



Bharathiar University

State University | "A++" Grade by NAAC | 46th Rank in MoE-NIRF
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

Dr K.M SAKTHIVEL , Professor , Department of Statistics

Ph. D.

Subject : Statistics
Institution : Department of Statistics
Affiliated University : Bharathiar University
Year of Award : December 2011

M. Phil.

Subject : Statistics
Institution : Loyola College, Chennai
Affiliated University : University of Madras
Year of Award : April 2005

M. Sc.

Subject : Statistics
Institution : Loyola College, Chennai
Affiliated University : University of Madras
Year of Award : April 1999

B. Sc.

Subject :
Institution :
Affiliated University :
Year of Award :

Projects

National Level

Ongoing - completed - 3

Research Guidance

Completed

Ph.D. - 9

On Going

Ph.D. - 4

Institutional Responsibilities

Deputy Co-ordinator, UGC SAP DRS -I

Period :Oct 2020 to Till date

Nature of Responsibility :

IQAC Department Co-ordinator

Period :Jul 2021 to Till date

Nature of Responsibility :

CBCS Co-ordinator

Period :Jul 2020 to Till date

Nature of Responsibility :

Publications

International Journals - 56

56. Wrapped Garima Distribution A Circular Modeling Approach for Ecological and Environmental Data

Environmental Modeling & Assessment (July 2025)

K.M.Sakthivel and Mathew A (2025)

55. A Dual Phase Threshold Selection Methodology for Modelling Extreme Events

Statistical Modelling,1 -18.[] (June 2025)

K.M.Sakthivel and Nandhini V(2025)



54. Wrapped Generalized Akash Distribution: Properties and Applications.

Jordan Journal of Mathematics and Statistics, 18(2), 243–253. (June 2025)
K. M. Sakthivel, & Alicia Mathew. (2025)

53. A Meaningful Construction of New Circular Distribution for Applications in Geomorphology

Indian Journal of Science and Technology 18(13), 1009-1022. (June 2025)
K.M.Sakthivel and Mathew A (2025)

52. Adaptive threshold selection for extreme value analysis to predict return levels of ozone layer depletion

Natural Hazards 121, 12741–12766. (May 2025)
K.M.Sakthivel, and Nandhini, V.(2025)

51. An Algorithm For Conditional Extreme Value Theory Garch-Evt Technique For Estimating Value At Risk.

Reliability Theory & Applications. 1(82), 253 - 276. (March 2025)
K.M. Sakthivel, V. Nandhini(2025)

50. Modelling Directional Data with Wrapped Chris-Jerry Distribution in Geological and Medical Domains

Advances and Applications in Statistics 92(5), 683-700. (March 2025)
K. M. Sakthivel and Alicia Mathew(2025)

49. A New Algorithm for Modeling Asymmetrical Data- An Empirical Study

Reliability: Theory & Applications. December, 4(80), 931-946. (December 2024)
K.M. Sakthivel and Vidhya G. (2024)

48. A Systematic Procedure for Modeling Asymmetrical Data.

Advances and Applications in Statistics, 91(10), 1241-1260. (August 2024)
K.M.Sakthivel and G.Vidhya.(2024)

47. Statistical Framework for Modeling Asymmetrical Data with Dual Peaks

Indian Journal of Science and Technology, 17(27), 2829-2840. (July 2024)
K.M.Sakthivel and G.Vidhya(2024)

46. An Empirical Study on Modeling Skewed Data Using a Mixture of Probability Distributions

Pakistan Journal of Statistics,10(1),81 -104. (June 2024)
K.M.Sakthivel and G.Vidhya.(2024)

45. An Entropy-Based Validation of Threshold Selection Technique for Extreme Value Analysis and Risk

Assessment

Labachevskii Journal of Mathematics, 45(4),1633 -1651. (June 2024)
K.M.Sakthivel and NandhiniV(2024)

44. Modeling Extreme Values of Non-Stationary Precipitation Data with Effects of Covariates

Indian Journal of Science and Technology, 17(22),2283 -2295. (May 2024)
K.M.Sakthivel and NandhiniV(2024)

43. A New Finite Mixture of Probability Models with Application

Reliability: Theory & Applications,3(74), 135-153. (September 2023)
K.M. Sakthivel and Vidhya G. (2023)

42. A Finite Mixture of ConvexCombination of Probability Models: Properties and Application

Asian Journal of Probability and Statistics, 23(2), 24-41. (June 2023)
K.M. Sakthivel and Vidhya G. (2023)

41. Predicting the relationshipbetween pesticide genotoxicityand breast cancer risk in SouthIndian women in vitro and in vivoexperiments

Scientific Reports, 13(1):9712 (June 2023)
S. Sasikala, M. Minu Jenifer, K. Velavan , K.M. Sakthivel, R. Sivasamy&E. R. Fenwick Antony (2023)

