Faculty Profile
(For booklet and website)

Name: Dr. Manoj Kumar Gupta

Designation: Associate Professor

Department: Computer Science & Engineering

Email ID: manoj.gupta@smvdu.ac.in, manoj.cst@gmail.com

Contact Number and Extn.: +919458393844

Qualification: B.Tech, M.Tech, Ph.D

Experience:

Teaching: 15.5yrs   **Research:** 3.5yrs   **Total:** 19yrs

Areas of Interest / Specialization:

1. Bioinformatics and Computational biology, Algorithms, Data mining

Brief Bio-data:

Manoj K. Gupta received the B.E. degree in Computer Science and Engineering from CCS University, Meerut in 2001, the Master of Technology in Computer Science and Engineering from HBTU Kanpur (Erstwhile HBTI Kanpur) in 2009 and Ph.D from the Department of Computer Science and Engineering, IIT Roorkee, Roorkee, in 2014. He has more than nineteen years of teaching and research experience and published around 40 research papers in international/national journal and conferences of high repute. Currently, he is working as Associate Professor & Head of School of Computer Science and Engineering, SMVDU Katra, J & K, India. His research areas of interest include Bioinformatics, Algorithms, Computational biology and Data mining.

Research Profile

Research Publications: International Journal

S.No.	Year	Publication
1	2013	Manoj Kumar Gupta, R. Niyogi and M. Misra, "A New Adjacent Pair 2D Graphical Representation of DNA Sequences," Journal of Biological Systems, vol. 21 (3), 2013, World Scientific. [SCI Indexed, IF=0.7]
2	2013	Manoj Kumar Gupta, R. Niyogi and M. Misra, "An alignment-free method to find similarity among protein sequences via the general form of Chou's pseudo amino acid composition," SAR and QSAR in Environmental Research, vol. 24 (7), pp. 597-609, 2013, Taylor and Francis.[Impact Factor=2.08].
3	2014	**Manoj Kumar Gupta**, R. Niyogi and M. Misra, "A 2D graphical representation of

		protein sequence and their similarity analysis with probabilistic method,"MATCH Commun. Math. Comput. Chem., vol. 72 (2), pp. 519-532, 2014. [SCI Indexed, IF=1.7].
4	2015	Syed AsmaAndrabi, Manoj Kumar Gupta, "Similarity Analysis of DNA Sequences Using BWT Technique," International Journal of Science and Research (IJSR) ISSN: 2319-7064, vol. 4(5) pp.2456-2459, 2015.
5	2015	AbdullahiHaruna Adam, Manoj Kumar Gupta, Ahmed BaitaGarko, "Knowledge discovery approach to repair a textual attributes in data mining," International Journal of Science Technology and Management, ISSN: 2394-1537, vol. 4(9), pp.67-72, 2015.
6	2016	ShaluBhati, Manoj Kumar Gupta, "Missing Data Imputation for Medical Database: Review", International Journal of Advanced Research in Computer Science and Software Engineering, vol. 6 (4), pp. 754-758[ISSN: 2277 128X], 2016.
7	2016	HarshitTandon, Manoj Kumar Gupta, "Enhancement in DBSCAN using SIFT Technique,"International Journal of Advanced Research in Computer Science and Software Engineering vol. 6 (4), pp. 935-941, ISSN: 2277 128X, 2016.
8	2016	Himanshu Sharma, Ashish Kumar, Manoj Kumar Gupta, "A Comparative Review of Various Energy Efficient DSR Routing Protocols in MANET," International Journal of Computer Trends and Technology, vol. 38 (1), pp. 5-14, [ISSN:2231-2803]**,** 2016.
9	2016	Temitope B. Salau, Manoj K. Gupta, Abdulkadir Ibrahim, "Data Preservation and Breach Detection in Social Network," International Journal of Innovative Science, Engineering & Technology, vol. 3 (5), pp. 144-151, ISSN (Online) 2348 – 7968,2016.
10	2017	Himanshu Sharma, Ashish Kumar, Manoj Kumar Gupta, "Performance Enhancement of Routing Protocol in MANET by implementing Ant Colony Optimization" International Journal of Advanced Research in Computer Engineering & Technology (IJARCET), vol. 6(7), pp.1090-1098 ISSN: 2278 – 1323, July 2017.
11	2018	Sarthak Yadav, Manoj Kr. Gupta, and Ankur Singh Bist, "Prediction of Ubiquitination Sites Using UbiNets", Advances in Fuzzy Systems, Hindwai, vol. 2018, pp.1-10, 2018. [Scopus, E-ISSN: 1687711X].
12	2019	Kanica Sachdeva and Manoj Kr Gupta, "A Comprehensive Review of Feature Based Methods for Drug Target Interaction Prediction," Journal of Biomedical Informatics, Article, vol. 93, pp.1-19. 2019. [DOI: https://doi.org/10.1016/j.jbi.2019.103159, SCI Indexed, IF:2.89, ISSN: 1532-0464].
13	2019	Payal Maken, Abhishek Gupta, Manoj Kumar Gupta, "A Study on Various Techniques Involved in Gender Prediction System: A Comprehensive Review," Cybernetics and Information Technologies, vol. 19 (1), pp.51-73, 2019 [Scopus, IF=0.88, ISSN: 1314-4081].
14	2019	Duraksha Ali, Manoj Kumar Gupta, "Deadline Sensitive Lease Scheduling Using Hungarian Genetic Algorithm in Cloud Computing Environment," International Journal of Computer Sciences and Engineering, Vol.7, Issue.12, pp.7-15, 2019. [DOI: https://doi.org/10.26438/ijcse/v7i12.715, ISSN:2347-2693, UGC J.NO. 63193, H-index=12].
15	2020	Kanica Sachdeva and Manoj Kr Gupta, "A Comprehensive Review of the Computational Techniques for the Prediction of Drug Side Effects" Journal of Drug Development Research, Wiley Online Library, Vol. 81 (4), pp. 2020.[DOI=https://doi.org/10.1002/ddr.21669, SCI, IF=1.742, ISSN:1098-2299, h-index=54, citescore=2.43].

