



Shaheed Rajguru College of Applied Sciences for Women
University of Delhi
Faculty Profile

Name	Dr. Sandeep Mishra	
Designation	Assistant Professor	
Email	sandeep.mishra@rajguru.du.ac.in	
Degree	Institution	Year
UGC NET & JRF	UGC NEW DELHI	2010
D. Phil (Awarded) in Statistics	University of Allahabad, Prayagraj, U.P. (Topic: Bayesian Spatial Models with Applications to Demographic Data)	2018
M. Sc (Statistics)	Banaras Hindu University, Varanasi, U.P.	2009
B. Sc (Statistics)	University of Allahabad, Prayagraj, U.P.	2007
Areas of Interest / Specialization		
Bayesian Computation and Sampling, Time Series Analysis, Applied Econometrics and Causal Inference, Actuarial Sciences and Probability Distributions.		
Publications Profile		
- Payal Mago, Smita Sundaram, Alok Kumar Singh, Nupur Gosain, Sandeep Mishra et. al., “Sustainable Environmental and Cultural Practices of Majuli, India: A case Study”. 2022, SSRN, https://dx.doi.org/10.2139/ssrn.4148279 . - Srivastava, T., Shruti, Jha, S. & Mishra, S., “Analyzing Johnson S_B Distribution for Detection of a Pair of Upper Outliers”. 2021, Stochastic Modeling and Application, Vol. 25, No. 2, pp-149-157. - Chaturvedi, A., Shalabh and Mishra, S., “Generalized Bayes Estimator for Spatial Durbin Model”. 2021, Journal of Quantitative Economics, - Chaturvedi, A. and Mishra, S., “Generalized Bayes Estimation of SAR Model with Linear restrictions binding the Coefficients”, 2021, Communications for Statistical Application and Methods, Vol. 28, No.4, pp-315-327. - Srivastava, T., Shruti & Mishra, S., “Approximate Estimation of the Parameters of		

Johnson SB Distribution”. **2020**, International Journal of Advanced Science and Technology, vol 5, 6, 3735-3740.

- **Mishra, S.**, Shruti & Sriwastava, T., “An Application of Spatial Autoregressive Model to the Study of Some Socio and Demographic Indicators of India using Generalized Bayes Procedure: A Comparative Study”, **2019**, International Journal for Research in Engineering Application and Management, Vol. 5, Issue 2, pp. 426-435.
- Chaturvedi, A. and **Mishra, S.**, “Generalized Bayes Estimation of Spatial Autoregressive Models”, **2018**, Statistics in Transition New Series, Vol. 20, No.2, pp-15-32.
- Sriwastava, T. & **Mishra, S.**, “Effect of Presence of Outliers in the Estimate of the Parameters of a Johnson SB Distribution”, **2018**, International Journal of Scientific Research in Mathematical and Statistical Sciences, Vol. 5, Issue 6, pp. 143-151.

Books and Chapters in Edited Volume

- **Mishra, S.**, “Linear Regression Models” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 8-32. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Multicollinearity” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 33-60. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Structural and Reduced form of the Model and Identification Problem” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 164-200. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Estimators in Simultaneous Equation Models-I” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 201-225. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Estimators in Simultaneous Equation Models-II” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 226-237. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Forecasting” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 238-261. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Instrumental Variable Estimation” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 262-288. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Autoregressive Process” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 292-336. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Vector Autoregressive Process” in ‘ECONOMETRICS: MScSTAT-

303N/MASTAT-303N', **2024**, pp. 337-359. ISBN: 978-93-48987-80-8.

- **Mishra, S.**, “Ganger Causality” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 360-380. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Cointegration” in ‘ECONOMETRICS: MScSTAT-303N/MASTAT-303N’, **2024**, pp. 381-402. ISBN: 978-93-48987-80-8.
- **Mishra, S.**, “Basic Concepts- Probability Distributions” in ‘ACTUARIAL STATISTICS: MScSTAT-404N/MASTAT-404’, **2024**, pp. 11-42. ISBN: 978-81-992992-2-1.
- **Mishra, S.**, “Utility Theory” in ‘ACTUARIAL STATISTICS: MScSTAT-404N/MASTAT-404’, **2024**, pp. 43-64. ISBN: 978-81-992992-2-1.
- **Mishra, S.**, “Principles of Premium Calculation” in ‘ACTUARIAL STATISTICS: MScSTAT-404N/MASTAT-404’, **2024**, pp. 65-91. ISBN: 978-81-992992-2-1.
- **Mishra, S.**, “The Collective Risk Model” in ‘ACTUARIAL STATISTICS: MScSTAT-404N/MASTAT-404’, **2024**, pp. 92-107. ISBN: 978-81-992992-2-1.
- **Mishra, S.**, “Survival Distributions and Life Tables” in ‘ACTUARIAL STATISTICS: MScSTAT-404N/MASTAT-404’, **2024**, pp. 108-128. ISBN: 978-81-992992-2-1.
- **Mishra, S.**, “Probability and Probability Distribution” in ‘DATA ANALYSIS AND DECISION TOOLS: MBAFT-6102’, **2022**, pp. 29-55. ISBN: 978-93-95774-08-6.
- Shruti and **Mishra, S.**, “Importance of Statistics in Biological Sciences” in ‘Emerging Trends of Biological Sciences and Bio-Statistics’, **2020**, pp. 177-183. ISBN:978-99-94604-39-3, Edwin Group of Publications, Kathmandu, Nepal.
- Shruti and **Mishra, S.**, “Effect of Migration on Fertility in India: A Comparative Study” in ‘Dimensions of Nanotechnology and Bio-Statistics’, **2016**, pp 131-144. ISBN:978-620-0-07999-2, Lambert Academic Press, Germany.
- Shruti, **Mishra, S.** and Tanuja Sriwastava, “An Application of Spatially Autoregressive Models to the Study of Mortality Rates in India” in ‘Dimensions of Nanotechnology and Bio-Statistics’, **2016**, pp 157-167. ISBN:978-620-0-07999-2, Lambert Academic Press, Germany.

