Publications

Artificial Intelligence, Supervised Learning, Pattern Recognition, Statistical Inference, Machine Learning, Data Mining and Knowledge Discovery, Feature Selection, Visualization, Statistical Data Analysis, Discriminant Analysis, Statistical Inference, Hypothesis Testing, Empirical Probability, Basic Statistics, [Sequential Test, Step Wise Test, Test of Equality for Multivariate Frequency Distributions, Discrimination and Classification, Alternative to Chebyshev's, Generalized Z Score, Outlier Detection and Asymmetry Quantification for Asymmetric Distribution, Shorter Range of Standard Deviation**]**

1. Shamsi, S and **Adnan M A S**. (2021). A Sequential Discrimination Procedure for Two Almost Identically Shaped Real Distributions. *Joint Statistical Meetings 2021 Proceedings*, Alexandria, VA: American Statistical Association. 890-900.
2. **Adnan M A S**. and Sharna S I. (2021). Alternative Chebyshev's Inequality. *Symposium on Data Science and Statistics 2021 Proceedings*, Alexandria, VA: American Statistical Association. 2095-2097.
3. **Adnan M A S** (2020). A Generalized Z-Score for Both Symmetric and Asymmetric Distribution. *Joint Statistical Meetings 2019 Proceedings*, Alexandria, VA: American Statistical Association. 2613-2618.
4. **Adnan M A S** and Roy S (2017). A Sequential Discrimination Procedure for Two Almost Identically Shaped Wrapped Distributions. *Journal of Applied Statistics*. 45(5), 872-881. DOI: 10.1080/02664763.2016.1189516.
5. Islam K, **Adnan M A S** and Shapla T. (2016). A Stepwise Test for Identical Normal Distributions. *Joint Statistical Meetings 2016 Proceedings*, Government Statistics Section. Alexandria, VA: American Statistical Association. 2722 - 2730.
6. Sharna S I, **Adnan M A S**, Adnan A S and Imon R. (2015). How Normal is Normal. How Symmetric is Symmetric. How local is the Location for Symmetric Distribution? *Joint Statistical Meetings 2015 Proceedings*, Statistics Education Section. Alexandria, VA: American Statistical Association. 3122 - 3136.
7. **Adnan M A S** (2015). Parametric Tests of Equality of Several Univariate and/or Multivariate Frequency Distributions and Several Transition Frequency Matrices and Several Contingency Tables. *Joint Statistical Meetings 2015 Proceedings*, Government Statistics Section. Alexandria, VA: American Statistical Association. 28- 41.
8. Sharna S I, **Adnan M A S** and Shamsuddin M. (2012). Parametric Test of Equality of Two Frequency Distributions or Matrices. *Joint Statistical Meetings 2012 Proceedings*, Inference from Combined Data Sets, Government Statistics Section. Alexandria, VA: American Statistical Association. 2025 – 2039.
9. Hossain F, **Adnan M A S** and Joarder H (2013). Shorter Variation of Standard Deviation for Small Sample.
   International Journal of Mathematical Education in Science and Technology. 45 (2). DOI:10.1080/0020739X.2013.822588
10. Hossain F and **Adnan M A S**. (2007). A New Approach to Determine the Asymmetry of a Distribution. *Journal of Applied Statistical Science*. Vol 15 (1), 127-134.

Imputation, Boundary Based Neighborhood, Nearest Neighborhood [Missing Value Estimation for High Dimensional Data, Multiple Missing Values Estimation**]**

11. **Adnan M A S** and Sharna S I (2021). A Missing Technique (to Estimate Missing Values) for High Dimensional Data. *Joint Statistical Meetings 2021 Proceedings*, Alexandria, VA: American Statistical Association. 913-926.
12. Sharna S I, **Adnan M A S**, Adnan A S and Imon R. (2017). A Missing Technique for Estimating Univariate Multiple Missing Values: An Advanced Resampling Method for Correlated Observations. *Joint Statistical Meetings 217 Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association. 2522-2535.

13. Sharna S I, **Adnan M A S**, Adnan A S and Imon R. (2016). A Missing Technique for Estimating Missing Values. *Joint Statistical Meetings 2016 Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association. 398 – 409.

