Dr. Bhagwati Devi, Ph.D.

Assistant Professor

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Personal Information:



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IRINS	
Journal Papers	14
Conference	1
Papers	
Sponsored	Nil
Projects &	
Consultancy	
Book and Book	
Chapters	
Doctoral	Nil
Students	
Brief Profile	Dr. Bhagwati Devi is a dedicated statistician currently serving as a faculty member in the Department of Statistics at the Central University of Jharkhand
	since February 13, 2024. Prior to this role, she contributed her expertise as an
	Assistant Professor of Statistics in the Department of Mathematics &
	Statistics at Banasthali Vidyapith, Rajasthan.
	Dr. Devi's academic journey includes completing her M.Sc., M.Phil., and
	Ph.D. in Statistics from the esteemed University of Jammu. Her research
	interests span a variety of topics within the field, focusing on Inferential
	Reliability, Bayesian Analysis, Sequential Testing, Optimization Techniques, and their practical applications. Through her work, she strives
	to advance statistical methods that can enhance decision-making processes
	across various domains.
	wrote rations domains.

Educational Qualifications:

• Ph.D. (Statistics) from University of Jammu, Jammu, J&K, India in the year 2021.

Topic: Inferential Procedures for Some Reliability Models Based on Censored Observations.

• M.Phil. (Statistics) from *University* of Jammu, Jammu, J&K, India in the year 2016.

Topic: Bayesian and Sequential Procedures for Some Zero- Truncated Distributions.

- **M.Sc.** (**Statistics**) examination from University of Jammu, Jammu, J&K, India in the year 2014 with ISt division securing 86.5 % marks (2076/2400)
- **B.Sc. with Statistics,** Mathematics and Physics from University of Jammu, Jammu, J&K, India in the year 2012 with Ist division securing 63.82 % marks (1053/1650)

Courses Taught:

B.A./B.Sc., M.A./M.Sc., B.B.A., M.B.A., B.Com, B.C.A., B. Pharm., M.Pharm., M.Phil., Ph.D.

Additional Roles/ Responsibilities

• Co-organizing Secretary

26th Annual Conference of The Society of Statistics, Computer and Applications (SSCA) International Conference on Emerging Trends of Statistical Sciences in AI and its Applications (ETSSAA-2024), February 26-28, 2024, Organized by Department of Mathematics and Statistics & Centre for Artificial Intelligence.

• Faculty Coordinator of Mayukh, April 1-3, 2023-15th National Level Inter College Technical Fest of 5 Faculties

Faculty of Mathematics and Computing, Centre for Mathematical Sciences, Centre for Artificial Intelligence, Bajaj School of Automation, School of Physical Sciences

• Coordinator of Student's Placements

Organizing campus placement drives for the students of M.Sc. (Statistics) and M.Sc. (Mathematics) since July 2019.

• Coordinator of M.Sc. Statistics and Project

Managing all the class arrangements and coordination among students and teachers. Taking all the responsibilities of Seminar in IIIrd Semester and Project in IVth Semester of Masters in Statistics students. (2021-2022)

• Coordinator of B.Sc. Statistics Project

Managing all the work related to project of B.Sc. Final Year students of Statistics

Professional Experience

- Assistant Professor in Department of Statistics at Central University of Jharkhand, Ranchi, Jharkhand (February13, 2024 to till date).
- Assistant Professor of Statistics at Department of Mathematics and Statistics, Apaji Sansthan, Banasthali Vidyapith, Rajasthan since (June 29, 2019 to February 09, 2024)

Research and Teaching Interests

- Statistical Inference
- Reliability Estimation
- Sampling Techniques
- Design of Experiments
- Non Parametric Inference & Sequential Analysis
- Basic Statistics and Probability