40. A New Generalization of Power Lindley Distribution and Its Applications

Thailand Statistician, 21(1): 196-208. (January 2023)
C.S Rajitha and K.M. Sakthivel(2023)



39. Circular Generalized Logistic Distributions and its Applications

Thailand Statistician, 20(4),905-917. (October 2022)
K.M.Sakthivel, and Alshad, K. B. (2022)

38. Alpha Power Transformation of Lomax Distribution: Properties and Applications

Thailand Statistician.20(3), 669-685. (July 2022)
K. M Sakthivel and V. Nandhini.(2022)

37. Transmuted Sine - G Family of Distributions: Theory and Applications

Statistics and Applications, 20(2),73–92. (June 2022)
K.M. Sakthivel and J.Rajkumar (2022)

36. Transmuted Sine-Dagum Distribution and Its Properties

Reliability: Theory and Application, Vol. 65(4), pp, 150-166. (December 2021)
K.M.Sakthivel and K.Dhivakar (2021)

35. A New Method of Generating Marshall-Olkin Sine -G Family and its Applications in Survival Analysis

Lobachevskii Journal of Mathematics,43, 463-472. (December 2021)
J.Rajkumar and K.M.Sakthivel (2022)

34. Type II Generalized Topp-Leone Dagum Distribution for Failure Times Data

International Journal of Agricultural and Statistical Sciences, 17(S1), 2403-2417. (October 2021)
K.M.Sakthivel and K.Dhivakar (2021)

33. Hyperbolic Cosine – Pareto Distribution and Its Extensions for Modelling River Flood Data

Journal of Information and Computational Science, 11(3), 257-267. (June 2021)
K.M. Sakthivel and A. Arul chezhian (2021)

32. Topp-Leone Generated Dagum Distribution and Its Properties

Advances and Applications in Statistics, 66(1), 13-38. (June 2021)
K.M. Sakthivel, and K. Dhivakar (2021)

31. Wrapped Improved Second Degree Lindley Distribution: Properties and Application

International journal of Mathematics and Computation, 32 (1), 72-77. (June 2021)
K.M.Sakthivel, and Alshad, K. B. (2021)

30. Type II Power Topp-Leone Dagum Distribution with Application in Reliability

Reliability: Theory and Application, 62(2), 136-156. (June 2021)
K.M.Sakthivel and K.Dhivakar (2021)

29. Type II Topp-Leone Dagum Distribution for Modeling Failure Times Data

Malaya journal of Matematik, 9(1), 343-353. (February 2021)
K.M. Sakthivel, and K. Dhivakar (2021)

28. Two Parameter Cubic Rank Transmutation of Lindley Distribution

AIP Conference Proceedings,2261, 030086. (October 2020)
K.M. Sakthivel, C. S. Rajitha and K. Dhivakar (2020)

27. Two Parameter Cubic Rank Transmutation of Minimax Distribution

AIP Conference Proceedings, 2261, 030080. (October 2020)
K.M. Sakthivel, S. Kumar and K. Dhivakar (2020)

26. Hyperbolic Cosine Rayleigh Distribution and its Application to Breaking Stress of Carbon Fibers

Journal of the Indian Society for Probability and Statistics, ISSN NO: 2364-9569. <https://doi.org/10.1007/s41096-020-00091-x>.
(October 2020)
K.M. Sakthivel and J.Rajkumar (2020)

25. A Generalization of Wrapped Exponential Distribution: Properties and Application

International journal of Mathematics and Statistics (June 2020)
K.M Sakthivel and Alshad K.B,(2020)

24. Cubic Transmuted Minimax Distribution and Its Properties

Journal of Information and Computational Science, 10(3),1349-1361 (June 2020)
K.M. Sakthivel S. Kumar and K. Dhivakar (2020)



23. Alpha Power Transformed Pareto Distribution and its Properties with Application

Malaya Journal of Matematik, 1(S), 52-57. (February 2020)
K.M. Sakthivel and A. Arul chezhian(2020)

22. A New Version of Cubic Rank Transmuted Minimax Distribution

A Journal of Composition Theory, 12(11),703-713. (November 2019)
K. M. Sakthivel, S. Kumar and K. Dhivakar, (2019)

21. Geometric – Geeta Distribution Using Lagrange Expansion of Second Kind

The International Journal of Analytical and Experimental Model Analysis, 11(10), 1937-1945. (October 2019)
K.M. Sakthivel and J. Rajkumar (2019)

20. Negative Binomial - Geeta Distribution and Some of its Property

International Journal of Scientific & Technology, 8(9), 1498-1501. (September 2019)
K.M. Sakthivel and J. Rajkumar (2019)

19. A New Discrete Negative Binomial – Haight Distribution and its Property

A Journal of Composition Theory, 12(9), 181-186. (September 2019)
K.M. Sakthivel and A. Arul chezhian(2019)

18. Generating Haight-Poisson Distribution Using Lagrange Expansion

Journal of Information and Computational Science, 9(12), 930-935. (June 2019)
K.M. Sakthivel, J. Rajkumar and A. Arul chezhian (2019)