Feature Extraction, Multivariate Pattern Recognition, Multivariate Analyses and High Dimensional Statistics, Statistical Optimization, Semi-Supervised Learning [Quality Control**,** Quality Assurance Check, Feature Extraction and Fraud Detection for Credit Card Customers**]**

14. **Adnan, M. A. S.** (2022). High Dimensional Generalized Linear Models with and without Dimension Reduction Techniques. *Joint Statistical Meetings 202 2 Proceedings*, Alexandria, VA: American Statistical Association. 290-297.
15. **Adnan M A S**. (2021). A Multivariate Quality Assurance Approach for Credit Card Customers and Some Features. *Quality and Productivity Research Conference 2021 Proceedings*, Alexandria, VA: American Statistical Association. 2036-2039.
16. **Adnan M A S**. (2021). A High Dimensional Mixture Model: A Mixture Multivariate Probabilistic Model. *Joint Statistical Meetings 2021Proceedings*, Alexandria, VA: American Statistical Association. 901-912.
17. Sharna S I, **Adnan M A S**, Adnan A S and Imon R (2020). Tests of Equality of Several High Dimensional Contingency Tables. *Joint Statistical Meetings 2019 Proceedings*, Alexandria, VA: American Statistical Association. 1385-1391.

Markov Chain, Stochastic Processes, Feature Extraction of Random Sequences, Large Scale Data Analysis [Generalized Counting Process, Mixture Stochastic Processes, Heterogeneity Index for Economic and Business Mobility**]**

18. **Adnan M A S**. (2021). Unfolding the Instantaneous Effect of Each Probability Process in a Mixture Stochastic Process. *Joint Statistical Meetings 2021 Proceedings*, Alexandria, VA: American Statistical Association. 927-931.
19. **Adnan M A S**, Irin Z S, Adnan A S and Shamsuddin M. (2014). A Generalization to the Counting Process and its Consequences. *Joint Statistical Meetings 2014 Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association. 3385 - 3399.
20. Shamsi, S and **Adnan M A S** and Shamsuddin M. (2014). A Class of Advanced Probabilistic Models for Assessing Economic/Business Mobility. *Joint Statistical Meetings 2014 Proceedings*, Business and Economic Statistics Section. Alexandria, VA: American Statistical Association. 3227 - 3241.

Biostatistics, Bioinformatics, High Dimensional Contingency Tables, Measures of Association, Correlation, Environmental Statistics, Ecological Statistics, Expected Maximization, Bayesian Statistics, Bagging and Boosting Based Predictive Models, Pattern Matching, Sequence Alignment

21. **Adnan, M. A. S** and Shamsi, S. (2022). Bagging and Boosting-Based Convexly Combined Multivariate Mixture Models: Models Better Than EM Based Mixture Models. *Joint Statistical Meetings 202 2 Proceedings*, Alexandria, VA: American Statistical Association. 290-297.
22. **Adnan M A S** and Mahmud, H M M. (2021). A Bagging and Boosting Based Convexly Combined Optimum Mixture Probabilistic Model. *arXiv*:2106.05840**.**
23. **Adnan M A S** and Roy S. (2014). Wrapped Variance Gamma distribution with an Application to Wind direction. *Journal of Environmental Statistics*. 16(2), 1-10.
24. Roy S, **Adnan M A S** and Sultana, K. (2019). An Asymmetric Probability Model for Circular data: Wrapped Erlang Distribution with Application to Blue Periwinkles. *International Journal of Mathematics and Computation*. 30 (2).
25. Roy S and **Adnan M A S**. (2012). Wrapped Generalized Gompertz Distribution: An Application to Ornithology. *Journal of Biometrics and Biostatistics.* 5, 1-6. DOI: 10.4172/2155-6180.1000153.

26. **Adnan M A S**, Kiser H, Adnan A S and Shamsuddin M. (2013). A Class of Thermostatistical Distributions for the Kinetic Behaviors of Gases from Distinct Genesis. *Far East Journal of Applied Mathematics.* 74(1), 49-70.
27. **Adnan M A S**, Mahmud H M M and Miah A B M A S. (2011). A Mixture Probabilistic Model for Extreme Temperatures. *Joint Statistical Meetings 2011 Proceedings*, Statistics and the Environment Section. Alexandria, VA: American Statistical Association. 2728-2739.
28. **Adnan M A S** and Shamsuddin M. (2012). An Advanced Statistical Method Multiple Sequence Alignment. *Joint Statistical Meetings 2012 Proceedings*, Genetic Epidemiology and Genomics, Statistics in Epidemiology Section. Alexandria, VA: American Statistical Association. 3222 - 3236.
29. **Adnan M A S**, Moinuddin M, Roy S and Jaman M R. (2011). An Alternative Approach of Pair-wise Sequence Alignment. *Joint Statistical Meetings 2011 Proceedings*, Statistics in Epidemiology Section. Alexandria, VA: American Statistical Association. 2941 - 2951.
30. **Adnan M A S**, Crouch S, Islam S and Zhu J. (2016). Three-Dimensional Contingency Tables, Measures of Association and Correlation. *Joint Statistical Meetings 2016 Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association. 211 - 221.

