Curriculum Vitae

Contact info: +91-9458393844, 419FF, SK-4, Indirapuram, Ghaziabad
Email: manoj.cst@gmail.com, manoj.gupta@smvdu.ac.in

Prof (Dr.) MANOJ KUMAR GUPTA
(B.Tech, M.Tech, PhD (IITR))

EXPERIENCE	Total Experience: 23+ years Teaching Experience: 20 years Research and Teaching Experience: 3.5 years
Research and Teaching Interest	Bioinformatics and Computational Biology, Machine Learning, Artificial Intelligence Design and Analysis of Algorithm, Neural Network, Data structure, Soft Computing, , Programming in C language,

Academic Qualifications

- ➢ **PhD** from the Department of Computer Science and Engineering, **IIT Roorkee**, Roorkee, in 2014.
- ➢ M.Tech (Computer Science and Engineering) with 9.33CPI from HBTI Kanpur, affiliated to AKTU (Erstwhile Uttar Pradesh Technical University), Lucknow in 2009.
- ➢ B.E (Computer Science and Engineering) from Dr. K. N. Modi Institute of Engineering & Technology, Modinagar (U.P) in 2001.
- ➢ Gate Qualified-(2002)

Research Experience

Dec 31, 2009 - July 31, 2013, Research Scholar, Indian Institute of Technology Roorkee, Roorkee, India

Professional Brief

1. July 05, 2020 - Cont., Professor, SMVDU Katra, Jammu
2. July 05, 2017 - July 04 2020, Associate Prof., SMVDU Katra, Jammu
3. July 08, 2016 - June 30, 2017, Associate Prof. KIET, Ghaziabad
4. Aug 07, 2014 - July 06, 2016, Associate Prof., Sharda University, Greater Noida
5. Aug 17, 2013 - Aug 06, 2014, Associate Prof./Asst. Prof, I.T.S Engineering College, Greater Noida
6. Dec 31, 2009 - July 31, 2013 (On Leave for pursuing PhD),
   Dec 15, 2007 to Dec 30, 2009, Sr. Lecturer, IDEAL INSTITUTE OF TECH., Ghaziabad
7. 31st July 2004 – Dec 14, 2007, Sr. Lecturer/Lecture, College of Engg. Technology, Moradabad.
8. 13th Aug 2001 – 30th July 2004, Lecture, Vira College of Engineering, Bijnor

Invited as Resource Person in workshops/seminars/Conferences

1. Session Chair and keynote speaker at International Conference of System Modeling advancements in Research Trend(SMART-2017) at TMU, Moradabad during Dec 29-30, 2017, titled "Advancements in Artificial Intelligence"
2. Delivered a session on "Introduction to R programming" in Two-Week Refresher Course on Intro. to MATLAB and Research Enhancement Tools (Phase-2) held during July 13-22, 2018 under HRDC at SMVDU, Katra.
3. Lecture delivered at JNTU Hyderabad, titled "Similarity Analysis by Dynamic Programming of sequences" under TEQIP-III Twining Program on Jan 29, 2018.
4. Invited talk on "Sequence Analysis of Biological Sequences" in two days National Conference titled "Mathematical Sciences and its Application" at GGMC Jammu on 19-20 Jan, 2018.

5. Session Chair and keynote speaker at International Conference of System Modeling advancements in Research Trend (SMART-2018) at TMUniversity, Moradabad during Nov 23-24, 2018, titled "Recent advancements in Machine Learning"

6. Session Chair International Conference on Recent Trends and Advancements in Engineering & Technology Oct 25-26, 2018, SMVDU, Katra.

7. Invited talk at one-day National Seminar titled "Information Communication Technology Enabled Education in Rural Areas" at Guru Nanak Dev University College, Pathankot on 9 March, 2019, titled "Usage of ICT in Rural Areas"

8. Session Chair in the International Conference on Recent Innovation in Computing at Central University of Jammu, during 8-9 March, 2019.

9. Guest Lecture at Model Institute of Tech., Jammu on April 6, 2019, titled "Recent Advancements in Artificial Intelligence."

10. 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.

11. Chaired a Technical session at Int. Conf. of System Modeling advancements in Research Trend(SMART-2019) at Teerthanker Mahaveer University, Moradabad during 22-23 Nov 2019.

12. Delivered a session titled "Role of ICT in education" in the FDP "Outcome based Education and Accreditation", 25-29 May, 2020 at IILM - AHL, CET, Greater Noida

13. Invited Lecture titled "Applications of AI and ML in Agriculture", delivered in a three-days Workshop on "Adoption of ICT enabled information systems in Agricultural Development "contemplated from 17th -19th May, 2020 at SKUAST-Kashmir.

14. Invited Lecture titled "Fundamentals of AI and ML and its Applications", delivered on Sep 09, 2020, for two-hours at Rajkiya College of Engineering, Banda (U.P.)

15. Session Chair at International Conference of System Modeling advancements in Research Trend (SMART-2020) at Teerthanker Mahaveer University, Moradabad during Dec 4-5, 2020.

