Ramanujan College FACULTY PROFILE

| FIRST NAME | RENU | MIDDLE NAME | | PHOTOGRAPH (ATTACH BELOW) |
|-------------------------|--|-------------|--|---------------------------|
| LAST NAME | GARG | | | |
| DEPARTMENT | Statistics | | | |
| DESIGNATION | Assistant Professor | | | |
| GENDER | Female | | | |
| LANGUAGE PROFICIENCY | Hindi and English | | | |
| ADDRESS | Department of Statistics, Ramanujan College, University of Delhi | | | |
| MOBILE | 99999461525 | | | |
| EMAIL | renu.garg@ramanujan.du.ac.in | | | |

EDUCATIONAL QUALIFICATIONS:

| DEGREE | INSTITUTION | YEAR |
|--|--|------|
| Ph.D. | Department of Statistics, M.D. University, Rohtak | 2017 |
| M.Phil. | Department of Statistics, C.C.S. University, Meerut | 2013 |
| B.Ed. | R.D.P.D. Girls PG College, C.C.S. University, Meerut | 2011 |
| M.Sc. | Department of Statistics, C.C.S. University, Meerut | 2010 |
| D.P.B.S. Degree College, C.C.S. University, Meerut | | 2008 |

CAREER PROFILE: TEACHING EXPERIENCE

• Assistant Professor (Permanent). Department of Statistics, Ramanujan College, University of Delhi, Delhi-110019 since June 26, 2023.

- Assistant Professor (Ad-hoc). Department of Statistics, Kirori Mal College, University of Delhi, Delhi-110007 from September 13, 2021, to October 25, 2022.
- Assistant Professor (Ad-hoc). Department of Statistics, University of Delhi, Delhi-110007 from January 01, 2018, to September 12, 2021.

CAREER PROFILE: INDUSTRY EXPERIENCE

NA

ADMINISTRATIVE ASSIGNMENTS: (List any administrative roles or responsibilities you have held)

- Member of the Admission Committee in Mathematical Science for the Academic Session 2023-2024 at the Ramanujan College, DU.
- Member of the Sports Committee for the Academic Session 2024-2025 at the Ramanujan College, DU.
- Coordinator of the 98th Annual Report for the Academic Session 2020-2021 at the Department of Statistics, DU.
- Deputy Coordinator of Research Activity Cell for the Academic Session 2020-2021 in the Department of Statistics, DU.
- Member of the PG Admission Committee for the Academic Sessions 2018-2019, 2019-2020, and 2020-2021 at the Department of Statistics, DU.
- Member of the Internal Quality Assurance Cell Committee for the Academic Sessions 2018-2019, 2019-2020, 2020-2021, and 2021-2022 at the Department of Statistics, DU.
- Member of the Syllabus Revision Committee for B.Sc. (Hons.), B.A. (Programme) Statistics and B.Sc. (Programme) Mathematical Sciences under CBCS for the Academic Session 2018-2019 at the Department of Statistics, DU.
- Member of the Syllabus Revision Committee for M.A./M.Sc. Statistics under CBCS Academic Session 2018-2019 at the Department of Statistics, DU.
- Member of the Internal Assessment Test Committee for the Academic Session 2018-2019 at the Department of Statistics, DU.

AREAS OF INTEREST / SPECIALIZATION: (Highlight your specific areas of interest or fields of specialization within your subject area)

- Reliability and Life Testing Experiments
- Censored Data
- Bayesian Estimation
- Statistical Inference

SUBJECTS TAUGHT: (List all the Subjects you have taught)

UG LevelPG Level• Mathematical Analysis• Statistical Methodology• Descriptive Statistics• Statistical Inference• Theory of Probability• Design of Experiments

- Theory of Probability Distributions
- Applied Statistics
- Time Series Analysis
- Sampling Distributions
- Linear Models

- Problem Solving using R software
- Problem solving using SPSS

COURSE DEVELOPMENT: (Mention any courses you have developed or contributed to designing)

NA

RESEARCH GUIDANCE: (Provide details on research supervision, indicating the number of doctoral and postgraduate students guided)

Co-supervisor of Ms. Maya Kumari, Roll No. 221799 (2024-) (Pursuing).