Predictive Modeling, Generalized Linear Models, Nonlinear Regression, Linear Models, Regression [Arithmetically and Geometrically Progressed Generalized Linear Models, Unique Regression Model for Both Symmetric and Asymmetric Distributions, Least Deviation Regression Models**]**

31. **Adnan, M. A. S** and Sharna, S. (2022). Some Generalized Linear Models to Explore the Effective Medical Derivatives: Biostatistical Analyses to Ensure Better Services for the Hospital Patients in the Post Covid Era. *Joint Statistical Meetings 2022 Proceedings*, Alexandria, VA: American Statistical Association. 962-967.
32. Shamsi S, **Adnan M A S** and Adnan A. S. (2020). Arithmetically and/or Geometrically Progressed Discrete Probability Distributions, Stochastic Processes and the Generalized Linear Models. *Joint Statistical Meetings 2019 Proceedings*, Section on Statistics and Data Science Education, Alexandria, VA: American Statistical Association. 2389-2396.
33. **Adnan M A S**, Shamsi S and Imon R. (2017). Unique Regression Model for both Symmetric and Asymmetric Regressed Variable. *Joint Statistical Meetings 2017 Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association 267-273.
34. Shamsi, S and **Adnan M A S** and Imon R. (2017). A Least Deviation Approach for Multiple Regression. *Joint Statistical Meetings 2017 Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association. 760-771.
35. Shamsi, S and **Adnan M A S** and Imon R. (2016). A Least Deviation Approach of Fitting Regression Line: An Alternative Approach to Least Square Estimates. *Joint Statistical Meetings 2016 Proceedings*, Business and Economic Statistic Section. Alexandria, VA: American Statistical Association. 304 - 317.

Circular Predictive Modeling, Wrapped and Circular Models [Wrapped or Circular Probability Distributions**]**

36. **Adnan M A S** and Roy S. (2021). On the Wrapped Generalized Inverse Gaussian Distribution. *Journal of Probability and Statistical Sciences*. 19(1), 37-50.
37. **Adnan M A S** and Roy S. (2013). Wrapped Hypo-exponential distribution. *Journal of Statistics and Management Systems.* 16 (1), 1-11.
38. Roy S and **Adnan M A S**. (2012). Wrapped Weighted Exponential Distribution. *Journal of Statistics & Probability Letters.* Vol 82, Issue 1, 77-83.
39. Roy S and **Adnan M A S**. (2010). Wrapped Three Parameter Gamma Distribution. *Joint Statistical Meetings 2010 Proceedings*, Statistical Computing Section. Alexandria, VA: American Statistical Association. 4001-4014.
40. **Adnan M A S** and Roy S (2011). Wrapped Chi-square Distribution. *Journal of Applied Statistical Science*. 18 (3). 307.

Mixture Kernel and Estimation, Mixture Probabilistic Models

41. **Adnan M A S**, Kiser H, Adnan A S and Shamsi S. (2021). A Class of Power Function Mixture Distributions. *Far East Journal of Theoretical Statistics*. 61(2), 191-208.
42. **Adnan M A S** and Kiser H. (2020). A Class of Beta Second Kind Mixture Distribution. *Journal of Statistical Theory and Application.* 19(4), 518-525.
43. **Adnan M A S** and Kiser H. (2014). A Class of *F* Mixture Distributions. *Journal of Interdisciplinary Mathematics.* 17 (5-6), 403-411.
44. **Adnan M A S** and Kiser H. (2012). A Class of Weibull Mixture Distributions. *Journal of Biometrics and Biostatistics*. Vol 3, Issue 3.
45. **Adnan M A S** and Kiser H (2011). A Class of Rayleigh Mixture Distributions. *Journal of Interdisciplinary Mathematics*. Vol 14, 507-522.
46. Kiser H and **Adnan M A S**. (2010). Some Pareto Mixtured Distributions. *Joint Statistical Meetings 2010 Proceedings,* Business and Economic Statistics Section. Alexandria, VA: American Statistical Association. 2982-2996.
47. **Adnan M A S** and Kiser H. (2010). Some Laplace Mixtured Distributions. *Journal of Applied Statistical Science.* 17 (4), 549-560.

