Sanchita Sharma

Email : sanchitasharam88@gmail.com
Mobile : +91 9999698894

Education

- **Indira Gandhi Delhi Technical University for Women** — Delhi, India
  Doctor of Philosophy in Mathematics — *August 2014 – November 2021*
  - **Tile: On Efficient Solutions of some Multi-objective Allocation Problem**
    Thesis Advisor: Prof. Shalini Arora:

- **Ramjas College, University of Delhi** — Delhi, India
  M.A. (Mathematics) — *July 2010 – July 2012*

- **Satyawati College, University of Delhi** — Delhi, India
  B.A. (Hons.) Mathematics — *July 2007 – July 2010*

Field of Research

Multi-objective Optimization, Allocation Problems, Mathematical Programming

Academic Experience

- **Department of Mathematics and Statistics, Banasthali Vidyapith** — Rajasthan, India
  Assistant Professor — *June 2019 - May 2021*
- **Indira Gandhi Delhi Technical University for Women** — Delhi, India
  Guest Faculty — *August 2014 - May 2018*

Research Publications

1. Bi-Objective Capacitated Transportation Problem with Bounds over distributions and requirement capacities, International Journal of Applied and Computational Mathematics, 7(3) (2021). (Jointly with Shalini Arora)

2. Efficient triads related to transportation problem with common pivotal time, International Journal of System Assurance Engineering and Management , 10 (2019), 1353–1360. (Jointly with Rita Malhotra and Shalini Arora)

3. Trade-Offs in Bi-objective Transportation Problem corresponding to all Pivotal Times, The Electronic International Journal Advanced Modeling and Optimization, 20 (1) (2018), 33–53. (Jointly with Rita Malhotra and Shalini Arora)

4. Limitation and Modification: On a Cost Pipeline Trade-Off in a Transportation Problem, Yugoslav Journal of Operations Research, 27 (4) (2017), 439–450. (Jointly with Shalini Arora)

Conference Presentations

1. Efficient Triads of Capacitated Transportation with bounds over distributions and requirement capacities, Conference on Engineering Systems Design and Optimization, (CESDO-2021), G. H. Raisoni College Of Engineering and Management, Ahmednagar, Maharashtra, India, March 26-27, 2021

2. Bi-objective Assignment Problem with Better Higher Completion Time of Assignment, International Conference on Advances in Smart Materials Emerging Technologies (ASMET 2020), IGDTUW, Delhi, India, January 23-24, 2020.

3. Limitation and Modification: On a Cost Pipeline Trade-Off in a Transportation Problem, 49th Annual Convention of the Operational Research Society of India, Birla Institute of Management Technology, Greater Noida, India, December 12-17, 2016.

Research Guidance

- M.Sc. Dissertation of Ms. Anita Kumari titled "Efficient solutions of Integer Linear Fractional Programming Problem", 2020-2021 (Banasthali Vidyapith).

- M.Sc. Dissertation of Ms. Shruti titled "Pareto optimal solution of cost-time trade-off bulk transportation problem", 2020-2021 (Banasthali Vidyapith).

- M.Sc. Project (Co-Advisor) of Ms. Meenakshi Bisht and Ms. Harshita Lunayach titled " Simulation analysis of some Markovian Queueing Models", 2019-2020 (Banasthali Vidyapith).

Workshops/Conferences Attended

- Five days national level online workshop on Software in Mathematics and Statistics (WSMS – 2021), Department of Mathematics, National Institute of Technology Tiruchirappalli, August 02–06, 2021.

- One week short term course on Modeling and Simulation Tools, Department of Mathematics, Malviya National Institute of Technology Jaipur, July 03-07, 2017.

- National Workshop on Mathematical Modelling and Computational Techniques using Mathematica, Department of Mathematics, Zakir Husain Delhi College, University Of Delhi, India, March 30-31, 2017.

- 49th Annual Convention of the Operational Research Society of India, Birla Institute of Management Technology, Greater Noida, India, December 12–14, 2016

- Short term course on optimization using MATLAB through ICT, Mechanical Engineering Department, Indira Gandhi Delhi Technical University for Women, Delhi, India, October 24–28, 2016.

- International Conference on Recent Advances in Optimization Theory and Applications, Department of Mathematics, University of Delhi, India, January 30—31, 2016.

- Workshop on Research Methodology and Tools, Research and Consultancy Wing, Indira Gandhi Delhi Technical University for Women, India, November 6, 2015.

Faculty Development Programme Attended

- 5th Faculty Induction Programme, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD, Govenment of India , Banasthali Vidyapith,Rajasthan, **November 17 – December 16, 2019**.

Courses Taught

- Banasthali Vidyapith (2019-2021)

  - Mathematical Programming (MATH 515) for Masters students
  - Computational Labs II (MATH 418L) for Masters students
  - Complex Variables (MATH 209) for Bachelors students
  - Mathematics For Business Application (MATH 109) for Bachelors students
  - Mathematics for Management (MATH 306) for Bachelors students
  - Remedial Mathematics (MATH-110) for Bachelors students
  - Basic Mathematics (MATH-102) for Bachelors students

- Indira Gandhi Delhi Technical University for Women (2014-2018)

  - Applied Mathematics-I (BAS-101) for Bachelors students
  - Advanced Engineering Mathematics (BAS-202) for Bachelors students

TECHNICAL SKILLS

- **LaTeX, MATLAB, Mathematica, R**

PROFESSIONAL ACTIVITIES

- Member of Program committee in National Workshop on Mathematics: Concepts, Motivation and Applications sponsored by MHRD, January, 11-13, 2020 organized by Center for Excellence in Science and Mathematics Education, Banasthali Vidyapith

ACADEMIC REFEREES

- **Prof. Shalini Arora**, Professor (Mathematics)
  Department of Applied Sciences and Humanities
  Indira Gandhi Delhi Technical University For Women, Delhi, India
  shaliniaroraigit@gmail.com

- **Prof. Rita Malhotra**
  Mathematics Professor and Former Principal
  Kamala Nehru College, University Delhi, India
  Academic Advisor, Soka Ikeda College, Chennai
  Committee Member, POETRY SOCIETY INDIA
  drritamalhotra@gmail.com

- **Prof. Prabhat Mittal**
  Satyawati College (Eve.), University of Delhi, India
  p.mittal@satyawatie.du.ac.in