PUBLICATIONS PROFILE: RESEARCH PAPERS (List your published research papers, including the title, journal, and year)

- * Corresponding Author
- 1. Shubham Saini, **Renu Garg**, Neeraj Tiwari, Chatany Swaroop* (2024). Classical and Bayesian estimation of multicomponent stress–strength reliability with power Lindley distribution under progressive first-failure censored samples. *Journal of Statistical Computation and Simulation*, **IF 1.10 (Taylor & Francis).**
- 2. Shubham Saini, Jyoti Patel and **Renu Garg*** (2024). Statistical inference on multicomponent stress–strength reliability with non-identical component strengths using progressively censored data from Kumaraswamy distribution. *Soft Computing*. **IF: 3.1**. (**Springer**)
- 3. **Renu Garg**, Maya Kumari, Ranjan Kumar Sahoo, Anita Kumari* (2024). Stress-strength reliability estimation of multicomponent system with non-identical strength components from inverse Pareto distribution. *Life Cycle Reliability and Safety Engineering*. 13(3), pp. 351-363. ISSN:2520-1352. (Springer).
- 4. Kapil Kumar, Shrawan Kumar, **Renu Garg**, Indrajeet Kumar* (2024). Reliability estimation for inverse Pareto lifetime model based on unified hybrid censored data. *International Journal of System Assurance Engineering and Management*. 15(6), pp. 2473–2482, ISSN: 0975-6809. **IF** 2.00 (Springer).
- 5. Randa Alharbi, **Renu Garg**, Indrajeet Kumar*, Anita Kumari and Ramya Aldallal (**2023**). On Estimation of P(Y<X) for Inverse Pareto Distribution based on Progressively First Failure Censored Data. *Plos One*, 18(11). ISSN: 1932-6203.**IF 3.7**
- 6. Shubham Saini, Sachin Tomer, and **Renu Garg*** (2023). Inference of Multicomponent Stress-Strength Reliability following Topp-Leone Distribution using Progressively Censored Data. *Journal of Applied Statistics*, 50(7), pp. 1538-1567. ISSN: 0266-4763. **IF 1.10** (**Taylor & Francis**).
- 7. Shubham Saini, and **Renu Garg*** (2024). Non-Bayesian and Bayesian estimation of Stress-strength reliability from Topp-Leone distribution under progressive first-failure censoring. International Journal of Modelling and Simulation, 44(1), pp. 1-15. ISSN: 1925-7082. **IF 2.1, (Taylor & Francis)**.

- 8. Anita Kumari, Shrawan Kumar*, **Renu Garg (2022)**. Reliability Estimation in Lindley Populations Using Hybrid Censored Data. *International Journal of Statistics and Reliability Engineering*, 9(3), pp.437-449.
- 9. Shubham Saini, and **Renu Garg*** (2022). Reliability Inference for Multicomponent Stress-Strength Model for Kumaraswamy-G Family of Distributions based on Progressively First-Failure Censored Samples. *Computational Statistics*, 37 (4), pp. 1795-1837. ISSN: 0943-4062. **IF** 1.30. (Springer).
- 10. Shubham Saini, Sachin Tomer, and **Renu Garg*** (2022). On the Reliability Estimation of Multicomponent Stress-Strength Model for Burr XII Distribution using Progressively First-Failure Censored Samples. *Journal of Statistical Computation and Simulation*, 92(4), pp. 667-704. ISSN: 0094-9655. **IF 1.10 (Taylor & Francis).**
- 11. Ajit Chaturvedi, **Renu Garg**, and Shubham Saini* (2022). Estimation and Testing Procedures for the Reliability Characteristics of Kumaraswamy-G Distributions based on the Progressively First Failure Censored Sample. *OPSEARCH*, 59, pp. 494–517. ISNN: 0975-0320. **IF 1.60 (Springer).**
- 12. **Renu Garg***, and Kapil Kumar. **(2021)**. On Estimation of P(Y<X) for Generalized Inverted Exponential Distribution based on Hybrid Censored Data. *Statistica*, 81(3), pp. 335-361. ISSN: 1973-2201.
- 13. Shubham Saini*, Ajit Chaturvedi, and **Renu Garg.** (2021). Estimation of Stress-Strength Reliability for Generalized Maxwell Failure Distribution under Progressive First Failure Censoring. *Journal of Statistical Computation and Simulation*, 91(7), pp. 1366-1393. ISNN: 0094-9655. **IF 1.10.** (**Taylor & Francis**).
- 14. **Renu Garg***, Madhulika Dube, and Hare Krishna. (2020). Estimation of Parameters and Reliability Characteristics in Lindley Distribution using Randomly Censored Data. *Statistics, Optimization & Information Computing*, 8, pp. 80-97. ISNN: 2310-5070.
- 15. Hare Krishna, Madhulika Dube, and **Renu Garg***. (2019). Estimation of Stress-Strength Reliability of Inverse Weibull Distribution under Progressive First Failure Censoring, *Austrian Journal of Statistics*, 48, pp. 14-37. ISNN: 1026-597X. **IF 0.60**.
- 16. Kapil Kumar*, **Renu Garg**, and Hare Krishna (**2017**). Nakagami Distribution as a Reliability Model under Progressive Censoring. *International Journal of System Assurance Engineering and Management*. 8(1), pp. 109-122. ISSN: 0975-6809. **IF 2.00 (Springer).**
- 17. Hare Krishna, Madhulika Dube, and **Renu Garg*. (2017).** Estimation of P(Y < X) for Progressively First Failure Censored Generalized Inverted Exponential Distribution, *Journal of Statistical Computation and Simulation*, 87(11), pp. 2274-2289. ISNN: 0094-9655. **IF 1.10**. (**Taylor & Francis**).
- 18. **Renu Garg**, Madhulika Dube, Kapil Kumar*, and Hare Krishna. (2016). On Randomly Censored Generalized Inverted Exponential Distribution. *American Journal of Mathematical and Management* Sciences. 35(4), pp. 361-379. ISSN: 0196-6324 (**Taylor & Francis**).
- 19. Madhulika Dube, Hare Krishna, and **Renu Garg***. (2016). Generalized Inverted Exponential Distribution under Progressive First Failure Censoring. *Journal of Statistical Computation and Simulation*, 86(6), pp. 1095-1114. ISNN: 0094-9655. **IF 1.10.** (**Taylor & Francis**)
- 20. Madhulika Dube, **Renu Garg*** and Hare Krishna. (2016). On Progressively First Failure Censored Lindley Distribution. *Computational Statistics*, 31(1), pp. 139-163. ISSN: 0943-4062. **IF 1.30.** (Springer).

