

## **LIST OF PUBLICATIONS**

1. Gajivaradhan, P. and **Parthiban, S.**, Statistical hypothesis testing through trapezoidal fuzzy interval data, International Research Journal of Engineering and Technology, Vol. 02, Issue: 02, (May 2015), pp. 251-258.  
<https://www.irjet.net/volume-2-issue-2>
2. Gajivaradhan, P. and **Parthiban, S.**, Two sample statistical hypothesis test for trapezoidal fuzzy interval data, International Journal of Applied Mathematics and Statistical Sciences. Vol. 04, Issue: 05, (August-September 2015), pp. 11-24.  
[http://www.iaset.us/view\\_archives.php?year=2015\\_73\\_2&id=45&jtype=2&page=2](http://www.iaset.us/view_archives.php?year=2015_73_2&id=45&jtype=2&page=2)
3. **Parthiban, S.** and Gajivaradhan, P., One-factor ANOVA model using trapezoidal fuzzy numbers through alpha cut interval method, Annals of Pure and Applied Mathematics, Vol. 11, No. 1, (2016), pp. 45-61. **(UGC Approved Journal)**  
<http://www.researchmathsci.org/apamart/apam-v11n1-6.pdf>
4. **Parthiban, S.** and Gajivaradhan, P., A comparative study of two factor ANOVA model under fuzzy environments using trapezoidal fuzzy numbers, International Journal of Fuzzy Mathematical Archive, Vol. 10, No. 1, (2016), pp. 1-25. **(UGC Approved Journal)**  
<http://www.researchmathsci.org/IJFMAart/ijfma-v10n1-1.pdf>
5. **Parthiban, S.** and Gajivaradhan, P., A comparative study of LSD under fuzzy environments using trapezoidal fuzzy numbers, IOSR Journal of Mathematics, Vol. 12, Issue: 1, Ver. II (January – February 2016), pp. 57-75.  
<http://www.iosrjournals.org/iosr-jm/papers/Vol12-issue1/Version-2/I012125775.pdf>
6. **Parthiban, S.** and Gajivaradhan, P., A comparative study of chi-square goodness-of-fit under fuzzy environments, Mathematical Theory and Modeling, Vol. 6, No. 2, (2016), pp. 82-97.  
<http://www.iiste.org/Journals/index.php/MTM/article/view/28576/29338>
7. **Parthiban, S.** and Gajivaradhan, P., One factor ANOVA model using trapezoidal fuzzy numbers through alpha cut interval method, Mathematical Theory and Modeling, Vol. 5, No. 13, (2015), pp. 87-101.  
<https://www.iiste.org/Journals/index.php/MTM/article/view/27731>
8. **Parthiban, S.** and Gajivaradhan, P., A comparative study of statistical hypothesis test for  $2^2$  factorial experiments under fuzzy environments, Bulletin of Mathematics and Statistics Research, Vol. 4, Issue: 1, (January-March 2016), pp. 46-70.  
<http://www.bomsr.com/4.1.16/46-70%20P.%20GAJIVARADHAN.pdf>
9. **Parthiban, S.** and Gajivaradhan, P., Statistical hypothesis test in three factor ANOVA model under fuzzy environments using trapezoidal fuzzy numbers, Bulletin of Mathematical Sciences and Applications, Vol. 14, (2016), pp. 23-42.  
<https://www.scipress.com/BMSA.14.23>