16. Invited talk titled "Bioinformatics Algorithms" and Session chair at International Conference on Networks and Cryptography organized by SoCSS, JNU Delhi on Dec 4-6, 2020

17. Keynote speaker during the AICTE sponsored STTP on "AI and Deep Learning" held on 3rd February 2021 (Feb 1-5, 2021), organized by MIET Jammu. Lecture title: "Introduction to AI and Deep Learning Applications".

18. Guest Speaker during the FDP on "Machine Learning" during Feb 22-26, 2021 organized by ITS Engineering College, Greater Noida, Titled "Introduction to Machine Learning & Deep Learning"

19. Invited speaker for a session on March 24, 2021 in the AICTE STTP on Artificial Intelligence and Its Societal Applications, scheduled during March 22-25, 2021 at NIT Meghalaya. Titled "Introduction to Deep Learning"

20. Resource Person for a session on Aug 20, 2021 in an FDP titled "Machine Learning for IoTs, NLP and Computer Vision," scheduled from Aug 16-21, 2021, organized by JIIT Noida, Uttar Pradesh. Title of the lecture is "Introduction to Optimization Algorithm in Deep Learning"

21. Chaired a Session at International Conference of System Modeling advancements in Research Trend (SMART-2021) at Teerthanker Mahaveer University, Moradabad during Dec 10-11, 2021.

22. Keynote address titled "Background and Health Care Application of Artificial Intelligence" at Int. Conf. of System Modeling advancements in Research Trend (SMART-2021) at TMU, Moradabad during Dec 10-11, 2021.

23. Delivered a session on "Big Data Analytics" at 5-days online FDP titled Research Avenues and Challenges in Industry 4.0" organized by FDC in collaboration with School of Mechanical Engineering at SMVDU, Katra, during Jan 31 to Feb 4, 2022.

24. Chaired a technical session at Int. Conf. on Applied Computational Intelligence (ACIA-2022) (Virtual Mode), Feb 26-27, 2022 organized by National Institute of Technology Raipur, India.

25. Chaired a Technical Session in the International Conference on Recent Innovation in Computing at Central University of Jammu, held during May 16-17, 2022.

26. Delivered invited talk titled "Digital Transformation with healthy Aging and Application of AI" on the celebration of Telecommunication Day May 17, 2022 organize by Dept of CS, Dept of EC and IETE Society, University of Jammu, Jammu

27. Keynote address titled "Deep learning applications in Health Care" at Int. Conf. of System Modeling advancements in Research Trend (SMART-2022) at TMU, Moradabad during Dec 16-17, 2022.

28. Delivered a technical session on "Basic concepts of R programming & Machine Language Applications" in one day workshop on Feb 20, 2023, organize by the Dept. of CSE, Inderprastha Engineering College Ghaziabad.
29. Delivered an Expert lecture on "Classification Algorithm in Machine Learning" on Jan 10, 2024, organize by the Dept. of Information Technology, Rajkiya College of Engineering, Banda (U.P.).
30. Delivered a guest lecture on "Artificial Intelligence fundamentals and its Application: CHATGPT" on March 28, 2024, organize by the Dept. of CSE, Allen Institute of Technology.
31. Delivered a guest lecture on "Artificial Intelligence Application: CHATGPT" on May 08, 2024, organize by the Dept. of CSE, Krishna Institute of Engineering and Technology.
32. Contributed as Resource Person in the "CEC Certification Course on Applied Data Analytics: A Practical Approach" conducted by the Dept. of IT under the Continuing Education Cell, NIT, Raipur, Chhattisgarh, India on 23rd June, titled "Classification Algorithm: Decision Tree and K-NN. The course was held from 12th- 26th June 2024.
33. Session chaired in the International Conference on Intelligent Computing and Communication Techniques (ICICCT-2024), during June 28-29, 2024 organized by JNU Delhi.

Awards/Fellowships

1. Received scholarship from Ministry of Human Resource and Development as Research Scholar at IIT Roorkee, Roorkee, from Dec 31, 2009 to July 2013.
2. Travel grant from CSIR and DST for airfare and registration fees for the participation in International conference at Nevada, USA.

PUBLICATIONS
INTERNATIONAL JOURNAL

1) 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), pp.1-15, 2013, World Scientific.[**SCI**, IF=0.73, ISSN(online):1793-6470, UGC CARE List no. 4981, https://doi.org/10.1142/S0218339013500058]
2) 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. [**SCIE** indexed, IF=2.287, ISSN: 1062-936X Online ISSN: 1029-046X, UGC CARE List no. 8560, 10.1080/1062936X.2013.773378].
3) 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=2.126, ISSN:0340-6253, UGC CARE List no.6668, https://match.pmf.kg.ac.rs/electronic_versions/Match72/n2/match72n2_519-532.pdf].
4) Syed Asma Andrabi, 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) Abdullahi Haruna Adam, Manoj Kumar Gupta, Ahmed Baita Garko, "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) Shalu Bhati, 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) Harshit Tandon, 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) 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, 2016. [ISSN: 2231-2803, IF=2.71,
9) 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) 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, DOI: https://doi.org/10.1155/2018/5125103].