| 16 | 2020 | Kshatrapal Singh, Ashish Kumar & Manoj Kumar Gupta (2020) Modified k-string in composition vector method for DNA sequence comparison based on maximum entropy principle, Journal of Interdisciplinary Mathematics, Taylor and Francis, Vol. 23(1), pp.31-41,[DOI: 10.1080/09720502.2020.1721649.   Online   ISSN: 2169-012X,   SCOPUS, Citescore=0.54] |

Conference Publications:

S.No.	Year	Conference	Publication
1	2019	8th International Conference on. System Modeling & Advancement in Research Trends, TMU Moradabad, 22 -23 November, 2019	Tanzeela Javid and Manoj Kumar Gupta, "Privacy Preserving Classification Using 4-Dimensional Rotation Transformation"
2	2019	ICICT 2019 held at KIET Ghaziabad, Sep 27-28, 2019.	Kanica Sachdeva and Manoj Kr Gupta, "An Improved Approach for Predicting Drug Target Interactions"
3	2019	ICICT 2019 held at KIET Ghaziabad, Sep 27-28, 2019.	Arjun Puri and Manoj Kr Gupta, "Comparative analysis of resampling techniques under noisy imbalanced datasets"
4	2019	International Conference on Recent Innovation in Computing at Central University of Jammu, Jammu, 8-9 March, 2019.	Kanica Sachdeva and Manoj Kr Gupta, "Predicting Drug Target Interactions Using Dimensionality Reduction with Ensemble Learning"
5	2019	5th International Conference on Signal Processing and Communication, JIIT Noida, March 7-9, 2019.	Sukanya, Manoj Kumar Gupta, Archana Gupta, "Performance analysis of Imputation Approaches with noise filtration on medical data"
6	2019	5th International Conference on Computational Intelligence and Communication Technology, ABES Ghaziabad, Feb 22-23, 2019.	Duraksha Ali and Manoj Kumar Gupta, "Advanced deadline sensitive scheduling approaches in cloud computing environment,"
7	2019	5th International Conference on Computational Intelligence and Communication Technology, ABES Ghaziabad, Feb 22-23, 2019.	Wajeeha Rashid and Manoj Kumar Gupta, "A Perspective of Missing Value Imputation Approaches."
8	2018	5th International Conference on Recent Trend and Advancement in Engineering and Technology, SMVDU Katra, Oct 25-26, 2018	Kanica Sachdeva and Manoj Kr Gupta, "A novel technique to predict drug target interaction using ensemble of SVM classifiers",
9	2018	5th International Conference on Recent Trend and Advancement in Engineering and Technology, SMVDU Katra, Oct 25-26, 2018.	Arjun Puri and Manoj Kr Gupta, "Comparative analysis of class imbalance over machine learning algorithm",