Articles Published

1.	Parmil Kumar, Ankita Sharma, and Bhagwati Devi , "Parameters Estimation of
	Bayesian and E-Bayesian Methods on the Generalized Order Statistics under
	Exponential Family", Thailand Statistician, (2351-0676), 22(3), 575-593 (2024),
	Scopus
2.	Taruna Kumari, Anupam Pathak, Sanjeev K. Tomer and Bhagwati Devi , "A Numerical
	Study on Robustness of Generalized Half Logistic Distribution under Entropy Loss"
	International Journal of Statistics and Reliability Engineering (2350-0174), 9(3),
	381-397, (2022)
3.	Ankita Sharma, Parmil Kumar and Bhagwati Devi , Entropy Estimation of Inverse
	Rayleigh Probability Distribution and Its Order Statistics, International Journal of
	Electronics Engineering (0973-7383), 11 (2), 508-513 (2019), Serials Publications
4.	Ajit Chaturvedi, Bhagwati Devi and Rahul Gupta, Robust Bayesian Analysis of Moore
	and Bilikam Family of Lifetime Distributions. International Journal of Agricultural
	and Statistical Sciences (0973-1903). 15(2), 497-522 (2019). Scopus, ESCI, NAAS
	Rated-4.92, DAV College
5.	Ajit Chaturvedi, Bhagwati Devi and Rahul Gupta, Estimation and Testing Procedures
	of the Reliability Functions of Nakagami Distribution. Austrian Journal of Statistics
	(1026597X), 48(3), 15-34 (2019), IF- 0.81, Scopus, ESCI, Austrian Society for
	Statistics
6.	Bhagwati Devi, Ankita Sharma and Parmil Kumar, Effect of female literacy on gender
	Ratio among scheduled cast and tribes of J&K State, India, International Journal of
	Research in Management and Social Science (2322-0899). 6(1), 88-94 (2018),
	Empyreal Institute of Higher Education
7.	Bhagwati Devi, Rahul Gupta and Parmil Kumar, Sequential Analysis of Zero
	Truncated Geometric Distribution, Journal of Statistics Applications and Probability
	(20908423), 6 (2), 1-5 (2017). Scopus , IF- 0.96, Natural Sciences Publishing
8.	Bhagwati Devi, Parmil Kumar and Kirandeep Kour, Entropy of Lomax Probability
	Distribution and its Order Statistics, International Journal of Statistics and Systems
	(0973-2675), 12 (2), 175-181 (2017), Research India Publication
9.	Bhagwati Devi, Rahul Gupta, and Parmil Kumar, E- Bayesian Estimation of the
	Parameter of Truncated Geometric Distribution, International Journal of
	Mathematics Trends and Technology (2231-5373), 38(1), 27-38. (2016) Seventh
	Sense Research Group

- 10. Ankita Sharma, Parmil Kumar and **Bhagwati Devi**, Jammu and Kashmir: A Paradise on Earth and the other side of the Story!, International Journal of Research in Social Sciences (2249-2496), Vol. 6(8), 33-40. (2016), International Journals of Multidisciplinary Research Academy.
- 11. **Bhagwati Devi**, Parmil Kumar and Ankita Sharma, Effect of Female Literacy on Gender Ratio: A Boon or Bane?, Researcher: A multidisciplinary Journal (2278-9022), Volume IX (1), 71-87(2015), University of Jammu

Books and Chapters

- Azhad, Q. J., Arshad, M., **Devi, B.**, Khandelwal, N., & Ali, I. Record-Based Transmuted Kumaraswamy Generalized Family of Distributions Properties and Application. *G Families of Probability Distributions: Theory and Practices*, (978-1-032-14065-0),233-243, 2023, CRC Press
- **Bhagwati Devi,** Qazi J. Azhad, Rahul Gupta and Ankita Sharma. Estimation Procedures of Length-Biased Nakagami Distribution. *Modern Approaches to Mathematics & Computer Sciences*, Vol. 2, (978-93-93333-31-5), 62-77, 2022, Island Publishers, Tamilnadu, India.

Seminar/Workshop/Conference Participation:

CONFERENCE PROCEESDINGS

1. Bhagwati Devi, Qazi J. Azhad, Ankita Sharma and Ayush Tripathi, Statistical Inference for Fr´echet Distribution Based on Dual Generalized Order Statistics, Special Proceedings: ISBN #: 978-81-950383-2-9, 25th Annual Conference, 15–17 February 2023, 93–106.

Invited Talks

- 1. Delivered a talk on "Statistical Inference for Dual Generalized Order Statistics" during 25th Annual Conference of SSCA on "Significance of Statistical science in the emerging scenario (SSSES-2023)" 15 17 February, 2023 at University of Jammu, Jammu, J&K.
- 2. Delivered a talk on "Bayesian Estimation Procedures for Generalized Inverted Family of Distributions" during 24th Annual Conference of SSCA (online) on "Recent Advances in Statistical Theory and Applications (RASTA-2022)" 23 27 February, 2022 at ICAR National Academy of Agricultural Research Management (ICAR NAARM), Hyderabad.
- 3. Delivered a talk on Statistical Methods for Bivariate Data Analysis on 16-Mar.-2021 organized by Department of Statistics, Amity Institute of Applied Sciences, AUUP, Noida, UP.
- 4. Delivered a talk entitled "Statistics The Administrator of Every Administration" at National Sample Survey Organization (FOD), Jammu on National Statistics Day June 29, 2017.
- 5. Delivered a talk on "Role of Statistics for the Welfare of Farmers" at National Sample Survey Organization (FOD), Jammu on National Statistics Day June 29, 2016.
- 6. Delivered a talk on "Effect of Female Literacy on Gender Ratio in J&K" at NSSO (FOD), Jammu on National Statistics Day June 29, 2015.