17. Zero Inflated Negative Binomial - Lindley Distribution and Its Applications

Far East Journal Of theoretical Statistics, 55(2), 101-112. (April 2019)
K.M. Sakthivel and C.S Rajitha.(2019)

16. A Supplement on Generalized Pareto Distribution Using Weibull and Dagum distribution

International Journal of Research in Advent Technology, 7(3S), 98-104 . (March 2019)
K.M Sakthivel and Alshad K.B(2019)

15. Model Selection for Count Data with Excess Number of Zero Counts

American Journal of Applied Mathematics and Statistics, 7(1), 43-51. (January 2019)
K.M. Sakthivel and C.S Rajitha (2019)

14. Application of Kernel Density Estimation in Chain Ladder Method for Claim Reserving

International Journal of Scientific Research in Mathematical and Statistical Sciences, 5 (6) , 186-193. (December 2018)
K.M. Sakthivel and C.S Rajitha (2018)

13. A Mixture of Negative Binomial - Sujatha Distribution

Mathematical Sciences International Research Journal, 7(2), 194-200. (September 2018)
K.M. Sakthivel , C.S Rajitha and J. Rajkumar (2018)

12. Statistical Modeling of Count Data using Negative Binomial Generalized –Lindley Distribution

IOSR Journal of Engineering, 01-06 (September 2018)
K.M. Sakthivel, C.S Rajitha and K.B. Alshad (2018)

11. Estimation of Zero-Inflation Parameter in Zero-Inflated Poisson Model

International Journal of Mathematics Trends and Technology (IJMTT), Volume 56 (2), 135-140. (September 2018)
K.M.Sakthivel and C.S. Rajitha(2018)

10. A Comparative Study of Modeling on Claim Frequency in Non-life Insurance

International Journal of Statistika and Matematika 24(1), 01- 06. (August 2017)
K.M.Sakthivel and C.S. Rajitha(2017)

9. A Comparative Study of Zero-Inflated, Hurdle Models with Artificial Neural Network in Claim Count Modeling

International Journal of Statistics and Systems, 12, 265 -276. (June 2017)
K.M.Sakthivel and C.S Rajitha (2017)

8. A Study of Claim Size Estimation using General Linear Model and Artificial Neural Network

Global Journal of Pure and Applied Mathematics(GJPAM), 13, 505 – 514. (June 2017)
K.M.Sakthivel and C.S Rajitha and J.Rajkumar(2017)



7. Zero –Inflated Negative binomial-Sushila Distribution and its Applications

International Journal of Pure and Applied Mathematics, 117 (13), 117-126. (June 2017)
K.M.Sakthivel, C.S Rajitha and K.B. Alshad (2017)

6. Estimation of Claim Severity in Non-Life Insurance: A Non-Parametric Approach

Journal of Advanced Research in Computer and Communication Engineering (IJARCCE), 6, 195 – 198. (January 2017)
K.M.Sakthivel and C.S Rajitha (2017)

5. Artificial Intelligence for Estimation of Future Claim Frequency in Non-Life Insurance

Global Journal of Pure and Applied Mathematics (GJPAM),13, 1701 -1710. (June 2016)
K.M.Sakthivel and C.S Rajitha (2016)

4. Kernel Density Estimation for Claim Size Distributions Using Shifted Power Transformation

International journal of science and research (IJSR),5, 2025 -2028. (April 2016)
K.M.Sakthivel and C.S Rajitha (2016)

3. Design and Evaluation of Bayesian Dependent State Sampling Inspection Plans

Journal of Testing and Evaluation,43(3),629 – 644. (June 2015)
R.Vijayaraghavan and K.M.Sakthivel (2015)

2. Chain Sampling Inspection Plans Based on Bayesian Methodology

Economic Quality Control, 28(2), 173 - 187. (June 2011)
R.Vijayaraghavan and K.M.Sakthivel (2011)

1. Selection of Bayesian Double Sampling Inspection Plans by Attributes with Small Acceptance Numbers

Economic Quality Control, 26(2), 207-220. (March 2010)
R.Vijayaraghavan and K.M.Sakthivel (2010)

Conferences - 1

1. A New Development of Threshold Selection in Extreme Value Theory

Special Proceedings of SSCA-25th Annual Conference of the Society of Statistics,Computer and Applications (SSCA), 79-92.
(September 2023)
K.M. Sakthivel and Nandhini V. (2023)

Projects

Completed - 3

1. A Surveillance on Risk Factors of Cardiovascular Disease UGC-MRP 1,40,000 (June 2011 - September 2025)
2. UGC SAP DRS -1
Theme: Bayesian Inference UGC-SAP 37,00,000 (May 2015 - May 2015)
3. Programming Skill Development using R and Python RUSA 2.0 - BEICH 1,25,000 (December 2020 - February 2021)