10. **Parthiban, S.** and Gajivaradhan, P., Statistical hypothesis test in LSD under fuzzy environments using trapezoidal fuzzy numbers, International Journal of Advances in Engineering and Emerging Technology (IJAEET), Vol. 8, No. 2 (February 2016), pp. 110-129.  
<http://erlibrary.org/abstract.php?journalname=1&archiveid=274&action=fulltext>
11. **Parthiban, S.** and Gajivaradhan, P., A comparative study of one-sample t-test under fuzzy environments, Journal of Research in Applied Mathematics, Vol. 2, Issue: 6, (2016), pp. 01-15. **(UGC Approved Journal)**  
<http://www.questjournals.org/jram/papers/vol2-issue6/A260115.pdf>
12. **Parthiban, S.** and Gajivaradhan, P., A comparative study of two-sample t-test under fuzzy environments using trapezoidal fuzzy numbers, International Journal of Mathematics and Statistics Invention, Vol. 4, Issue: 1, (January 2016), pp. 39-54. **(UGC Approved Journal)**  
<http://www.ijmsi.org/Papers/Volume.4.Issue.1/G041039054.pdf>
13. **Parthiban, S.** and Gajivaradhan, P., A Comparative study of one-factor ANOVA model under fuzzy environments using trapezoidal fuzzy numbers, International Journal of Recent Scientific Research, Vol. 7, Issue: 3, (March 2016), pp. 9545-9564. **(UGC Approved Journal)**  
<http://recentscientific.com/sites/default/files/4567.pdf>
14. **Parthiban, S.** and Gopinathan, P., Statistical Hypothesis on Industrial Applications through Ranks from COG of TrFNs, International Journal of Recent Technology and Engineering (IJRTE), Vol. 6, Issue: 1S4, (June 2019), pp. 1116-1118. **(SCOPUS)**  
<https://www.ijrte.org/download/volume-8-issue-1s4/>
15. Sudam Sekhar, P., Venkata Subramanyam Sajja, Murthy, V.R.K., **Parthiban, S.**, "A Semi Analytical Approach in Thermal Analysis of Hydrodynamic Lubrication of Journal Bearing", Materials Today: Proceedings. **(Elsevier SCOPUS)**  
<https://doi.org/10.1016/j.matpr.2019.10.117>
16. Gopinathan, P., Nandini, C. V., **Parthiban, S.**, et al. A Geo-spatial approach to perceive the groundwater regime of hard rock terrain-a case study from Morappur area, Dharmapuri district, South India. Groundwater for Sustainable Development, Volume 10, 2020.  
<https://doi.org/10.1016/j.gsd.2019.100316>. **(Elsevier SCOPUS)**
17. Sudam Sekhar, P., **Parthiban, S.**, Moorthy, V.R.K., Decay Management Model for Perishable Goods, International Journal of Engineering and Advanced Technology, Volume 9, Issue-1S5, December, 2019. **(SCOPUS)**  
<https://www.ijeat.org/download/volume-9-issue-1s5/>  
<https://doi.org/10.35940/ijeat.A1052.1291S52019>
18. Gopinathan, P., **Parthiban, S.**, et al., Mapping of Ferric (Fe<sup>3+</sup>) and Ferrous (Fe<sup>2+</sup>) iron Oxides distribution using band ratio techniques with ASTER data and geochemistry of Kanjamalai and Godumalai, Tamil Nadu, South India, Remote Sensing Applications: Society and Environment, Volume-18, April 2020 (100306) **(Elsevier SCOPUS)**  
<https://www.sciencedirect.com/science/article/abs/pii/S2352938519301594?via%3Dihub>  
<https://doi.org/10.1016/j.rsase.2020.100306>

19. Keerthika, K. S., **Parthiban**, S., Statistical Hypothesis Test to the Fuzzy Samples from Biomedical Observations by Pivotal Spot of Trapezoidal Fuzzy Numbers, Journal of Green Engineering (JGE), Volume-10, Issue-3, March 2020 (SCOPUS)  
<https://www.jgenng.com/volume10-issue3.php>
20. Kalpana, P., **Parthiban**, S., et al., Spatio-Temporal Estimation of Rainfall Patterns in North and North-Western States of India between 1901 and 2015: Change Point Detections and Trend Assessments, Arabian Journal of Geosciences-Springer, Volume-13:1116 (2020).  
<https://doi.org/10.1007/s12517-020-06098-9> (SCI-Springer)  
<https://link.springer.com/article/10.1007%2Fs12517-020-06098-9>
21. Vinoth, S., Sudam Sekhar. P., **Parthiban**, S., Design and Evaluation of an Interval Valued Intuitionistic Multi Fuzzy Completely Generalized Semipre Continuous Mappings, Materials Today: Proceedings, April 2021.  
<https://doi.org/10.1016/j.matpr.2021.04.081> (Elsevier SCOPUS)  
<https://www.sciencedirect.com/science/article/pii/S2214785321029370>
22. Keerthika, K. S., **Parthiban**. S., A Fuzzy Approach to the Test of Hypothesis Using Pentagonal Fuzzy Number, Natural Volatiles & Essential Oils, 2021; Volume-8, Issue-5, pp. 3641-3649.  
<https://www.nveo.org/index.php/journal/article/view/937> (SCOPUS)
23. **Parthiban**, S., Sridhar. A., Vinoth, S., Yookesh, T. L., Statistical Hypothesis Test Under Fuzzy Observations by Euler Centroid Method, Mathematical Statistician and Engineering Applications, Volume-71, No. 4 (2022), pp. 1968-1976.  
<https://www.philstat.org.ph/index.php/MSEA/article/view/727> (SCOPUS)
24. Sridhar, A., Saddam Hussain, H., **Parthiban**, S., Transient Solution of M/M/1 Queueing Model by using Hybrid Laplace Transformation, Computer Integrated Manufacturing Systems, Volume-28, No. 11 (2022), pp. 659-663.  
<http://cims-journal.com/index.php/CN/article/view/245> (SCOPUS)
25. Keerthika, K. S., **Parthiban**, S., Test of hypothesis under fuzzy observations through intuitionistic pentagonal fuzzy number, NeuroQuantology, Volume-20, Issue-16, (November 2022), pp. 2199-2207.  
DOI: 10.48047/NQ.2022.20.16.NQ880220  
<http://neuroquantology.com/article.php?id=10590> (SCOPUS)
26. Vidya, P., **Parthiban**, S., Comparative Analysis of Fuzzy Dagum Hazard Function Approaches for Estimating Failure Rates, Communications on Applied Nonlinear Analysis, Volume-31, No.-3s, (June 2024), pp. 105-117.  
DOI: <https://doi.org/10.52783/cana.v31.735>  
<https://internationalpubls.com/index.php/cana/index> (SCOPUS)