Workshop

1. Participated in Pre-Conference Workshop "Reader- Focused Writing in the Quantitative Sciences" held on 22 February, 2022 at ICAR - National Academy of Agricultural Research Management (ICAR - NAARM), Hyderabad.

- 2. Attended one week workshop on "Data Analytics through R" Held at Dept. of Statistics, University of Jammu, Jammu, J&K, India during Nov 24-30, 2019.
- 3. Attended one-day work shop on "Applied Mathematics" held at Dept. of Mathematics, University of Jammu, J and K, India during Sep 10-14, 2018.
- 4. Attended one-week work shop on "Statistics through SPSS" held at Dept. of Statistics, University of Jammu, J and K, India during Sep 10-14, 2018.
- 5. Attended two days' work shop on "*Research Methodology Course*" held at Dept. of Computer Science and IT, University of Jammu, Jammu, J and K, India during May 24-25, 2018.
- 6. Attended one-week work shop on "Statistics through SPSS and R" held at Dept. of Statistics, University of Jammu, J and K, India during Feb 19-24, 2018.

International Conference:

- 1. Indian Women and Mathematics Annual Conference 2021-22, 28-30 Jan 2022
- 2. Presented Research Article "Estimation and Testing Procedures of the Reliability Functions of the Nakagami Distribution" 24th International Conference of International Academy of Physical Sciences (CONIAPS XXIV), held at CCSU Meerut, India during August 09-11, 2019.
- 3. Presented Research Paper, "Robust Bayesian Analysis of Moore and Bilikam Family of Lifetime Distributions", in Twenty-Seventh International Conference of Forum for Interdisciplinary Mathematics (FIM) in Conjunction with Third Convention of IARS on Interdisciplinary Mathematics, Statistics and Computational Techniques held at Dept. of Statistics, in University of Jammu, J and K, India during Nov 2-4, 2018.
- 4. Presented Research Paper, "Estimation and Testing Procedures of the Reliability Functions of the Nakagami Distribution", in 11th Triennial Conference of the Association of Asia Pacific Operational Research Societies (APORS) on Operations Research and Development" held at Kathmandu, Nepal during Aug 6-9, 2018.
- 5. Presented Research Paper, "Robust Bayesian Analysis of Family of Lifetime Distributions" in International Conference on Responsible Research and Innovation in Science, Management and Education organized by Research Promotion Cell, Panjab University Chandigarh (India) and London School of Management Education (UK) during April 04-06, 2018.
- 6. Presented Research Paper, "Estimation of Parameter of Zero Truncated Geometric Distribution: Bayesian and Information Theoretic Approach", in the International Conference on Statistics and Related Areas for Equity, Sustainability and Development, held at Dept. of Statistics, University of Lucknow, Lucknow, India during Nov 28-30, 2015.

<u>International Conferences (Outside India): One (01)</u>

1. Presented Research Paper, "Estimation and Testing Procedures of the Reliability Functions of the Nakagami Distribution", in 11th Triennial Conference of the Association of Asia Pacific Operational Research Societies (APORS) on Operations Research and Development" held at Kathmandu, Nepal during Aug 6-9, 2018.

National Conference:

- Attended two lectures on "Invited Lecture on Free and Open Source Software" held at Dept. of Computer Science and IT, University of Jammu, Jammu, India on Dec 3rd, 2018.
- 2. Presented Research Paper, "Maximum Product Spacing Method of Estimation of Entropy of Logistic Distribution and Their Order Statistics" in national Conference on Emerging Trends in Advanced