11) 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, UGC CARE List no.4987].

12) 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 [DOI: 10.2478/cait-2019-0015, **Scopus**, IF=0.88, ISSN: 1314-4081].

13) 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, IF=3].

14) 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. 1-21, 2020.[DOI=https://doi.org/10.1002/ddr.21669, **SCI**, IF=1.742, ISSN:1098-2299, h-index=54, citescore=2.43, UGC CARE List no.2660].

15) Kshatrapal Singh, Ashish Kumar & Manoj Kumar Gupta, "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, 2020. [DOI: 10.1080/09720502.2020.1721649. Online ISSN: 2169-012X, 0972-0502, **SCOPUS**, Citescore=0.54, IF=0.58].

16) Tanzeela Javid, Manoj Kumar Gupta and Abhishek Gupta, "A Hybrid-Security Model for Privacy-Enhanced Distributed Data Mining", Journal of King Saud University - Computer and Information Sciences, Vol. 34(6), pp 3602-3614, 2022. [doi: https://doi.org/10.1016/j.jksuci.2020.06.010, ISSN: 1319-1578, **SCOPUS**, **SCI** CiteScore:8, IF=13.98, UGC CARE List no.5576].

17) Rakhi Vatsal, Dr. Manoj Kumar Gupta, "Motor Imagery and Mental Task Classification Algorithms in Noninvasive Brain-Computer Interface", Journal of Critical Reviews, Vol. 7(17), 2020. pp. 2437-2443.[ISSN- 2394-5125, doi: 10.31838/jcr.07.17.301, **SCOPUS**].

18) Surbhi Gupta, Manoj Kumar Gupta, "An Approach Based on Neural Learning for Diagnosis of Prostate Cancer", Journal of Natural Remedies, Vol. 21, No. 3(S1), pp. 110-118, 2020.[ISSN: 2320-3358 (e), **SCOPUS**]

19) Tanzeela Javid, Manoj K. Gupta, and Abhishek Gupta, "Securing Privacy In Data Mining: A Survey of Techniques", Journal of Natural Remedies, Vol. 21, No. 3(S1), pp. 119-127, 2020. [ISSN: 2320-3358 (e), **SCOPUS**][Presented]

20) Kanica Sachdev, Manoj Kumar Gupta, "A hybrid ensemble-based technique for predicting drug–target interactions," Chemical Biology & Drug Design, Vol. 96, Issue 6, December 2020, Pages 1447-1455 [https://doi.org/10.1111/cbdd.13753, Online ISSN:1747-0285, Impact factor:2.548, **SCI**, UGC CARE List no.1835]

21) Sharma, Deepika and Vashishtha, Ashutosh and Gupta, Manoj Kumar, Review of Credit Risk and Credit Scoring Models Based on Computing Paradigms in Financial Institutions (May 7, 2020). Journal of Credit Risk, Vol. 17, No. 3, Available at SSRN: https://ssrn.com/abstract=3946322 [ISSN:1744-6619 (print) 1755-9723 (online), IF:0.226, **Scopus**, SSI, CiteScore: 0.17,pp. 1-16].

22) Arjun Puri, Manoj Kumar Gupta, "Improved Hybrid Bag-Boost Ensemble With K-Means-SMOTE–ENN Technique for Handling Noisy Class Imbalanced Data", The Computer Journal, Vol. 65, pp. 124–138 06 May 2021 [ISSN:0010-4620, https://doi.org/ 10.1093/comjnl/bxab039 IF:1.07, **SCI,** UGC CARE List no.**2237**]

23) Surbhi Gupta, Manoj K Gupta, Computational Prediction of Cervical Cancer Diagnosis Using Ensemble-Based Classification Algorithm, *The Computer Journal*, Vol. 65(6) pp.1527–1539, June 2022 2021, [doi.org/10.1093/comjnl/bxaa198, ISSN 0010-4620, IF:1.07, **SCI,** UGC CARE List no.**2237**].

24) Surbhi Gupta, Manoj Kumar Gupta, "A comprehensive data level investigation of cancer diagnosis on imbalanced data", Computational Intelligence,Vol 38 (1), pp. 156-186, 05 May 2021(Feb 22) [Online ISSN:1467-8640, https://doi.org/10.1111/coin.12452, IF:1.196, SCI, Wiley, UGC CARE List no.2237].

25) Surbhi Gupta, and Manoj K. Gupta. "Computational Model for Prediction of Malignant Mesothelioma Diagnosis." The Computer Journal, Vol. 66, , pp. 86–100, Jan 2023, (SCI Indexed) ISSN 0010-4620

IF:1.07, UGC CARE List no.2237, DOI: https://doi.org/10.1093/comjnl/bxab146).

