

Nabakumar Jana

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- Experience**
- Associate Professor, Department of Mathematics and Computing
Indian Institute of Technology (ISM) Dhanbad (12.07.2024 to present)
 - Assistant Professor, Department of Mathematics and Computing
Indian Institute of Technology (ISM) Dhanbad (25.10.2017 to 11.07.2024)
 - Assistant Professor, Department of Mathematics
National Institute of Technology Meghalaya (27.08.2015 to 24.10.2017)
 - Visiting Scientist, ISRU, Indian Statistical Institute Kolkata (June 01-July 31, 2017)

- Educational Qualifications**
- Ph.D., 2016, Indian Institute of Technology Kharagpur
 - M.Sc., 2011, Indian Institute of Technology Kharagpur
 - B.Sc. (Honours), 2009, Kharagpur College, Vidyasagar University

- Awards**
- Best Ph.D. Thesis Award in Statistics, 2016-ISPS
 - Prof. R. S. Varma Best Paper Award, IMSCT 2014-FIM XXIII
 - Gold Medal from Vidyasagar University for 1st rank, 2009
 - Principal Sripati De Merit Medal from Kharagpur College
 - Beni Madhab De & Parul Bala De Merit Medal from Kharagpur College
 - Gold Medal from Vidyasagar Vidyapith, Midnapur

- Examination Qualified**
- CSIR NET JRF-2011 AIR-19
 - GATE-2010, AIR-42
 - JAM-2009 for M.Sc., AIR-64
 - West Bengal State Eligibility Test SET-2013

- Scholarships**
- Research Fellowship from IIT Kharagpur, June 23, 2011-August 26, 2015
 - MCM Scholarship from IIT Kharagpur, 2010
 - Visiting Student Research Fellowship, TIFR Mumbai, June-July 2010
 - UGC Scholarship for University Rank Holders, Govt. of India, 2009
 - Beni Madhab De and Parul Bala De Merit Scholarship, Kharagpur College, 2009

Research Areas Statistical Inference, Classification Problems, Reliability Estimation

Publications

- Jana, N. and Gautam, M. (2025) Testing the homogeneity of mean parameters in two independent zero-adjusted inverse Gaussian distributions. *Journal of Statistical Computation and Simulation*, 1-26
- Chakraborty, A. and Jana, N. (2024) Bayes estimation of ratio of scale-like parameters for inverse Gaussian distributions and applications to classification. *Computational Statistics*, 1-22
- Jana, N. and Bera, S. (2024) Estimation of multicomponent system reliability for inverse Weibull distribution using survival signature. *Statistical Papers*
- Jana, N., & Chakraborty, A. (2023). Estimating error rate of classification into several normal populations under equal mean restriction. *Communications in Statistics-Simulation and Computation*, 1–24.
- Bera, S., & Jana, N. (2023). Estimation of the system reliability with stress and strength variables having inverse Gaussian distributions. *Quality Technology & Quantitative Management*, 20(3), 334–359.
- Jana, N., & Chakraborty, A. (2022). Estimation of ordered restricted standard deviations of normal populations with a common mean. *Statistics*, 56(4), 867–890.
- S. Dey and N. Jana (2022). Inference on parameters of Watson distributions and application to classification of observations. *Journal of Computational and Applied Mathematics*, Vol. 403, 113847
- Dey, S., & Jana, N. (2022). Inference on parameters of Watson distributions and application to classification of observations. *Journal of Computational and Applied Mathematics*, 403, 1138–47.
- N. Jana and S. Bera (2022). Interval estimation of the multi-component reliability using inverse Weibull distribution. *Mathematics and Computers in Simulation*, Vol.191, pp.95-119
- N. Jana and S. Dey (2023). Classification of observations into von Mises-Fisher populations with unknown parameters. *Communication in Statistics-Simulation and Computation*. 52(9): 4392-4413
- N. Jana, & M. Gautam (2022). Interval estimation of the common mean and difference of medians for a bivariate lognormal distribution. *Journal of Statistical Computation and Simulation*, 95(15), 3249–3274.
- S. Bera and N. Jana (2022). On properties of estimator of common mean of inverse Gaussian distributions. *Metrika*, 85:115–139
- N. Jana, & M. Gautam. (2022). Confidence intervals of difference and ratio of means for zero-adjusted inverse Gaussian distributions. *Communications in Statistics-Simulation and Computation*, 1–22.
- N. Jana, S. Kumar, K. Chatterjee & P. Kundu (2021) Estimating stress-strength reliability for exponential distributions with different location and scale parameters. *International Journal of Advances in Engineering Sciences and Applied Mathematics*, 13(2), 177–190.
- N. Jana and S. Bera (2020) Estimation of parameters of inverse Weibull distributions and applications to multi-component stress-strength model. *Journal of Applied Statistics* 49(1):169-194
- P. Kundu, N. Jana, S. Kumar & K. Chatterjee (2019). Stress-strength reliability estimation for exponentially distributed system with common minimum guarantee time. *Communication in Statistics-Theory and Methods*. Vol.49, No.14, pp.3375–3396
- N. Jana & S. Kumar (2019). Ordered classification rules for inverse Gaussian populations with unknown parameters. *Journal of Statistical Computation and Simulation* Vol.89, No.14, pp.2597-2620

- N. Jana, S. Kumar & K. Chatterjee (2019). Inference on stress-strength reliability for exponential distributions with a common scale parameter. *Journal of Applied Statistics*. Vol.46, No.16, pp.3008-3031
- N. Jana & S. Kumar (2017). Classification into two normal populations with a common mean and unequal variances. *Communication in Statistics-Simulation and Computation*. Vol.46, No.1, pp.546-558.
- H. Qin, N. Jana, S. Kumar & K. Chatterjee (2017). Stress-strength models with more than two states under exponential distribution. *Communication in Statistics-Theory and Methods*. Vol.46, No.1, pp.120-132.
- N. Jana, S. Kumar & N. Misra (2016). Classification rules for two-parameter exponential populations under order restrictions on parameters. *Journal of Statistical Computation and Simulation*. Vol.86, No.8, pp.1559–1581.
- N. Jana, S. Kumar & K. Chatterjee (2016). Bayes estimation for exponential distributions with common location parameter and applications to multi-state reliability models. *Journal of Applied Statistics*. Vol.43, No.15, pp.2697–2712.
- N. Jana & S. Kumar (2016). Classification into two-parameter exponential populations with a common guarantee time. *American Journal of Mathematical and Management Sciences*. Vol. 35, No.1, pp.36–54.
- N. Jana & S. Kumar (2015). Estimation of ordered scale parameters of two exponential distributions with a common guarantee time. *Mathematical Methods of Statistics*. Vol.24, No.2, pp.122–134.
- N. Jana, S. Kumar & N. Misra (2014). Classification rules for exponential populations under order restrictions on parameters. *Springer Proceedings in Mathematics & Statistics*, Vol.91, pp.243-250.
- S. Basu, N. Jana, A. Bag, Mahadevappa M., J. Mukherjee, S. Kumar, & R. Guha (2016). Emotion recognition based on physiological signals using valence-arousal model. *Third International Conference on Image Information Processing (ICIIP) IEEE* pp.50-55.
- S. Basu, N. Jana, V. Krishna, M. Manjunatha, J. Mukherjee, R. Guha & S. Kumar (2021). Analysis of emotional response through physiological signals. *Springer Lecture Notes in Networks and Systems*.