiology (FIC), Faisalabad, Pakistan
6. **Technical and Patent Writing** held on January 28, 2017 at the University of Agriculture, Faisalabad, Pakistan
7. **14-th Islamic Countries Conference on Statistical and Allied Sciences (ICCS-14)** held on December 12-15, 2016 at Multan, Pakistan
8. **Four-Day Workshop on "Hybrid Course Design and Development"** organized by U.S.-Pakistan Center for Advanced Studies in Agriculture and Food Security, October 18-21, 2016, University of Agriculture-Faisalabad, Pakistan
9. **The CODATA-RDA School of Research Data Science** organized by The Abdus Salam International Centre for Theoretical Physics (ICTP), in collaboration with International Council for Science - Committee on Data for Science and Technology (CODATA), The Research Data Alliance (RDA), The World Academy of Sciences and The Association of Commonwealth Universities (TWAS), August 01-12, 2016, Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, Italy
10. **Dialogue on Current Fertilizer Policy** organized by Food and Agriculture Organization (FAO) of the United Nations, June 06, 2016, Ramada Hotel, Islamabad, Pakistan
11. **Two-Day Workshop on "4R Nutrient Stewardship for Food, Economic and Environmental Security"** organized by Food and Agriculture Organization (FAO) of the United Nations, April 04-05, 2016, Serena Hotel, Islamabad, Pakistan
12. **14-th International Conference on Statistical Sciences** held on March 14-16, 2016 at Jinnah Sindh Medical University, Karachi, Pakistan
13. **2-nd International Conference on Horticultural Sciences (ICH2016)** held on February 18-20, 2016 at the University of Agriculture, Faisalabad, Pakistan
14. **Water Dialogue on Irrigation System of Pakistan: Challenges & Opportunities** held on February 10, 2016 at the University of Agriculture, Faisalabad, Pakistan
15. **Grant Writing Workshop - Competitive Grants Program** organized by U.S.-Pakistan Centers for Advanced Studies in Agriculture/Food Security, June 01, 2015, University of Agriculture- Faisalabad, Pakistan
16. **International Conference on Management, Education & Social Sciences Research** held on April 4-5, 2015 at the University of Karachi, Karachi, Pakistan
17. **12-th International Conference on Statistical Sciences** held on March 24-26, 2014 at the Dow University of Health Sciences, Karachi, Pakistan
18. **Reference Management in Scientific Writings**, Oct 25, 2014 at Dept. of Physics, University of Agriculture-Faisalabad, Pakistan
19. **One day Workshop on Scientific Writing**, May 24, 2014 at Dept. of Agronomy, University of Agriculture-Faisalabad, Pakistan
20. **2-nd Annual Workshop on Scientific Writing & Plagiarism**, May 07, 2014 at the University of Agriculture-Faisalabad, Pakistan
21. **Statistical Learning**, presented by Drs. Trevor Hastie & Rob Tibshirani, January 20, 2014 to April 04, 2014 Stanford University, Stanford, CA, USA (Through Stanford Online OpenEdx)
22. **Advanced Multivariate Techniques**, March 23, 2014 at the Dow University of Health Sciences, Karachi, Pakistan

23. *Introduction to SAS*, March 23, 2014 at the Dow University of Health Sciences, Karachi, Pakistan
24. *Introduction to SPSS*, March 22, 2014 at the Dow University of Health Sciences, Karachi, Pakistan
25. *Remote Sensing for Monitoring Agricultural Crops and Assessing Soil Salinity*, presented by Dr. Muhammad Waqar, February 3-15, 2014, at the University of Agriculture, Faisalabad, Pakistan
26. *Development in Applied Forecasting for Business and Economics*, presented by Dr. Muhammad Akram, January 16-17, 2013, at the University of Agriculture, Faisalabad-Pakistan
27. *Introduction to Statistical Software R*, presented by Dr. Muhammad Akram, January 15, 2013, at the University of Agriculture, Faisalabad-Pakistan
28. *Three-day Workshop on Data Analysis & Developing Research Grant Proposal*, presented by Drs. H. Anwar Ahmad & Shaukat Ali Bhatti, December 27-29, 2012, at the University of Agriculture, Faisalabad-Pakistan
29. *Learn R In-Depth*, presented by Dr. Paul Geissler, June 7 to August 25, 2011 (23 contact hours), U.S. Geological Survey
30. *Generalized Linear Mixed Model*, presented by Prof. Charles McCulloch in the *2011 Joint Statistical Meetings* on August 1, 2011 at Miami Beach Florida, USA
31. *Bayesian Inference*, presented by Prof. Bruno Sanso in the *2011 Joint Statistical Meetings* on July 31, 2011 at Miami Beach Florida, USA
32. *Analysis and Design of Agricultural Research: A Generalized Mixed Model Perspective*, presented by Prof. Walter Stroup in the *Conference on Applied Statistics in Agriculture* held on May 1-3, 2011 at Kansas State University, Manhattan, Kansas, USA
33. *Learn R by Example*, presented by Dr. Paul Geissler, October 12 to November 16, 2010 (32 contact hours), U.S. Geological Survey
34. *Fitting and evaluating mixed models using lme4*, presented by Prof. Douglas Bates in *The R User Conference, useR! 2010*, at the Gaithersburg, Maryland, USA, campus of the National Institute of Standards and Technology (NIST), during July 21-23, 2010
35. *Applied spatial data analysis with R*, presented by Dr. Virgilio Gomez-Rubi in *The R User Conference, useR! 2010*, at the Gaithersburg, Maryland, USA, campus of the National Institute of Standards and Technology (NIST), during July 21-23, 2010
36. *The R User Conference, useR! 2010* July 21-23 2010 National Institute of Standards and Technology (NIST), Maryland, USA
37. *Training for International Teaching Assistants* held on August 3-7, 2009 at University of Nebraska-Lincoln USA
38. *Faculty Development Program* held on March 27-28, 2007 at The University of Faisalabad, Faisalabad, Pakistan
39. *Workshop on Intelligent Data Analysis Methods in Functional Genomics* held on March 17-18, 2007 at Lahore University of Management Sciences, Lahore, Pakistan
40. *Workshop on Data Analysis* held on March 10-11, 2007 at Lahore University of Management Sciences, Lahore, Pakistan
41. *Workshop on Foundation of Data Mining* held on June 11-12, 2005 at Lahore University of Management Sciences, Lahore, Pakistan
42. *Staff Development Course* under the scheme National Academy of Higher Education, held from May 9-June 4, 2005 at University of Agriculture, Faisalabad, Pakistan
43. *Research Orientation Program on Research Methodology and Analytical Techniques* held on June 15-30, 2004 at University of Agriculture, Faisalabad, Pakistan

44. ***Bio-Informatics, Information Technology and Bio-Statistics*** held on December 27-28, 2003 at National College of Business Administration and Economics, Lahore, Pakistan
45. ***EU Asia Link Project Short Course on Principles of Experimental Design and Analysis*** organized by SALINE Agriculture Research Center, University of Agriculture, Faisalabad, held from December 1-12, 2003 at University of Agriculture, Faisalabad, Pakistan
46. ***GRE Preparation Course of 45 teaching hours*** held on 27-10-2003 to 12-11-2003 at University of Agriculture, Faisalabad, Pakistan