



Dr. Naveen Kumar

Assistant Professor

Department of Mathematics

School of Engineering

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India

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1. ABOUT

Dr. Naveen Kumar is an Assistant Professor in the Department of Mathematics, School of Engineering, Dayananda Sagar University, Bengaluru. Prior to joining DSU, he served as a Postdoctoral Fellow in the Department of Electronics and Communication Engineering at Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Bengaluru. He obtained his Ph.D. in Mathematics from the National Institute of Technology Silchar. His research expertise lies in fuzzy set theory, intuitionistic fuzzy sets, distance and similarity measures, aggregation operators, multi-criteria decision-making, uncertainty modeling, and fuzzy clustering. He has published several research articles in reputed international journals and contributed book chapters, with ongoing collaborations in computational intelligence and artificial intelligence. He is actively engaged in teaching undergraduate and postgraduate mathematics courses, mentoring student projects, and guiding young researchers, with a strong commitment to excellence in teaching, research, and academic collaboration.

2. RESEARCH INTERESTS

- Uncertainty Modeling
- Fuzzy Set Theory
- Generalized Fuzzy Sets
- Fuzzy Aggregation Operators
- Decision-Making
- Multi-Criteria Decision-Making

3. ACADEMIC QUALIFICATIONS

- **Ph.D. in Mathematics** — National Institute of Technology (NIT) Silchar, Assam, 2025.
- **M.Sc. in Mathematics** — Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand, 2017.
- **B.Sc. in Mathematics** — Hemvati Nandan Bahuguna Garhwal University, Uttarakhand, 2015.

4. PROFESSIONAL EXPERIENCE

- **Assistant Professor** — Department of Mathematics, School of Engineering, Dayananda Sagar University, Bengaluru, August 2026–Present.
- **Postdoctoral Fellow** — Department of Electronics and Communication Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Bengaluru, October 2025 – July 2026.
- **Teaching Assistant** — Department of Mathematics, National Institute of Technology (NIT) Silchar, Assam, July 2020 – December 2024.

5. RESEARCH HIGHLIGHTS

- **Publications:** 8 research articles published in international journals, with additional manuscripts under review.
- **Books/Book Chapters:** 3 book chapters published in academic/research volumes.
- **Awards/Recognitions:** Qualified CSIR-UGC NET (2019) with AIR 74 and GATE Mathematics (2019) with a score of 581.
- **Research Projects:** No externally funded research projects.
- **Academic/Conference Role:** Active participation in academic research, collaboration, student mentoring, and research activities.
- **Reviewer/Editorial Activities:** Reviewer for Engineering Applications of Artificial Intelligence (EAAI) and Scientific Reports.

6. SELECTED PUBLICATIONS

1. **Naveen Kumar, Chinmaya Pradhan, and Juthika Mahanta**, “Hybrid multicriteria decision-making with a novel 3D similarity measure in an intuitionistic fuzzy environment: application in medical diagnosis,” *International Journal of Information Technology & Decision Making*, World Scientific, 2026. DOI: 10.1142/S0219622026500215.
2. **Naveen Kumar, Rohit Kumar Mandal, A. Sarkar, and Juthika Mahanta**, “An exponential Intuitionistic fuzzy metric and its application in varied decision making,” *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, World Scientific, 2025. DOI: 10.1142/S021848852550031X
3. **Naveen Kumar and Juthika Mahanta**, “Exploring social media addiction using an adapted distance measure through hybrid Pythagorean MCDM methodology,” *Arabian Journal for Science and Engineering*, Springer, 2025. DOI: 10.1007/s13369-025-10402-8.
4. **Naveen Kumar and Juthika Mahanta**, “A matrix norm-based Pythagorean fuzzy metric and its application in MEREC-SWARA-VIKOR framework for solar panel selection,” *Applied Soft Computing*, Elsevier, 2024. DOI: 10.1016/j.asoc.2024.111592.
5. **Naveen Kumar, Anjali Patel, and Juthika Mahanta**, “K-L divergence-based distance measure for Pythagorean fuzzy sets with various applications,” *Journal of Experimental & Theoretical Artificial Intelligence*, Taylor & Francis, 2023. DOI: 10.1080/0952813X.2023.2240813.

7. ACADEMIC PROFILES

- Google Scholar Link: <https://scholar.google.com/citations?hl=en&user=OYTX8isAAAAJ>
- Research Gate Link: https://www.researchgate.net/profile/Naveen-Kumar-358?ev=hdr_xprf
- Scopus ID: 57281876200
- ORCID ID: <https://orcid.org/0000-0002-0983-8358>

8. CONTACT

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