27. Joshua Remlalliana, **Parthiban, S.**, Prediction of Air Quality Index and Air Quality Levels in Guwahati-India Using Machine Learning: A Comparative Study, Communications on Applied Nonlinear Analysis, Volume-31, No.-7s, (July 2024), pp. 328-348.  
DOI: <https://doi.org/10.52783/cana.v31.1311>  
<https://internationalpubls.com/index.php/cana/article/view/1311> (SCOPUS)
28. Vidya, P., **Parthiban, S.**, Multiple solutions of tungsten carbide-cobalt tool turning performance optimization results by Taguchi's combined multi-objective approach analysis an exponentiated exponential Weibull Dagum distribution model, Journal of Process Mechanical Engineering, Sage Publications, Volume-238, Issue-6 (October 2024), pp. 1-17.  
<https://doi.org/10.1177/09544089241288939> (SCI)
29. Vidya, P., **Parthiban, S.**, Estimation of Tensile Strength of Carbon Fibers Using Exponentiated Exponential Weibull-Dagum Distribution Model (EEWD) and Its Properties, Contemporary Mathematics, September 2024, pp. 5062-5086.  
<http://ojs.wiserpub.com/index.php/CM/>  
DOI: <https://doi.org/10.37256/cm.5420245123> (SCOPUS)
30. Vidya, P., **Parthiban, S.**, A Statistical Model for the Evaluation on Extended Exponential Dagum Distribution with Quantile Regression: Properties and Evaluation of Size of Brain Tumor, Nanotechnology Perceptions, Volume20, No. S10 (2024), pp. 354-367.  
<https://nano-ntp.com/index.php/nano/article/view/1805>  
DOI: <https://doi.org/10.62441/nano-ntp.v20iS10.26> (SCOPUS)

### **PATENT**

Filed a **Patent** on the work entitled “**A Method for Cost-Effective Treatment of Polluted Groundwater Using Eco-Friendly Bio-Coagulants**” filed on 17<sup>th</sup> December 2020 and published on 12<sup>th</sup> February 2021 with International Application No. PCT//01/01/1900.

<https://ipindia.gov.in/journal-patents.htm>

| <b>Research Scholars status under my supervision for Ph.D.</b> | <b>Full Time</b>               | <b>Part Time</b> |
|--|--------------------------------|------------------|
| <b>Number of Research Scholars awarded Ph.D.</b>               | 2                              | 0                |
| <b>Number of Research Scholars pursuing Ph.D.</b>              | 1                              | 1                |
| <b>Project Guide</b>   | <b>III Year B.Sc. Students</b> |                  |

| <b>Dr. S. PARTHIBAN</b>  |   |
|--------------------------|---|
| <b>Scopus Author ID</b>  | : 57212247577   |
| <b>Orcid ID</b>          | : 0000-0002-7134-6522   |
| <b>Vidwan ID</b>         | : 83255   |
| <b>Researcher ID</b>     | : D-9396-2018   |
| <b>Google Scholar ID</b> | : Dr. S. Parthiban/Vignan's University  |
| <b>Website</b>           | : <a href="https://drsparthiban.blogspot.in/">https://drsparthiban.blogspot.in/</a> |