

FACULTY PROFILE



Name: Dr. Tanuj Kumar

Designation: Assistant Professor

E-Mail: tanujkuo@srmist.edu.in

Professional Qualification:

- Ph.D in Mathematics from Jaypee University of Information Technology, Wagnaghat, 2015.
- M.Tech. from Jaypee Institute of Information Technology, Noida, Uttar Pradesh, 2011.
- B. Ed. from C.C.S. University, Meerut, Uttar Pradesh, 2007.
- M.Sc. from C.C.S. University, Meerut, Uttar Pradesh, 2006.
- B.Sc. from C.C.S. University, Meerut, Uttar Pradesh, 2004.

Publications (Journals & Conferences):

- **Kumar T.,** Bajaj R.K. “On some characterization results of R^{\sim} -norm dynamic survival entropies,” *Communications in Statistics-Theory and Methods*,1-17, 2021. [**Taylor & Francis; SNIP 1.01; SCI Index**]
- **Kumar T.,** Verma V. K. and Tyagi S. “On (R, S) -Norm Entropy of Intuitionistic Fuzzy Sets,” *Artificial Intelligence and Evolutionary Computations in Engineering Systems*, 785–796, 2020. [**Springer Book Series (AISC, volume 1056)**]
- **Kumar T.,** Bajaj R.K. and Ansari M.D. “On Accuracy Function and Distance Measures of Interval-valued Pythagorean Fuzzy Sets with Application in Decision Making,” *Scientia Iranica*, 2019. [**Scientia Iranica, Current IF: 0.83; Scopus, ISI-SCI Index**].

- **Kumar T.**, Bajaj R.K. “Credibility Distribution based R-Norm Fuzzy Information Measures in Noiseless Coding Theorems,” *International Journal of General Systems*, 48 (3), 302–320, 2019. [**Taylor & Francis, Current IF: 2.931; Scopus, ISI-SCI Index**].
- **Kumar T.** and Bajaj R.K. “NTV Metric based metric based Entropies of Interval Valued Intuitionistic Fuzzy Sets and their applications in Decision Making,” *Annals of Fuzzy Mathematics and Informatics*, 9(1), pp. 1–21, January 2015. [**MathSciNet, IF: 1.1147**].
- **Kumar T.** and Bajaj R.K. “On Complex Intuitionistic Fuzzy Soft Sets with Distance Measures and Entropies,” *Journal of Mathematics*, Vol 2014, pp. 1–12, 2014. [**Hindawi, MathSci Net**].
- **Kumar T.**, Bajaj R.K. and Gupta N. “Fuzzy Information Measure in Weighted Fuzzy Linear Regression Model under Linear Restrictions with Simulation Study,” *International Journal of General Systems*, 43(2), pp. 135–148, 2014. [**Taylor & Francis, IF: 1.667; Scopus, ISI-SCI Index**]
- **Kumar T.**, Bajaj R.K. and Gupta N. “On Some Parametric Generalized Measures of Fuzzy Information, Directed Divergence and Information Improvement,” *International Journal of Computer Applications*, 30(1), pp. 5–10, 2011.
- Singh S. and **Kumar T.**, “Intuitionistic fuzzy inventory model with quadratic demand rate, time-dependent holding cost and shortages,” *Journal of Physics*,” vol. 2223, pages. 012003, 2021.
- Chaudhary P. and **Kumar T.**, “An intuitionistic fuzzy inventory model with waste disposal using the triangular intuitionistic fuzzy numbers,” *Journal of Physics*,” vol. 2223, pages 012004 2021.
- Organized committee member of 21st Annual conference of Vijnana Parishad of India on “Modeling, Optimization and Computing for Technological and Sustainable Development (MOCTSD-2019) organized by *Department of Mathematics, SRMIST, Delhi NCR, Campus, Ghaziabad*, April 26-28, 2019.
- **Kumar T.** and Bajaj R.K. “Expected Value Based Ranking of Intuitionistic Fuzzy Variables,” *The American Institute of Physics Conference Proceedings*, 1860, 020030, pp. 1-11, 2017.
- Arora S. and **Kumar T.** “ST Intuitionistic Fuzzy Metric Space with Applications to Fixed Point Theorems,” *The American Institute of Physics Conference Proceedings*, 1860, 020030, pp. 1–6, 2017.
- Kaushik R., Bajaj R.K. and **Kumar T.** “On Intuitionistic Fuzzy Divergence Measure with Application to Edge Detection,” *Science Direct (Procedia Computer Science): 4th International Conference on Eco-friendly Computing and Communication Systems (ICECCS)*, 70, pp. 2–8, 2015. [**Scopus**].
- **Kumar T.** and Bajaj R.K. “Reliability Analysis of the k-out-of-n : G-System Using Triangular Intuitionistic Fuzzy Numbers,” *International Journal of Mathematical, Computational Science & Engineering*, 8(2), pp. 64–70, 2014.
- Bajaj R.K., **Kumar T.** and Gupta N. “R-norm Intuitionistic Fuzzy Information Measures and its Computational Applications,” *Springer: Communications in Computer and Information Science*, 305(8), pp. 372–380, 2012. [**Springer, ISI Index, DBLP, Scopus**].
- **Kumar T.**, Bajaj R.K. and Gupta N. “Reliability Evaluation of Series and Parallel Systems using Trapezoidal Intuitionistic Fuzzy Sets,” *IEEE {2nd International conference on Advances in Computing and Communications (ICACC)}*, pp. 219–222, 2012. [**Scopus**]
- Bajaj R.K., **Kumar T.** and Gupta N. “NTV Metric based New Similarity Measure for Intuitionistic Fuzzy Sets with its Computational Application in Medical Diagnosis,” *IEEE*

