CURRICULUM VITAE

Dr. Shivam Shreevastava

Assistant Professor Dept. of Mathematics HBTU, KANPUR E-mail:<u>shivam386@gmail.com</u> Contact No: +91-8527904993

Educational Qualifications:

Doctor of Philosophy (Ph.D.)

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Institute/University: Indian Institute of Technology (Banaras Hindu University)
Varanasi, U.P., India.
Title of Ph.D. Thesis : Hybridization of rough set with intuitionistic fuzzy set and its
application to attribute reduction.
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Supervisor: Dr. Tanmoy Som, Professor, IIT (BHU).PhD Completion: 2018Department: Mathematical Sciences

Master of Science (M.Sc.)

University	:	Indian Institute of Technology, Kanpur, India
Subject	:	Mathematics
Year	:	2013
Percentage/CGPA	:	6.8

Bachelor of Science (B.Sc.)

University	:	Institute of Science, Banaras Hindu University, Varanasi, India
Subject	:	Mathematics
Year	:	2011
Percentage/CGPA.	:	8.57

Intermediate (10+2)

Board	:	U.P. Board, Allahabad, U.P., India
College	:	BRP Inter College, Jaunpur
Year	:	2008
Percentage/CGPA :		77.20

High school (10th)

Board	:	U.P. Board, Allahabad, U.P., India
College	:	FDSP, Jaunpur
Year	:	2006
Percentage/CGPA	:	76.6

Honors & Awards:

- Qualified BHU UET 2008
- Qualified IIT-JAM in 2011
- Qualified GATE-2013
- Qualified UGC-JRF-June, 2014

Fellowships Availed:

- Availed MCM scholarship during 2011-2012 in IIT Kanpur.
- Availed NBHM M.Sc. 2012-2013 scholarship.
- ▶ Junior Research Fellowship (2013-2015) by MHRD, India.
- Senior Research Fellowship (2015-2018) by MHRD, India.

Published Papers in Journals:

- Paul, A., Mishra, A. K., Shivam Shreevastava, & Tiwari, A. K. (2022). Deep Reinforcement Learning based reliable spectrum sensing under SSDF attacks in Cognitive Radio networks. Journal of Network and Computer Applications, 103454, 2022.(IF: 6.281)
- Anoop Kumar Tiwari, Shivam Shreevastava (Corresponding Author), Tanmoy Som, and K. K. Shukla, "Tolerance-based intuitionistic fuzzy-rough set approach for attribute reduction", Expert Systems with Applications 101, 205-212, 2018. (IF: 6.954)
- Shivani Singh, Shivam Shreevastava (Corresponding Author), Tanmoy Som, and Pankhuri Jain, "Intuitionistic Fuzzy Quantifier and Its Application in Feature Selection", International Journal of Fuzzy Systems 21(2), 441-453, 2019. (IF: 4.673)
- Shivani Singh, Shivam Shreevastava (Corresponding Author), Tanmoy Som, and Gaurav Somani, "A Fuzzy Similarity-based Rough Set Approach for Attribute Selection in Set-Valued Information Systems", Soft Computing (Springer), 24(6), 4675-4691. (IF: 3.643)
- Anoop Kumar Tiwari, Shivam Shreevastava (Corresponding Author), K. K. Shukla, S. Karthikeyan, "New Approaches to Intuitionistic Fuzzy-Rough Attribute Reduction", Journal of Intelligent and Fuzzy Systems (IOS Press), 34(5), 3385-3394, 2018. (IF: 1.852)
- Anoop Kumar Tiwari, Shivam Shreevastava (Corresponding Author), Karthikeyan Subbiah, and Tanmoy Som, "An intuitionistic fuzzy-rough set model and its application to feature selection", Journal of Intelligent & Fuzzy Systems 36, no. 5 (2019): 4969-4979. (IF: 1.852)
- Shivam Shreevastava, Singh, S., Tiwari, A. K., & Som, T. (2021). (2005-5897) Different classes ratio and Laplace summation operator based intuitionistic fuzzy rough attribute selection. *Iranian Journal of Fuzzy Systems*. (IF: 2.276)
- Shivam Shreevastava, Anoop Kumar Tiwari, and Tanmoy Som, "Intuitionistic Fuzzy Neighborhood Rough Set Model for Feature Selection", International Journal of Fuzzy System Applications (IJFSA) 7(2), 75-84, 2018.