10	2017	ICMLCI-2017, SMVDU Katra, Sep 28-29, 2017.	Kanica Sachdeva and Manoj Kumar Gupta "Research Issues in Biological Data Mining: A Review",
11	2017	ICMLCI-2017, SMVDU Katra,Sep 28-29, 2017.	Arjun Puri and Manoj Kumar Gupta, "Review on Missing Value Imputation Techniques in Data Mining"
12	2017	ICRTAET-2017, SMVDU Katra Nov 3-4, 2017	Sukanya, Manoj Kumar Gupta, "A survey on different techniques for handling missing values in dataset
13	2014	3rd International Conference on System Modeling & Advancement in Research Trends (SMART) College of Computing Sciences and Information Technology (CCSIT),	Pritee Gupta, Yashpal Singh, Manoj Kr. Gupta, "Moving Object Detection Using Frame Difference, Background Subtraction and SOBS for Video Surveillance Application," pp. 151-156, Nov 22-23, 2014.
14	2013	*The Sixth International Conference on Contemporary Computing (IC3-2013),* ISBN:978-1-4799-0190-6.	Manoj Kumar Gupta, Rajdeep Niyogi and Manoj Misra, "A framework for Alignment-free methods to perform similarity analysis of biological sequence," pp. 337 – 342,ISBN:978-1-4799-0190-6.
16	2013	Third International Conference on Computer Science and Information Technology (CCSIT- 2013), *Springer,* Banglore, India	Manoj Kumar Gupta, R.Niyogi and M. Misra, "A new alignment free method for similarity/dissimilarity analysis of protein sequences," Feb 18-20, 2013.
17	2013	International Conference on Advanced Research in Engineering and Technology, IEEE, K.L. University, Guntur, India	Manoj Kumar Gupta, R.Niyogi and M. Misra, "Analysis of similarity/ dissimilarity of DNA sequences based on adjacent nucleotide pair representation," Feb 8-9, 2013
18	2013	The International Conference on Bioinformatics & Computational Biology (BIOCOMP'13), Las Vegas, Nevada, USA, 2013.	Manoj Kumar Gupta, Aniket Mittal, R.Niyogi and M. Misra,Parallelizati-on of Composition Vector Method for Sequence Similarity Analysis, pp. 159-164, ISBN: 1-60132-234-8, July 2013.
19	2012	International Conference Information Systems Design and Intelligent Applications (INDIA 2012), Springer, Visakhapatnam, India	Manoj Kumar Gupta, R.Niyogi and M. Misra, An experimental analysis of phylogenetic trees based on topological score, January 5–7, 2012, pp. 237–244.
20	2009	International Conf. on Emerging Trends in Engg. and Technology-ICETET-2009 Co-sponsored by IEEE Systems, Man and Cybernetics Society, USA.	Manoj Kr Gupta, Mayank Dave, ArchanaPurwar, Simulation of Power Efficient Region Based Approach for Query Processing in Wireless Sensor Networks, Dec 16-18, 2009, pp. 1104-1109, ISBN: 978-1-4244-5250-7.
21	2009	International Conference on Advance Computing - ICAC-09, Trichy, India	Manoj Kr Gupta, Dr. Mayank Dave, Simulation of Region Based Approach for Query Processing in Wireless Sensor Networks, Aug 06-08, 2009.