26) Arjun Puri, Manoj Kumar Gupta, "Knowledge discovery from noisy imbalanced and incomplete binary class data", Expert Systems with Applications, Volume 181, 1 November 2021, [ISSN:0957-4174, **SCI**, IF: 8.5, Cite Score:12.7, https://doi.org /10.1016/j.eswa.2021.115179, UGC CARE List no.3210].

27) Surbhi Gupta, and Manoj K. Gupta, "A Comparative Analysis of Deep Learning Approaches for Predicting Breast Cancer Survivability", Archives of Computational Methods in Engineering, 16 November 2021, vol. **29** pp, 2959–2975 (**SCI**, ISSN: 1886-1784 IF- 7.33, 10.1007/s11831-021-09679-3).

28) Surbhi Gupta, Manoj Kumar Gupta and Rakesh Kumar, A Novel Multi-Neural Ensemble Approach for Cancer Diagnosis, Applied Artificial Intelligence, Taylor and Francis, vol. 36, pp.1-36, 24 Dec 2021.[IF=1.58, SCIE, Online ISSN: 1087-6545, doi: 10.1080/08839514.2021.2018182]

29) Harnain Kour & Manoj K. Gupta, "An hybrid deep learning approach for depression prediction from user tweets using feature-rich CNN and bi-directional LSTM", Multimedia Tools and Applications, Vol. 81(17):pp.1-37 Mar 2022 [SCIE, ISSN: 1573-7721, IF: 2.517 https://doi.org/10.1007/s11042-022-12648-y].

30) Sachdev, Kanica, and Manoj K. Gupta. "CIAE: Class Imbalance Aware Ensemble Framework to Predict Drug Side Effects." International Journal of Medical Engineering and Informatics, (2021). [SCOPUS, ISSN online1755-0661, CiteScore 2020: 0.5, DOI: 10.1504/IJMEI.2021.10041984]

31) Surbhi Gupta, Manoj Kumar Gupta, Mohammad Shabaz, "Deep learning techniques for cancer classification using microarray gene expression data", Frontiers in Physiology, Sec. Computational Physiology and Medicine, Vol. 13 pp.1, Oct 2022 [**SCIE**, **Scopus** IF= 4.0, Cite Score=6, doi: 10.3389/fphys.2022.952709, ISSN 1664-042X].

32) Harnain Kour & Manoj K. Gupta, "Predicting the language of depression from multivariate twitter data using a feature-rich hybrid deep learning model," Concurrency and Computation: Practice and Experience, Vol 34(1) 22 July 2022 [**SCIE**, **Scopus** IF=1.83, e7224. ISSN: 1532-0634 https://doi.org/10.1002/cpe.7224].

33) Harnain Kour & Manoj K. Gupta, "Hybrid evolutionary intelligent network for sentiment analysis using Twitter data during COVID-19 pandemic", Expert Systems, Wiley, Vol. 40, Oct 2023[**SCIE**, **SCOPUS**, https://doi.org/10.1111/exsy.13489, ISSN:1468-0394, IF=3.3].

34) Kour, H., & Gupta, M. K. (2022). AI Assisted Attention Mechanism for Hybrid Neural Model to Assess Online Attitudes About COVID-19. Neural Processing Letters, 1-40. Dec 2022 [doi: 10.1007/s11063-022-11112-0, **SCIE, SCOPUS**, IF: 3.1, ISSN: 1573-773X]

35) Ifrah Raoof and Manoj Kumar Gupta, "Domain independent shortterm calibration-based hybrid approach for motor imagery electroencephalograph classification: a comprehensive review. Multimedia Tools and Application, Springer, Vol. 83 Issue 3, pp. 9181 - 9226, June 2023 [**SCI**E, **SCOPUS** , IF: 3.6, ISSN: 1573-7721, https://doi.org/10.1007/s11042-023-15900-1)

36) Raoof, I., Gupta, M.K. A conditional input-based GAN for generating spatio-temporal motor imagery electroencephalograph data. Neural Comput & Application, Springer, Vol.35, pp.21841–21861 (22 Aug 2023).[**SCIE**, IF:5.6, ISSN: 1433-3058 https://doi.org/10.1007/s00521-023-08927-w]

37) Ifrah Raoof and Manoj Kumar Gupta, "Improving generalization of motor imagery electroencephalograph data using unsupervised clustering". International Journal of Engineering Research in Computer Science and Engineering (IJERCSE). Vol 10, ISSN(Online) pp.2394-2320, Aug 2023. [https://ijercse.com/viewabstract.php?id=16433&volume=Volume10&issue=Issue8]

38) P. Maken and A. Gupta, "2D-to-3D: A Review for Computational 3D Image Reconstruction from X-ray Images," Archives of Computational Methods in Engineering, pp.1-30, 2022. (**SCIE**, IF = 8.171).

39) P. Maken, A. Gupta and M.K. Gupta, "A systematic review of the techniques for automatic segmentation of the human upper airway using volumetric Images", Medical & Biological Engineering & Computing. (**SCIE,** IF = 3.079).