- Computing and Information Technology held at Kathua Campus, University of Jammu, Jammu, Jam K, India during Feb 24-25, 2018.
- 3. Presented Research Paper, "Information Theoretic and Bayesian approach in Estimation of the Parameter of Zero Truncated Geometric Distribution", in the 18th Annual National Conference of Society of Statistics, Computer and Applications, held at Dept. of Statistics, Jammu University, Jammu, J and K, India during Feb 18-20, 2016.
- 4. Presented Research Paper, "A Bayesian and Information Theoretic approach in estimation of Parameter of Zero Truncated Distribution", in the NBHM Sponsored National Conference on Recent Trends in Mathematical Sciences, held at "SMVD University, Katra, J and K, India during Oct 08-09, 2015.
- 5. Presented Research Paper, "Estimation of Entropy of Lomax and Inverse Rayleigh Probability Distribution and Their Order Statistics", in the 10th J K Science Congress on "Science and Technology for Inclusive Development, held at "Jammu University, Jammu, J and K, India during March 14-16, 2015.
- 6. Presented Research Paper, "On *Entropy of Lomax and Inverse Rayleigh Probability Distribution and Their Order Statistics*", in the National Conference on Recent Trends and Developments in Statistics, held at M.D. University, Rohtak, Haryana, India during Feb. 21-23, 2015.
- 7. Presented Research Paper, "Shannon's Entropy of Some Continuous Family of Probability Distributions and Their Order Statistics" in the National Conference on Advances in Theoretical and Applied Statistics, held at Panjab University, Chandigarh, Punjab, India during Feb. 12-13, 2015.
- 8. Participated in National Meet of Research Scholars in Mathematical Sciences held at Dept. of Statistics, University of Jammu during Dec. 08-12, 2014 sponsored by SERB, DST, India.
- 9. Participated and attended Pre-Conference Workshop in the 32nd Annual National Conference of Indian Society for Medical Statistics held at Dept. of Statistics, University of Jammu, Jammu, India during Nov. 1-3, 2014.

Faculty Development Programme

- 1. Mathematics in Artificial Intelligence and Data Science, March 23-27, 2023 organized by Centre for Artificial Intelligence and Department of Mathematics and Statistics, Banasthali Vidyapith, Rajasthan
- 2. Artificial Intelligence, Robotics and Automation from March 20-25, 2021 organized by Centre for Artificial Intelligence, Banasthali Vidyapith.
- 3. Statistical and Optimization Techniques Using Software Packages from October 25-29, 2021 at Aligarh Muslim University.
- 4. Innovation and Research trends in Artificial Intelligence from March 03-08, 2021 at Banasthali Vidyapith

Program Organized

- 1. National Workshop on Data Analysis using Python, during 03-05 December 2021 at Dept. of Mathematics & Statistics, Banasthali Vidypaith.
- 2. National Webinar on Role of Statistics in Sustainable Agricultural Development August 21, 2021 at Dept. of Mathematics & Statistics, Banasthali Vidypaith.
- 3. National Webinar on Role of Statistics in the Advancement of Data Science on the occasion of World Statistics Day, October 20, 2020 at Dept. of Mathematics & Statistics, Banasthali Vidypaith.
- 4. National webinar on Putting the Brakes on the theme "Covid-19: How to Safeguard the Health and Rights of Women and Girls Now" on the Occasion of World Population Day July11, 2020, at Faculty of Mathematics & Computing, Banasthali Vidyapith.

5. Webinar on the role of statistics in the time of covid-19 on the Occasion of National Statistics Day June 29, 2020 at Dept. of Mathematics & Statistics, Banasthali Vidypaith.

Awards and Honors

- R S Varma Best Paper Award for Ph.D. from Forum for Interdisciplinary Mathematics (FIM). (2018)
- DST INSPIRE Fellowship from Dept. of Science and Technology, Govt. of India for Ph.D. (2017)
- Qualified NET examination held in January 2017.
- University Merit Scholarship during M.Phil.
- University Gold Medal in Statistics, Faculty of Mathematical Sciences.
- Certificate of Merit from Madhav Lal Nanda Memorial Trust, Reasi, for scoring Second position in class X in whole Reasi District.

Any Other Information

Skills

1. Working knowledge of Statistical software/Packages viz. SPSS, MatLab, R and LaTex.

Extension and Field Out- Reach Activities

- 1. Working member of Parmaarth: Service Before Self (Non Profitable Trust), working in the field of women, children, elderly and animal care
- 2. Providing statistical consultation to M.Phil., Ph.D., MDP students in the field of Economics, Commerce, Management, Psychology, Medicine, Engineering etc. in their research work.

Reviewer of Journal

- 1. Austrian Journal of Statistics, Austrian Society for Statistics
- 2. Pakistan Journal of Statistics, Pakistan Journal of Statistics
- 3. Hacettepe Journal of Mathematics and Statistics, Hacettepe University Faculty of science