22	2004	National Conference proceedings on Fuzzy logic and its application in technology and management", Indian Institute of Technology Kharagpur,	Bhavesh Kumar Chauhan, Manoj Kr Gupta, "Neuro-fuzzy approach based model for short-term electric load forecasting," vol. FLATeM-04, pp 84-86, May 2004.
23	2004	National Conference on Automation in Electricity Distribution System *Delhi College of Engineering, Delhi*,	Bhavesh Kumar Chauhan, Manoj Kr Gupta. "ANN based short term load forecasting, vol. APDS-04, page 100-108, Jan 2004.
24	2004	National Seminar proceeding on Energy Management, *NTTTI Chandigarh*,	Bhavesh Kumar Chauhan, Jitendra Singh Rawat, Manoj Kr Gupta, Short-term load forecasting using ANN, vol. 6, no. 1, pp 36-38, March 2004.

Research Supervised (M.Tech):

S.No.	Year	Role	Research Topic	Status
1	2014	Supervisor	Similarity analysis of DNA sequence using BWT Technique	Completed
2	2015	Supervisor	Association Rule Mining on Medical Data to Predict Heart Disease	Completed
3	2015	Supervisor	Data Cleaning on Payroll System For Educational Sector in Nigeria	Completed
4	2015	Supervisor	Frequent Pattern Mining –A comparative study of various algorithm	Completed
5	2016	Supervisor	Multiclass imbalanced classification with missing value imputation	Completed
6	2016	Supervisor	Enhanced DBSCAN clustering algorithm using fuzzy logic	Completed
7	2016	Supervisor	Privacy Preserving Data Mining	Completed
8	2018	Supervisor	Performance Analysis of Missing value imputation after instance selection	Completed
9	2019	Supervisor	Missing value imputation using cosine similarity measure	Completed
10	2019	Supervisor	Deadline sensitive lease scheduling using Hungarian-Genetic algorithm(HGA) in cloud computing	Completed
11	2019	Supervisor	A Hybrid-Security Model for Privacy-Enhanced Distributed Data Mining.	Ongoing
12	2020	Supervisor	Moto imagery and mental task classification algorithms in non-invasive Brain-Computer interfacce	Ongoing

Award and Honours:

S.No.	Title	Activity/Event	Given by	Year
1	Scholarship	Research Scholarship	MHRD	Jan 2010-July 2013
2	Travel grant	Airfare and registration fees for the participation in International conference at Nevada, USA	CSIR and DST	July 20132

Professional Affiliation:

S.No.	Designation	Organization
1	Member	Universal Association of Computer and Electronics Engineers (UACEE): Membership No.SM1003125
2	Member	International Association of Engineers (IAENG). Membership No. 108052
3	Member	International Association of Computer Science and Information Technology (IACSIT) Membership No. 80338397

Invited as resource persons in workshops/seminars/Conferences

1) Resource person for delivering a session on titled "Sequence analysis & drug target interaction prediction" in one-week FDP program on "Intelligence Systems and Informatics" held during July 08-13, 2019, at JIIT Noida.
2) Guest Lecture at Model Institute of Technology, Jammu on April 6, 2019, titled "Recent Advancements in Artificial Intelligence."
3) Session Chair in the International Conference on Recent Innovation in Computing at Central University of Jammu, during 8-9 March, 2019.
4) Invited talk in one-day National Seminar titled "Information Communication Technology Enabled Education in Rural Areas" at Guru Nanak Dev University College, Pathankot on 9 March, 2019.
5) Session Chair International Conference on Recent Trends and Advancements in Engineering & Technology Oct 25-26, 2018, SMVDU, Katra.
6) Session Chair and at International Conference of System Modeling advancements in Research Trend (SMART-2018) at Teerthanker Mahaveer University, Moradabad during Nov 23-24, 2018.
7) Keynote speaker and Session Chair at International Conference of System Modeling advancements in Research Trend(SMART-2017) at Teerthanker Mahaveer University, Moradabad during Dec 29-20, 2017.
8) Invited talk in two days National Conference titled "Mathematical Sciences and its Application" at GGMC on 19-20 Jan, 2018.
9) Lecture delivered at JNTU Hyderabad, titled "Similarity Analysis by Dynamic Programming of sequences" under TEQIP-III Twining Program on Jan 29, 2018.
10) Delivered a session on "Introduction to R programming" in Two-Week Refresher Course on Introduction to MATLAB and Research Enhancement Tools (Phase-2) held during July 13-22, 2018 under HRDC at SMVDU, Katra