INTERNATIONAL CONFERENCES/BOOK CHAPTERS

1) Manoj Kr Gupta, Mayank Dave, Archana Purwar, Simulation of Power Efficient Region Based Approach for Query Processing in Wireless Sensor Networks, International Conference on Emerging Trends in Engg. And Technology (ICETET-2009), Co-sponsored by IEEE Systems, Man and Cybernetics Society, USA,

Nagpur, India, Dec 16-18, 2009, pp. 1104-1109. (ISBN: 978-1-4244-5250-7, Print ISSN: 2157-0477, Electronic ISSN: 2157-0485) **[Presented]**

2) Manoj Kr Gupta, Dr. Mayank Dave, Simulation of Region Based Approach for Query Processing in Wireless Sensor Networks, International Conference on Advance Computing (ICAC-09), Trichy, India, Aug 06-08, 2009. **[Presented]**

3) Manoj Kumar Gupta, Rajdeep Niyogi and Manoj Misra, "A framework for Alignment-free methods to perform similarity analysis of biological sequence," in The Sixth International Conference on Contemporary Computing (IC3-2013), IEEE, JIIT Noida, India, Aug 8-10, 2013, pp. 337 – 342, ISBN:978-1-4799-0190-6. **[Presented]**

4) Manoj Kumar Gupta, Aniket Mittal, R.Niyogi and M. Misra, Parallelization of Composition Vector Method for Sequence Similarity Analysis, The 2013 International Conference on Bioinformatics & Computational Biology (BIOCOMP'13), Las Vegas, Nevada, USA, pp. 159-164, ISBN: 1-60132-234-8, July 2013.

5) Manoj Kumar Gupta, R.Niyogi and M. Misra, An experimental analysis of phylogenetic trees based on topological score, International Conference on Information Systems Design and Intelligent Applications (INDIA 2012), Springer, Visakhapatnam, India, January 5–7, 2012, pp. 237–244. (Online ISBN978-3-642-27443-5). **[Presented]**

6) Manoj Kumar Gupta, R.Niyogi and M. Misra, "A new alignment free method for similarity/dissimilarity analysis of protein sequences," Third International Conference on Computer Science and Information Technology (CCSIT- 2013), Springer, Banglore, India, Feb 18-20, 2013.

7) Manoj Kumar Gupta, R.Niyogi and M. Misra, "Analysis of similarity/dissimilarity of DNA sequences based on adjacent nucleotide pair representation," International Conference on Advanced Research in Engineering and Technology, IEEE, Guntur, India, Feb 8-9, 2013. **[Presented]**

8) Pritee Gupta, Yashpal Singh, Manoj Kr. Gupta, "Moving Object Detection Using Frame Difference, Background Subtraction and SOBS for Video Surveillance Application," in 3rd International Conference on System Modeling & Advancement in Research Trends (SMART-2014) at, Teerthanker Mahaveer University, Moradabad, pp. 151-156, Nov 22-23, 2014.

9) Kanica Sachdev and Manoj Kr Gupta "Research Issues in Biological Data Mining: A Review", International Conference on Machine Learning and Computational Intelligence (ICMLCI) -2017, SMVDU Katra, Sep 28-29, 2017.

10) Arjun Puri and Manoj Kumar Gupta, "Review on Missing Value Imputation Techniques in Data Mining" International Conference on Machine Learning and Computational Intelligence (ICMLCI) -2017, SMVDU Katra, Sep 28-29, 2017.

11) Sukanya, Manoj Kumar Gupta, "A survey on different techniques for handling missing values in dataset" ICRTAET-2017, SMVDU Katra Nov 3-4, 2017.

12) Kanica Sachdev and Manoj Kr Gupta, "A novel technique to predict drug target interaction using ensemble of SVM classifiers", 5th International Conference on Recent Trend and Advancement in Engineering and Technology, SMVDU Katra, Oct 25-26, 2018

13) Arjun Puri and Manoj Kr Gupta, "Comparative analysis of class imbalance over machine learning algorithm", 5th International Conference on Recent Trend and Advancement in Engineering and Technology, SMVDU Katra, Oct 25-26, 2018.

14) Sukanya, Manoj Kumar Gupta, Archana Gupta, "Performance analysis of Imputation Approaches with noise filtration on medical data", on 5th International Conference on Signal Processing and Communication, JIIT Noida, March 7-9, 2019.[ISBN: 978-1-5386-9436-7]

15) Ali D., Gupta M.K. (2020) Advanced Deadline-Sensitive Scheduling Approaches in Cloud Computing. In: Gao XZ., Tiwari S., Trivedi M., Mishra K. (eds) Advances in Computational Intelligence and Communication Technology. Advances in Intelligent Systems and Computing, vol 1086. Springer, Singapore presented in 5th International Conference on Computational Intelligence and Communication Technology, ABES Ghaziabad, Feb 22-23, 2019, pp 317-329. [Online ISBN:978-981-15-1275-9]

16) Rashid W., Gupta M.K. (2020) A Perspective of Missing Value Imputation Approaches. In: Gao XZ., Tiwari S., Trivedi M., Mishra K. (eds) Advances in Computational Intelligence and Communication Technology. Advances in Intelligent Systems and Computing, vol 1086. Springer, Singapore presented in 5th International Conference on Computational Intelligence and Communication Technology, ABES Ghaziabad, Feb 22-23, 2019, pp 307-315 [ISBN:978-981-15-1275-9, Book Chapter].

