# CurriculumVitae

Title Dr	FirstN ame	Shruti	LastN me	la	Tohan	
Designation	Assistant Professor					
Department	Mathematics					
Institutional Email Address	skapoor@jmc.du.ac.in					
EDUCATION						
Degree	Institution		Year Details		etails	
PhD	IIT Delhi		2026		Thesis title: Study of Fluid Queues and Its Applications	
CAREERPROFILE				l		
Organisation /Institution	Designation		Duration	Ro	Role	
Jesus and Mary College	Assistant Professor		July 2009 to Presen t (15 years)	T€	Teaching and Mentoring	
PTC (formerly Servigistics)	Quality Assurance Engineer	July 2008 to June 2009				
AREAOF INTEREST	:	Numerical m	ethods, Probal	oility	theory and s	tatistic, Fluid queues
TEACHINGEXPERIEN	ICE(Subject	s/Courses ta	ught)			
Subjects taught:						
I. Numerical Methods						
II. Probability and Statistics						
III. Graph theory						
IV. Latex and HTML						

# V. Partial Differential Equations

Courses: B.Sc(H) Maths 1st, 2nd, 3rd year; B.A(Prog.) 1st, 2nd, 3rd year. B.El.Ed III

#### **HONORS& AWARDS**

- All India Rank 252 in GATE (Graduate Aptitude Test in Engineering), 2008
- Qualified NET (National Eligibility Test for Asst. Professor) 2008 with JRF (Junior Research Fellowship)

#### **PUBLICATION DETAILS**

#### Journal Articles:

- Kapoor, Shruti, and Dharmaraja Selvamuthu. "On the exact transient solution of fluid queue driven by a birth death process with specific rational rates and absorption." *Opsearch* 52, no. 4 (2015): 746-755
- Kapoor, Shruti, Selvamuthu Dharmaraja, and Viswanathan Arunachalam. "Transient solution of fluid queue modulated by two independent birth-death processes." *International Journal of Operational Research* 36, no. 1 (2019): 1-11
- Kapoor, Shruti, and Selvamuthu Dharmaraja. "Steady state analysis of fluid queues driven by birth death processes with rational rates." *International Journal of Operational Research* 37, no. 4 (2020): 562-578
- Kapoor, Shruti, and S. Dharmaraja. "Applications of Fluid Queues in Rechargeable Batteries." In Applied Probability and Stochastic Processes, pp. 91-101. Springer, Singapore, 2020
- S. Dharmaraja and Kapoor, Shruti, "On the time-dependent solution of fluid models driven by an M/M/1 queue using a probabilistic approach." *International Journal of Operational Research*, 2023 Vol.46 No.1, pp.65 72

## OTHER DETAILS:

- Member of NIRF 2022-24
- Convenor help desk for admission since 2022
- Member of Convocation committee- 2021-23
- Convenor of Western Dance Society-2017-2022
- Convenor of Indian Cultural Society-2022-2024
- Association Incharge, Dept. of Mathematics-May 2022-April 2024
- Teacher-In-Charge, Dept. of Mathematics-May 2024-till date

### Orientation and Refresher Courses:

- Summer faculty research fellow program, IIT Delhi, 13-05-2010 to 16-07-2010, IIT Delhi under Continuing Education Program
- Attended and completed SAP 01 and SAP B1 course in college to train students in SAP, JMC, December 2014, AMI Tech Pvt. Ltd.
- Workshop on ICT usages in Teaching, CPDHE, 1-09-2015 to 8-09-2015, UGC-HRDC
- Participated in capacity building workshop at Institute of lifelong Learning on e-content creation, held on 20th January 2016.
- 5th three- week Special Summer School, Jamia Millia Islamia, New Delhi, 26-05-2016 to 15-06-2016, UGC-
- 118th Four-Week Orientation Programme, Jamia Millia Islamia, New Delhi, 23-05-2017 to 19-06-2017, UGC-HRDC
- One Week Professional Development Programme, Jamia Millia Islamia, New Delhi, 24-12-2018 to 31-12-2018, UGC-HRDC
- 2-Week Faculty Development Programme on "Research Methodoly", Teaching Learning Center, Ramanujan College, University of Delhi, 1-10-2020 to 15-10-2020, Ministry of Human Resource Development Pandit Madan Mohan Malviya National Mission on Teachers and Teaching