Invited Talk/Lecture

- Deliver a Talk on “Role of Indigenous Practices for Sustainable Development” in the Symposium on **Data for Sustainable Development**, 29th June, **2022**, (16th National

Statistics Day) organized by U.P. Rajarshi Tandon Open University, Prayagraj, U.P in association with Government of India, NSSO, MoSPI.

Conference Organization/ Presentation

- Presented a paper “Ensembling SAR Model to Identify Some Socio and Demographic Indicators of North-East Indian States”, in the *National Conference* on Time Series, Analytics & Recent Advances in Statistical Modelling (NCTAS-2025), 10th – 11th February, **2025**, organized by Dept of Statistics, Central University of Rajasthan in Association with RSA.
- Presented a paper “Time Series Analysis of Air Quality and Effect of Wetland in Some Indian States And UT”, At the *Sumangalam Panchmahabhoot International Conference* series on ‘Vayu: The Vital Life Force’, 02nd-04th December, **2022**, held at Siksha ‘O’ Anusandhan University at Bhubaneswar.
- Presented a poster “Analysis of some Social and Demographic Indicators: Bayesian Spatial Modeling Approach”, in the *Eighth International Conference* on Agricultural Statistics “Statistics for Transformation of Agriculture to Achieve the Sustainable Development Goals (SDGs)”, 18th-21th November, **2019**, organized by **Ministry of Agriculture and Farmers Welfare, Government of India** at New Delhi.
- Presented a paper “Restricted Regression Generalized Bayes Estimators for Linear Regression Model”, in the *International Conference* on “Biological Research and Bio-Statistics”, 29st-30th April, **2019**, organized by U.P. Rajarshi Tandon Open University, Prayagraj, U.P.
- Presented a paper “Generalized Bayes Estimation of Spatial Autoregressive Model with Application to Total Fertility Rate”, in the *International Symposium* on “Statistical Techniques, Big Data Analysis and Research”, 01st September, **2018**, organized by U.P. Rajarshi Tandon Open University, Prayagraj, U.P.
- Presented a paper “Generalized Bayes Estimation of Spatial Autoregressive (SAR) Model”, in the *International Conference* on “Statistics for Twenty-first century- 2017 (ICSTC-2017)”, 14th-16th December, **2017**, organized by Dept. of Statistics, University of Kerala, Trivandrum, Kerala.
- Presented a paper “Generalized Bayes Estimation in Spatial Autoregressive (SAR) Model”, in the *National Conference* on “Advanced Developments in Theoretical and

Applied Statistics”, 13th-15th November, **2017**, organized by Banaras Hindu University, Varanasi.

Attended Workshop/ Conferences/ Seminars

- Workshop on “Creating Awareness about Official Statistics in India”: 5th March, **2012**, organized by Dept. of Statistics, University of Prayagraj & Ministry of Statistics and Program Implementation, Government of India.
- Conference on “Applied Statistics and It’s Applications 2013 (CASA 2013)”: 16th-17th March, **2013**, organized by Dept. of Applied Statistics, Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow.
- Seminar on “Recent Developments in Statistics, Applied Econometrics and Forecasting”: 27th April, **2013**, organized by Dept. of Statistics, University of Prayagraj.
- Workshop on “Statistical Analysis with R”: 6th September, **2013**, organized by Dept. of Statistics, University of Prayagraj.
- Workshop on “IBM SPSS22”: 21th August, **2014**, organized by Dept of Statistics, University of Prayagraj.
- National Conference on “Recent Advances in Statistical and Mathematical Sciences and Their Applications”: 04th-06th October, **2014**, Dept. of Statistics, Kumaun University, S. S. J. Campus, Almora.

Training Programme and Courses

- One week online Interdisciplinary Faculty Development Programme on “**Optimization: The Omnipresent**” organized by Motilal Nehru College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College during 4th – 9th February, 2022.
- Attended RTG Big Data Research Prayagraj Summer School **by Prayagraj University and the Interdisciplinary Center for Scientific Computing (IWR) of Heidelberg University, Germany**, 1th-5th, April, **2019**.
- Two-week interdisciplinary Faculty Development Programme on “**Data Analysis using Software packages**”, Dept of Statistics, Hindu College, University of Delhi, Delhi, 12th – 24th, December, **2018**.

Awards and Distinctions

• <i>Young Scientist Award</i> in the International Academic Achievers Awards organized by JYD International School of Higher Education Zurich, Switzerland, 2021-22.
Association with Professional Bodies
• Associate Editor, International Journal of Innovation and Multidisciplinary Research (IJIAMR). • Life Membership of Indian Society for Probability and Statistics (ISPS) [LM/33/1628/2021].