Folded Density and Estimation, Two Folded, Triple Mixture Distributions

48. **Adnan M A S**, Kiser H, Adnan A S and Shamsi S. (2021). A Class of Two Folded Mixture Distributions. *Far East Journal of Theoretical Statistics.* 61(1), 75-93.
49. **Adnan M A S**, Kiser H, Adnan A S and Shamsi S. (2020). A Class of Folded Gamma Mixture Distributions. *Far East Journal of Theoretical Statistics*. 60(1-2), 1-23.
50. **Adnan M A S** and Kiser H. (2020). A Class of Triple Mixture Distributions. *Far East Journal of Theoretical Statistics*. 59(2), 59-79.

Probabilistic Predictive Modeling, Generalized Probabilistic Models

51. Khan T F, **Adnan M A S**, Hossain F and Balawi A. (2018). An Alternative Approach of Poisson and Geometric Distribution. *Journal of Statistical Theory and Application.* Vol 17(3). 478-490.
52. **Adnan M A S**, Khan T F, Hossain F and Albalawi A. (2017). An Alternative Approach of Binomial and Multinomial Distributions. *Journal of Statistical Theory and Application*. Vol 16(2). 269-283.
53. Albalawi, A, **Adnan M A S**, Khan T F. (2015). A Generalization to the Family of Discrete Distributions. *Joint Statistical Meetings 2015 Proceedings,* Statistical Computing Section. Alexandria, VA: American Statistical Association. 79 - 90.
54. **Adnan M A S** and Kiser H (2011). A Generalization of the Family of Exponential and Beta Distributions. *Joint Statistical Meetings 2011 Proceedings,* Statistical Computing Section. Alexandria, VA: American Statistical Association. 2336 – 2347.
55. **Adnan M A S** and Kiser H. (2010). A Two parameter Generalized Double Exponential Distribution. *Joint Statistical Meetings 2010 Proceedings,* Statistical Computing Section. Alexandria, VA: American Statistical Association. 4247-4261.

Calculus, Instantaneous Effects, Functions

56. **Adnan M A S** (2020). Unfolding the Instantaneous Effect of Each Probability Density Function/Process in a Mixture Probability Distribution/Process. *Joint Statistical Meetings 2020 Proceedings,* Government Statistics Section, Alexandria, VA: American Statistical Association. 1250-1254.
57. **Adnan M A S**, Kiser H, Adnan A S and Shamsuddin M. (2016). Various Integral Representations of the Product of Gamma Functions based on Triple Mixture Distributions. *Far East Journal of Applied Mathematics.* 94 (2), 157-171.

58. **Adnan M A S**, Kiser H, Irin Z S, Adnan A S and Shamsuddin M. (2015). Various Integral Representations of Gamma Functions. *Far East Journal of Applied Mathematics*. Vol 92 (1), 31-49.
59. **Adnan M A S** and Shamsuddin M. (2013). Various Integral Representations of Beta Function. *Far East Journal of Applied Mathematics.* Vol 76(1), 25-38.

Bootstrapping, Resampling, Sequential Bootstrap

60. Sharna S I and **Adnan M A S** (2020). A Sequential Bootstrap/Resampling Method. *Joint Statistical Meetings 2019 Proceedings*, Alexandria, VA: American Statistical Association. 2619-2632.

Analysis of Variance, Experimental Design

61. **Adnan M A S** and Shamsi S. (2021). Alternative to ANOVA. *Symposium on Data Science and Statistics 2021 Proceedings*, Alexandria, VA: American Statistical Association. 2091-2094.

Prediction/Time Series Analysis

62. Adnan, A. S. and **Adnan M A S** (2022). A Moving Time Series Model: Change Point Analysis. *Joint Statistical Meetings 2022 Proceedings*, Alexandria, VA: American Statistical Association. 749-760.
63. Shamsi S and **Adnan M A S** (2020). A Least Deviation Estimation Approach for Time Series Models. *Joint Statistical Meetings 2019 Proceedings*, Alexandria, VA: American Statistical Association. 2633-2641.