17) Kanica Sachdev and Manoj Kr Gupta, "Predicting Drug Target Interactions Using Dimensionality Reduction with Ensemble Learning" in International Conference on Recent Innovation in Computing at

Central University of Jammu, Jammu, 8-9 March, 2019.[ISBN: 978-3-030-29407-6]

18) Kanica Sachdev and Manoj Kr Gupta, "An Improved Approach for Predicting Drug Target Interactions" in ICICT 2019 held at KIET Ghaziabad, Sep 27-28, 2019.[ISBN: 978-1-7281-1772-0]

19) Arjun Puri and Manoj Kr Gupta, "Comparative analysis of resampling techniques under noisy imbalanced datasets" in ICICT 2019 held at KIET Ghaziabad, Sep 27-28, 2019.[ISBN: 978-1-7281-1772-0]

20) Tanzeela Javid and Manoj Kumar Gupta, "Privacy Preserving Classification Using 4-Dimensional Rotation Transformation", in 8th International Conference on. System Modeling & Advancement in Research Trends, TMU Moradabad, 22 -23 November, 2019.[ISBN: 978-1-7281-3245-7][**Presented the paper**].

21) Karamjeet Kaur, Sudeshna Chakraborty, Sanika Singh, Manoj Kumar Gupta, "Accelerating the performance of Sequence Alignment using High Performance Multicore GPU", 2019 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE), held at Dubai 11-12 Dec. 2019.[ISBN: 978-1-7281-3778-0].

22) Rashid W., Arora S., Gupta M.K. (2021) Missing Value Imputation Approach Using Cosine Similarity Measure. In International Conference on Innovative Computing and Communications. Advances in Intelligent Systems and Computing, vol 1165. Springer, Singapore. Aug 2020 (Appears online) [Online ISBN: 978-981-15-5113-0, DOI: https://doi.org/10.1007/978-981-15-5113-0_44].

23) Kanica Sachdev and Manoj Kr Gupta, "A Comparative Discussion of Similarity Based Techniques and Feature Based
Techniques for Interaction Prediction of Drugs and Targets" as a **Book Chapter** in "Tracking and Preventing Diseases with Artificial Intelligence" to be published by Springer, 2021. (SCOPUS Indexed) Online ISBN 978-3-030-76732-7

24) Arjun Puri, Manoj Kumar Gupta, "Empirical Investigation of Resampling Techniques in an Intruder Detection System" in Proceedings of International Conference on Innovations in Information and Communication Technologies (IICT-2020), at ITS Mohan Nagar, Ghaziabad, 7-8 November, 2020 (Springer, Scopus). DOI https://doi.org/10.1007/978-3-030-66218-9_31, ISBN 978-3-030-66218-9.

25) Surbhi Gupta, Manoj Kumar Gupta, "A Review on Machine Learning Techniques for the Diagnosis of Cancer", 4th International Conference on Recent Innovations in Computing (ICRIC-2021), 8th – 9th May, 2021 at Central University of Jammu, J & K.

26) Surbhi Gupta, Manoj Kumar Gupta, "Prostate Cancer Prognosis Using Multi-Layer Perceptron and Class Balancing Techniques", The International Conference on Contemporary Computing (IC3)-2021, JIIT Noida, 05-07 August, 2021.

27) Surbhi Gupta, and Manoj K. Gupta. "An Approach based on Neural Learning for Diagnosis of Prostate Cancer." International Conference on Computational Methods in Science & Technology (ICCMST 2020) 11-12 June, 2020.

28) Zahid Maqsood and Manoj Kumar Gupta "Deep Learning in IoT and Edge/Fog Integrated Environments: A Review", 4th International Conference on Recent Innovations in Computing (ICRIC), 2021, 8th – 9th May, 2021 at Central University of Jammu, J & K.

29) Zahid maqsood and Manoj Kumar Gupta "Automatic Detection of Diabetic Retinopathy on the Edge", International Conference on Cyber Security, Privacy and Networking(ICSPN-2021), Sep 17-19, 2021. [**Presented the paper**].

30) Harnain Kaur, Manoj Kumar Gupta, "Classification Techniques for sentiment analysis on medical data: A Review" 4th International Conference on Recent Innovations in Computing (ICRIC), 2021, 8th – 9th May, 2021 at Central University of Jammu, J & K.