{2nd International conference on Advances in Computing and Communications (ICACC), pp. 1–4, 2012. [Scopus]

- **Kumar T.**, Bajaj R.K. and Gupta N. “Fuzzy Entropy on Restricted Fuzzy Linear Regression Model with Cross Validation and Applications,” *IEEE {2nd International conference on Advances in Computing and Communications (ICACC), pp. 5–8, 2012 [Scopus].*

Awards and Achievements

- Received Research Fellowship during Ph.D
- Received Teaching Assistantship during M.Tech
- Qualified Graduate Aptitude Test in Engineering (**GATE**) in 2009.

Workshops/Seminars/FDPs

- Participated in the FDP on “IOT and Wearable Devices for Smart City Infrastructure” organized by the *SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, (U.P.)*, during June 20–25, 2022.
- Participated & Completed successfully AICTE Training and Learning (ATAL) Academy online Elementary FDP on “Novel Materials” organized by the *SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, (U.P.)*, during August 23–27, 2021.
- Participated and successfully completed the 5-day online FDP on the theme “Inculcating Universal Human Values in Technical Education” organized by All India Council for Technical Education(AICTE) from 9 August, 2021 to 13 August, 2021.
- Participated in the webinar titled Faculty Development Programme on “Mathematics and Its Applications in Science and Technology”, organized by Department of Mathematics, School of Basic Sciences , College of Engineering and Technology, SRM Institute of Science and Technology, Kattankulathur, from July 06- 16, 2020.
- Participated in the International Faculty Development Programme on “Prominence of Mathematics in Diverse Sectors”, organized by Science and Humanities of Hindustan College of Engineering and Technology from 15.07.2020 to 20.07.2020
- Successfully completed “**NPTEL**” online certification courses: --Calculus of one variable (8 weeks), **Elite+Silver**, Jul-Sep 2019.
- Successfully completed “**NPTEL**” online certification courses: ----Probability and Statistics (FDP approved by AICTE), 12 weeks, **Elite +Silver**, Jan-Apr, 2019
- Participated in the FDP on “Cyber Security and Big Data Analytics” organized by the *SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, (U.P.)*, during May 14–19, 2018.
- Successfully completed “**NPTEL**” online certification courses: ---Introduction to Abstract and Linear Algebra (FDP approved by AICTE), 8 weeks, **Elite**, Aug-Oct, 2018.
- Successfully completed “**NPTEL**” online certification courses: ----Introduction to Ordinary and Partial Differential Equations and Applications (FDP approved by AICTE), 12 weeks, **Elite**, Jul-Oct, 2018.

- Participated in “Application of Technical Terminology in Modeling Optimization and Computing in Science and Technology” organized by *Commission for Scientific and Technical Terminology (Department of Higher Education, MHRD)*, April 26–28, 2019
- Participated in the FDP on “ERUDITIA 2018” organized by the *SRM Institute of Science and Technology, Delhi-NCR Campus, Ghaziabad, (U.P.)*, during June 12–23, 2018.
- Participated in the “Second International Conference on Eco-friendly Computing and Communication Systems (ICECCS),” held in the *Department of Mathematics, Jaypee University of Information Technology, Wagnaghat (H.P.)*, during Oct.17–19, 2013.
- Presented a paper titled “Fuzzy Complex Numbers” in the International conference on *Mathematical Modelling and Computational Techniques*, held in Punjab University, Chandigarh, India, during Sept. 27–28, 2013.
- Presented a research paper titled “Fuzzy Information Measure in Weighted Linear Regression Model under Exact Linear Restrictions in National Conference on *Advances and Applications in Statistics*, held in Punjab University, Chandigarh, India during Feb. 20–21, 2012.
- Participated in the FDP by National Board of Higher Mathematics Instructional School on “Lectures in Differential Equations and Computations” organized by the *Department of Mathematics, Jaypee University of Information Technology, Wagnaghat (H.P.)* during June 04–16, 2012.
- Short term course on “Numerical Methods in Science and Engineering” organized by *Department of Mathematics, Motilal Nehru National Institute of Technology* held during 25–26 August, 2012.
- Attended a Workshop on “Data Mining and Parallel computing” jointly organized by *Jaypee University of Information Technology, Wagnaghat & University of Florida* held during 2–5 August, 2011.
- Workshop on “Wavelets and its Applications in Signal Processing” organized by *Jaypee Institute of Information Technology, Noida* held on 20th April, 2011.
- Attended a Workshop on “Advanced Computing and Software Tools” organized by *Jaypee Institute of Information Technology, Noida* held on 30 October, 2010.
- Short term course on “Statistical Modelling of Systems” organized by *Indian Institute of Technology Kharagpur* held during June 28-July 04, 2010.

Work Experience:

- Assistant Professor, SRM IST, Delhi NCR Campus, Ghaziabad from 2017 to till date.
- Assistant Professor, Lovely Professional University, Phagwara from 2015 to 2017.
- Assistant Professor, Invertis University, Bareilly from 2014 to 2015.

Professional Memberships:

- Member of International Association of Engineers (**IAENG**)-125733
- Member of The Indian Society for Technical Education (ISTE)-LM 137324
- Member of Soft Computing Research Society (SCRS)- 2023-06-04-1013