- 21. Kapil Kumar*, Hare Krishna and Renu Garg. (2015). Estimation of P(Y<X) in Lindley Distribution using Progressively First Failure Censoring. *International Journal of System Assurance Engineering and Management*. 6(3), pp. 330-341. ISSN: 0975-6809. **IF 2.0 (Springer).**
- 22. Kapil Kumar K. and Renu Garg*. (2014). Estimation of the Parameters of Randomly Censored Generalized Inverted Rayleigh Distribution. *International Journal of Agricultural and Statistical Sciences*. 10(1), pp. 147-155. ISSN: 0973-1903. IF 0.10

PUBLICATIONS PROFILE: BOOK CHAPTERS (List your published book chapters, including the title, publisher, ISBN and year)

NA

PUBLICATIONS PROFILE: OTHERS (Mention any other relevant publications details)

NA

CONFERENCE / WORKSHOPS/ REFRESHER/ FDP/ TRAINING ORGANIZED

NA

CREATION OF ICT MEDIATED TEACHING LEARNING PEDAGOGY AND CONTENT

NA

CONFERENCE/WORKSHOPS/TRAINING ATTENDED AS FACULTY MEMBER

National Conference Presentations

- 1. Attended and presented a paper titled, "Estimation of Multicomponent Stress-strength Reliability from the Inverse Pareto Distribution with non-identical Strength Component" at the **National Conference** on Morden Applications of Statistical Science Recent Advances in during September 27-28, 2024 at the Punyashlok Ahilyadevi Holkar Solapur University, Solapur, India.
- 2. Attended and presented a paper titled, "Reliability Estimation in Lindley Distribution using Progressively First Failure Censored Data" at the **National Conference** on Recent Advances in Data Science during December 15-17, 2023 at the VIT-AP University, Andhra Pradesh, India.
- 3. Attended and presented a paper titled, "Reliability Estimation in Lindley Distribution using Randomly Censored Data", at the **National Conference** on Recent Statistical Computing Techniques and their Applications during March 11-12, 2016 at Ramanujan College, University of Delhi, Delhi, India.
- 4. Attended and presented a paper titled, "Reliability Estimation in Lindley Distribution under Progressively First Failure Censoring Scheme", at the **National Conference** on Significance of Statistics as Interdisciplinary Science during February 18-20, 2016 at the University of Jammu, Jammu, India.

5. Attended and presented a paper titled, "Estimation of Parameters in Generalized Inverted Exponential Distribution with Randomly Censored Sample", at the **National Conference** on Statistical Inference, Sampling Techniques and Related Areas during February 18-19, 2014 at Aligarh Muslim University, Aligarh, India.