31) Harnain Kaur, Manoj Kumar Gupta, "Depression and Suicide Prediction using Natural Language Processing and Machine Learning", International Conference on Cyber Security, Privacy and Networking(ICSPN-2021), Sep 17-19, 2021. [**Presented the paper].**

32) Ifrah Raoof, Manoj Kumar Gupta, "A Study of Semi Supervised based approaches for the Moto Imagery Signal Generation", 3rd International Conference on Inventive Research in Computing Applications (ICIRCA 2021) organizes by RVS College of Engg & Tech., Coimbatore, India from Sep 2-4, 2021. [IEEE XPLORE ISBN: 978-07381-4267].

33) Karamjeet Kaur, Sudeshna Chakraborty and Manoj Kumar Gupta, "Accelerating Smith-Waterman Algorithm for Faster Sequence Alignment using Graphical Processing Unit", First Int. Conf. on Artificial Intelligence, Computational Electronics and Communication System (AICECS 2021), Oct 28-30, 2021, Manipal Institute of Technology, Manipal. (**Presented**).

34) Singh, K., Gupta, M.K., Kumar, A. (2021). Phylogenetic and Biological Analysis of Evolutionary Components from Various Genomes", pp 161–169. Algorithms for Intelligent Systems. Springer,

Singapore. https://doi.org/10.1007/978-981-16-2248-9_17, Online ISBN:978-981-16-2248-9.[**Book Chapter**]

35) Surbhi Gupta, and Manoj K. Gupta, Deep Learning for Brain Tumor Segmentation using Magnetic Resonance Images, IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB), 13-15 October 2021, Melbourne, Australia, **ISBN:**978-1-6654-0112-8

36) Harnain Kaur, Manoj Kumar Gupta "Hybrid LSTM TCN Model for Predicting Depression Using Twitter Data," 17th Int, Conference on Control, Automation, Robotics and Vision (ICARCV-2022), organized by NTU Singapore, from Dec 11-13, 2022**[Presented].**

37) Subhag Sharma, Tushar Taggar, Manoj K Gupta, "Early Detection of Alzheimer's Disease Using Advanced Machine Learning Techniques – A Comprehensive Review," in the Congress on Control, Robotics and Mechantronics, organized by Modi Institute of Technology, Kota, and Soft Computing Research Society, India, MARCH 25-26, 2023[**Presented**].

38) Shahid Ul Islam Dar, Manoj Kr. Gupta, "Deep Learning based Identification of Genetic Syndromes using Facial Images" in the Hinweis Second International Conference on Networking, Communication and Computing Technology, Aug 26, 2023, NCCT-2023.

NATIONAL CONFERENCES

39) Bhavesh Kumar Chauhan, Manoj Kr Gupta, "Neuro-fuzzy approach based model for short-term electric load forecasting," National Conference proceedings on Fuzzy logic and its application in technology and management", Indian Institute of Technology Kharagpur, vol. FLATeM-04, pp 84-86, May 21-22, 2004.

40) Bhavesh Kumar Chauhan, Manoj Kr Gupta. "ANN based short term load forecasting, National Conference proceeding on Automation in Electric Distribution Systems, Delhi College of Engineering, Delhi, vol. APDS-04, page 100-108, Jan 8-9, 2004.

41) Bhavesh Kumar Chauhan, Jitendra Singh Rawat, Manoj Kr Gupta, Short-term load forecasting using ANN, National Seminar proceeding on Energy Management, NTTTI Chandigarh, vol. 6, no. 1, pp 36-38, March 21-22, 2004.

Thesis Supervision

M.Tech	16
Ph.D.	10

Patent Filed

Sr. No.	Title of Patent	Inventors	Application Filing No.	Filing /Publishing date/Grant date	Assignee
1	Methods and systems for monitoring face posture	**Abhishek Gupta, Manoj K. Gupta**	202011048859	November 09, 2020/ May 13, 2021/ 16 Nov 2023	Shri Mata Vaishno Devi University

TRAINING PROGRAMS AND WORKSHOP ATTENDED/ORGANIZED

1. Participated in workshop on computer network security "SECNET-2005", during Feb 11-13, 2005, organized by the Department of Computer Science and Engineering, I.I.T Bombay at Mumbai.
2. Participated in one-day workshop on "Personality Development Program" at TMIMT Moradabad, on Oct 2007.
3. Participated in a workshop on "Microsoft .NET", during Jan 21-25, 2008 organized by Microsoft & UPTU Lucknow at UPTU Lucknow.
4. Participated in an International workshop on "Machine Learning and Text Analysis" during Dec 15-23, 2013 at South Asian University, New Delhi.
5. Participated in a research promotion workshop on "Introduction to Graph and Geometrical Algorithm" from March 6-8, 2014 at IIT Roorkee.
6. Participated in a Faculty Development Program on "Big Data Computing" held on November 22, 2014 at IMS Ghaziabad.
7. Participated in one week AICTE recognized short term course on "Cloud Computing" from Dec 5-9,

2016 by NITTTR Chandigarh.