Published Paper(s) in Conference Proceedings:

- Anoop Kumar Tiwari, Shivam Shreevastava (Corresponding Author), K. Subbiah, T. Som. "Enhanced Prediction for Piezophilic Protein by Incorporating Reduced Set of Amino Acids Using Fuzzy-Rough Feature Selection Technique Followed by SMOTE." In International Conference on Mathematics and Computing, pp. 185-196. Springer, Singapore, 2018.
- Shivam Shreevastava, Anoop Tiwari, and Tanmoy Som. "Feature Subset Selection of Semisupervised Data: An Intuitionistic Fuzzy-Rough Set-Based Concept." In Proceedings of International Ethical Hacking Conference 2018, pp. 303-315. Springer, Singapore, 2019.
- Shivani Singh, Shivam Shreevastava (Corresponding Author), Tanmoy Som, "Attribute Reduction of Incomplete Information Systems: An Intuitionistic Fuzzy Rough set approach", Advances in Intelligent Systems and Computing-Springer, 2018.

Book Chapters:

- Tanmoy Som, Shivam Shreevastava, Anoop K. Tiwari, Shivani Singh; Fuzzy Rough Set Theory-Based Feature Selection: A Review; Mathematical Methods in Interdisciplinary Sciences, First Edition. Edited by Snehashish Chakraverty. © 2020 John Wiley & Sons, Inc.
- Anoop K. Tiwari, Shivam Shreevastava (Corresponding Author), Neelam Kumari, Arti Malik, T. Som; Application of Feature Extraction and Feature Selection followed by SMOTE to improve the prediction of DNA-Binding Proteins; Fuzzy, Rough and Intuitionistic Fuzzy Set Approaches for Data Handling: Theory and Applications, Springer, 2022.
- R.K. Pandey, Anoop Kumar Tiwari, Shivam Shreevastava, Tanmoy Som; Enhancing the prediction of anti-cancer peptides by suitable feature extraction and FRFS with ACO search followed by resampling, Fuzzy, Rough and Intuitionistic Fuzzy Set Approaches for Data Handling: Theory and Applications, Springer, 2022.

Teaching Experience: Currently, I am working as an Assistant Professor in the Department of Mathematics, HBTU, Kanpur since 20th June, 2022.

I worked as an Assistant Professor in the Division of Mathematics, SBAS, Galgotias University, Greater Noida from 07 Aug, 2019 to 10 June, 2022.

Ancillary Responsibilities performed in Galgotias University						
S. No.	Details					
1	NAAC Criteria 7 incharge (School)					
2	NAAC Criteria 1 member (School)					
3	e-content Coordinator (School)					
4	Time Table Coordinator (Departmental)					
5	NPTEL Coordinator (Departmental)					
6	MS Teams Coordinator (School)					
7	Institutional Repository Coordinator (School)					

M.Sc. Student Guided: 1(Completed)

Ph.D. Student: 1(Pursuing)

International Conference Attended/ Papers Presented:

- Attended a conference entitled "International Conference on Mathematical Modelling and Computer Simulation" in Dec 2014 at IIT Chennai.
- Attended a conference AMNS 2016 in May 2016 at Kathmandu, Nepal.
- Presented a paper entitled "A fuzzy rough set and intuitionistic fuzzy rough set approach for feature selection" in the international conference of the Indian Mathematics Consortium in cooperation with American Mathematical Society held at DST-CIMS, ISc BHU, Varanasi in Dec 14-17, 2016.
- Presented a paper entitled "Enhanced Prediction for Piezophilic Protein by incorporating reduced set of amino acids using fuzzy-rough feature selection technique followed by SMOTE" in the 4th international conference on Mathematics and Computing at IIT BHU during January 9-11,2018.

Workshops and Training Programs Attended

- 1. Participated in workshop "Advanced Training Program in Linear Algebra and Analysis" in 2010 Sponsored by the DST at BHU, Varanasi.
- 2. Attended a national workshop on "Mathematical Modeling & Computer Simulation" under the aegis of the Teaching-Learning Cell, IIT(BHU) during March 20-21, 2015.
- 3. Participated in the International Training Workshop on "Fuzzy Logic with Applications" at IIT BHU, Varanasi during March 20-25, 2017.
- 4. Attended a workshop on "New trends in Fuzzy and Rough set theory and its applications" during 25-29 Sept 2020 in Manipal University, Jaipur.
- 5. Introduction to fuzzy set theory, arithmetic and logic by NPTEL during Sep-Dec, 2020.
- 6. R-for beginners organized by SCET, Maharashtra from 21-26 May, 2020.
- 7. R-training organized by Spoken tutorial project, IIT Bombay during Jan 2020.
- 8. Introduction to Python from DataCamp on May 08, 2020.

I hereby declare that the above mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the mentioned particulars.

Date: 29 June 2022 Place: Kanpur