

## Faculty Profile

Name : Gitanjali  
Designation : Assistant Professor  
Qualifications : Ph.D. (Statistics), M.Phil.  
Phone : +91-9990476287  
Email : [drgitanjali@msit.in](mailto:drgitanjali@msit.in)  
Area of Interest/Specialization: Statistics & Mathematics  
Experience : 15 years



### Key Publications

1. Stochastic analysis of a three-unit non-identical repairable system with priority to main unit for operation and repair. International Journal of Reliability and Safety, 2020 Vol.14 No.2/3, pp.182 – 198. Print ISSN: 1479-389X Online ISSN: 1479-3903.
2. Stochastic Analysis of a Three-Unit Non-Identical Repairable System with Simultaneous Working of Cold Standby Units. Journal of Reliability and Statistical Studies, Vol. 13, Issues 2–4 (2020), 385–400. Doi: 10.13052/jrssi0974-8024.13249S.
3. Stochastic Analysis of a Non-Identical Repairable System of Three Units with Priority for Operation and Simultaneous Working of Cold Standby Units. International Journal of Statistics and Reliability Engineering Vol. 7(2), pp. 269-274, 2020 (ISSN (P): 2350-0174; ISSN (O):2456-2378).
4. Cost-benefit evaluation of a repairable system with Alternate repair and Weibull distribution. Int. J. Agricult. Stat. Sci. Vol. 15, No. 2, pp. 741-749, 2019. ISSN: 0973-1903.
5. Stochastic behavior of the parallel system with expert repair and maintenance. Life Cycle Reliability and Safety Engineering, volume8, Issue 1, pp 55-64, 2019.<https://doi.org/10.1007/s41872-018-0064-6>.
6. Stochastic Behavior of single-unit system with preventive maintenance subject to random appearance of the server. International Journal of Computer Sciences and Engineering (IJCSE), volume-5(11), pp68-73, Nov. 2017.

### **Papers presented in Conferences**

1. National Conference on “**Advances in Metrology (AdMet-2021)**” during March 5-6,2021, in MSIT, Janakpuri, New Delhi.  
**Paper Presented** : Reliability Measurement of Complex Industrial Redundant System
2. International Conference on “**Emerging Innovation in Statistics & Operations Research (EISOR-2018)**” during December 27-30, 2018 in Department of Statistics, M.D.University Rohtak, Haryana.  
**Paper Presented:** Reliability Modelling of 2- Out-of-3 Redundant System with Alternate Repair
3. National Conference on "Advances in Mathematics and Computing (AMC-2017) during May 1-2,2017 department of Statistics, YMCA, Haryana.  
**Paper Presented:** Analysis of single-unit System with random appearance and disappearance of server subject to MRT and MOT.
4. National Conference on "Statistics and Optimization Techniques (NCSOT)" during Feb. 11-13, 2017 inthe Department of Statistics, M.D.University Rohtak, Haryana.  
**Paper Presented:** Stochastic behavior of a two-unit parallel system with the Arrival time of servers.
5. National Conference on Recent Statistical Computing Techniques and their Applications RSCTA (2016), will be held on 11-12 March 2016 at Ramanujan College, University of Delhi.  
**Paper Presented:** Analysis of a Parallel System with Repair by an Expert Server Subject to Maximum Operation and Repair times.
6. International Conference on Quality, Reliability, Infocom Technology and Business Operations, 2015 to be held during Dec. 28-30, 2015 at the University of Delhi, Delhi.

**Paper Presented:** Analysis of Parallel Unit System with Different Repair Policies of the Servers Subject to Maximum Repair Time.

7. National Conference on Recent Trends and Developments in Operations Research (NCRTDOR-2014), to be held on February 22-23, 2014 at the Department of Mathematics, BITS Pilani.

**Paper Presented:** A Parallel System with the Arrival time of Expert Server Subject to Maximum Repair and Inspection Times of Ordinary server.

8. International Conference of ISPS-2013 on "Recent Advances in Statistics and Their Applications" held at Dept. of Statistics, Dr. Baba Saheb Ambedkar Marathwada University, Aurangabad from Dec. 26-28, 2013.

**Paper Presented:** A Parallel System with Maximum Repair Time and Two Types of Servers.

9. International Conference of FIM-2012 on "Interdisciplinary Mathematics, Statistics and Computational Techniques" held at Dept. of Statistics, Punjab University, Chandigarh from Dec. 15-17, 2012.

**Paper Presented:** Cost-Benefit Analysis of a Parallel System with Maximum Repair Time.

10. International Conference on "Optimization Modeling and Application" held at Dept. of Operational Research, University of Delhi, Delhi, India during Nov. 29-Dec. 01, 2012.

**Paper Presented:** Cost-Benefit Analysis of a Parallel System with Maximum Repair Time.

11. International Conference on Quality, Reliability, Infocom Technology and Industrial Technology Management "ICQRITITM-2012" from Nov. 26-28, 2012 at University of Delhi, Delhi.

**Paper Presented:** Analysis of a Parallel System with Maximum Repair Time and Single Server Who Appears and Disappears Randomly.

**Invited Talks and Responsibilities in Conferences:**

1. Invited to present a lecture entitled "Scope of Career in Statistics" on 31st May 2020 on Two Days Series of Lectures on Scope of Careers for Mathematics Students, organized by the Department of Mathematics, Ram Krishna College, Mahbubani, Bihar.
2. Invited to present a short talk on Analysis of a Repairable Parallel System with Weibull Distribution for all Random Variable in the International Conference on Applicable Mathematics, 19-20 February 2018, Department of Mathematics, Motilal Nehru College, University of Delhi.
3. Member of organizing Committee of International Conference on Emerging Innovation in Statistics & Operations Research (EISOR-2018)" during December 27-30, 2018 in Department of Statistics, M.D.University Rohtak, Haryana.
4. Member of organizing Committee of National Conference on Statistics and Optimization Techniques (NCSOT)" during February 11-13, 2017 in Department of Statistics, M.D.University Rohtak, Haryana.

#### **Book Chapter/Books published**

1. Published an International Book 'Mathematics for Natural Sciences' by Artz Books in 2020 with ISBN No. 978-93-89441-21-5.

#### **Ph.D. Supervised**

I am supervising the doctoral work of the following students:

1. Sweety Kadyan (2021, Submitted)
2. Yogita Rani (In Progress)
3. Vibhu Singhal (In Progress)

#### **Memberships of Professional bodies**

1. Life member of Indian Society for Probability and Statistics.
2. Life Member of the Indian Association for Reliability and Statistics.
3. Life Member of the Indian Science Congress

#### **Other Contributions:**

1. Successfully Completed the AICTE-ISTE approved orientation/ Refresher programme on "Use of ICT in Engineering Education" held during 07.04.2021 to 13.04.2021 organized by Maharaja Surajmal Institute of Technology, Janakpuri, New Delhi.