International Conference Presentations

- 1. Attended and presented a paper, "Estimation in Inverse Pareto Distribution under Unified Hybrid Censoring". **International Conference** on "Statistics and Optimization" organized by the Department of Statistics and Operational Research, Aligarh Muslim University, Aligarh during 28-29, October 2023.
- 2. Attended and presented a paper, "On the Reliability Estimation of Multicomponent Stress-Strength Model for Burr XII Distribution using Progressively First-Failure Censored Samples". **International Conference** on "Statistics and Data Science: Theory and Practice for Progress and Prosperity (ICSDS-2021)" organized by the Department of Statistics, Osmania University, Hyderabad during 11-13, March 2022.
- 3. Attended and presented a paper, "Reliability Estimation in Maxwell Lifetime model using Progressively First Failure Censored Data", **International Conference** on Frontiers in Industrial and Applied Mathematics organized by the Department of Mathematics, Sant Longowal Institute of Engineering & Technology Longowal, Punjab 21-22 December 2021.
- 4. Attended and presented a paper "Stress-Strength Reliability Estimation of Generalized Inverted Exponential Distribution Using Hybrid Censored Data", **International Conference** on "Recent Advances in Computational Mathematics & Engineering" organized by B K Birla Institute of Engineering & Technology, Pilani, Rajasthan during 19-21 March 2021.
- 5. Attended and presented a paper, "Estimation of Stress-Strength Reliability in Inverse Weibull Distribution using Progressively First Failure Censored Data", **International Conference** on Emerging Innovations in Statistics & Operations Research during December 27-30, 2018 at M.D. University, Rohtak, India.
- 6. Attended and presented a paper titled, "Reliability Estimation in Nakagami Distribution using Progressively Censored Data", at the **International Conference** on Emerging Trends in Inventory, Supply Chain & Reliability Modeling December 21-23, 2018 at the University of Delhi, India.
- 7. Attended and presented a paper titled, "On Progressively First Failure Censored Generalized Inverted Exponential Distribution", VIII **International Symposium** on Statistics and Optimization during December 17-19, 2016 at Aligarh Muslim University, Aligarh, India.
- 8. Attended and presented a paper titled, "Analyzing δ =P(Y<X) in Generalized Inverted Exponential Distribution with Progressively First Failure Censored Data", at the **International Conference** on Quality, Reliability, Infocom Technology & Business Operations during December 28-30, 2015 at University of Delhi, Delhi, India.

Workshops Attended

1. Attended a one-week online National Workshop on "Statistical Data Analysis Using SPSS & R 5th Edition" during **11-15 March 2024** organized by the Department of Statistics, Central University of Haryana, Mahendergarh, India.

- 2. Attended a one-week online **National Workshop** on "Applications of Mathematical and Statistical Tools" Jointly organized by the Department of Mathematics, Department of Statistics and School of Education under the Scheme of Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, Central University of Haryana, Mahendergarh, India during 20-24 March 2021.
- 3. Attended a National Workshop on "How to Write a Research Paper", during December 17-20, 2018 at the University of Delhi, Delhi, India.
- 4. Attended a **Faculty Development Programme** on "Actuarial Statistics", during December 27-28, 2017 at the Department of Statistics, University of Delhi, Delhi, India.
- 5. Attended a **National Workshop** on "Mathematical Modelling and Computational Techniques using Mathematica", during March 30-31, 2017 at Zakir Husain College, University of Delhi, New Delhi, India.
- 6. Attended a National Workshop on "Statistical Computing Using R", during September 13-14, 2013 at the University of Delhi, Delhi, India.

Trainings Attended

- 1. Attended a 20 days Certificate/Refresher Course on Srimad Bhagavad-Gita, Prabodha Evam Prasamgikata Conducted by the Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi from 23 December to 9 January 2023.
- 2. Attended a Two-Week Refresher Course on Statistics Conducted by the Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi from 30 November -14 December 2023.
- 3. Attended a Four-Week Induction/Orientation Programme conducted by the Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi from 21 August 19 September 2023.
- 4. Attended a Two-Week Refresher Course on Research Methodology Conducted by the Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi from 23 October –06 November 2021.
- 5. Attended a Four-Week Induction/Orientation Programme conducted by the Teaching Learning Centre, Ramanujan College, University of Delhi, Delhi from 19 July 17 August 2021.

INVITED LECTURES AS RESOURCE PERSON AND PAPER PRESENTATIONS:

RESEARCH PROJECTS (MAJOR GRANTS/RESEARCH COLLABORATION)

AWARDS AND DISTINCTIONS:

- Senior Research Fellowship (SRF) by Council of Scientific & Industrial Research (CSIR) from April 17, 2017 to September 22, 2017.
- First position in M.Phil. (Statistics) in Ch. Charan Singh University, Meerut and received Vice Chancellor and Dr. Prem Chand Kansal Gold Medals.
- First position in M.Sc. (Statistics) in Ch. Charan Singh University, Meerut and received Vice Chancellor Gold Medal.

ASSOCIATION WITH PROFESSIONAL BODIES:

- Life Member of the Indian Society for Probability and Statistics.
- Life Member of the International Indian Statistical Association.
- Life Member of the Association of Inventory Academicians and Practitioners.

OTHER ACTIVITIES: (Include any additional relevant activities or contributions not covered in the above sections.)

NA