8. Participated in one week AICTE recognized short term course on "Open Source Technologies," from Aug 29-Sep 02, 2016 by NITTTR Chandigarh.
9. Participated in two weeks AICTE recognized short term course on "Open Source Technologies," from May 01-12, 2017 by NITTTR Chandigarh.
10. **Organized** and participated in one-week training program on "Adobe Experience Manager" at SMVDU, Katra from July 31-Aug 04, 2017.
11. Participated in a The First Northern Regional Workshop of PANDIT MADAN MOHAN MALVIYA NATIONAL MISSION FOR TEACHERS AND TEACHING took place on March 7th, 2018 conducted by National Institutes of Education Planning and Administration (NIPEA), New Delhi
12. Participated in Two-Week Refresher Course on Introduction to MATLAB and Research Enhancement Tools (Phase-1) during Mar 16-25, 2018 HRDC, SMVDU Katra.
13. Participated in one week FDP on "Applications of Soft Computing and Machine Learning" from April 03-07, 2018, SMVDU Katra.
14. Participated in one-week Professional Development Training program at IIM Raipur from May 7 to 11, 2018.
15. Participated in one week FDP on "Big Data Analytics" MNIT Jaipur from May 21-25, 2018.
16. Participated in one week FDP on "MHRD-TEQIP-KITE" program at IIT Bombay, Mumbai from June 11-15, 2018.
17. Participated in 1-week FDP on "Networking and Cyber Security" from 3-7th July, 2018, SMVDU Katra.
18. Participated in 1-week FDP on "Applications of Data Science & Machine Learning" from 6-10th Aug, 2018, SMVDU Katra.
19. Participated in one week FDP on "Wireless and Mobile Communication" from Dec 03-07, 2018, EICT Academies through NKN at SMVDU Katra
20. Participated in one week FDP on "Artificial Intelligence and Machine Learning" from Dec 17-21, 2018, EICT Academies through NKN at SMVDU Katra
21. Participated in one-week FDP program on "Intelligence Systems and Informatics" held during July 08-13, 2019, at JIIT Noida.
22. Participated in one-week Short-Term Course on "Machine Learning For Engineering Applications", IIT Delhi Campus, New Delhi, from 9th to 13th December 2019.
23. **Organized** one-week Faculty Development Program on "Computational Intelligence System and Security (CISS-2020) during July 20th -24th 2020, at Shri Mata Vaishno Devi University Katra.
24. Participated in one week FDP on "Machine Learning for IoTs, NLP and Computer Vision," scheduled from Aug 16-21, 2021, organized by JIIT Noida.
25. Participated in 3-days online workshop on Deploying Deep Learning Applications, from Feb 15-17, 2022, organized by Intel India.
26. 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 18th July to 22nd July 2022.
27. Participated and successfully completed the 5-day online STTP on "Research & Development to Intellectual Property Rights – A Roadmap" approved by ISTE, New Delhi, from 22nd to 26th May 2023.
28. Organized one-week Skill Development program on AI and ML applications, from March 11 to 15, 2024, at Shri Mata Vaishno Devi University Katra

REFERENCES

Dr. Manoj Misra
Professor,
Dept. of Computer Science & Engg,
Indian Institute of Tech., Roorkee
Roorkee, UK, 247667, India
Phone: +91-1332- 285642, 9897491864
E-mail: manojfec@iitr.ernet.in

Dr. Rajdeep Niyogi
Professor,
Dept. of Computer Science & Engg,
Indian Institute of Technology Roorkee
Roorkee, UK, 247667, India
Phone: +91-1332- 285896, 7060573669
E-mail: rajdpfec@iitr.ernet.in

PhD Supervision

S. No.	Name of the Student (s)	Full Time/Part-time	Title of the Topic	Supervisors Co-Supervisors (If any)	Remarks
1	Kanica Sachdev (17dcs001)	Full Time	Drug Target Interaction Prediction		Awarded (Aug 2022)
2	Surbhi Gupta (18DCS003)	Full Time	Efficient Computational Model for Diagnosis of Cancer		Awarded (Aug 2022)
3	Arjun Puri 17dcs003	Full Time	Handling Multi Class Imbalance Datasets		Awarded (April 11, 2023)
4	Deepika Sharma	Full Time	Analysis of Financial Data from Banking sector Using Big Data Analytics	Supervisor: Dr. Ashutosh Vashistha	Awarded (Aug 04 2023)
5	Harnain Kour (18DCS008)	Full Time	Machine Learning based sentiment analysis using hybrid optimization technique		Awarded (Aug 10, 2023)
6	K P Singh	Part Time	Similarity analysis of biological sequences using composition vector method	Supervisor: Ashish Kumar	Awarded: Oct 13, 2023. (Jan 2023)
7	Malvika Ashok 18DCS005	Full Time	Automatic Segmentation of Organs-at-risk in Thoracic Computed Tomography Images	Supervisor: Dr. Abhishek Gupta	Awarded: Oct 10, 2023, Sub: (Jan 2023)
8	Mohit Pandey 19DCS005	Full Time	Automatic Kidney Segmentation in Abdominal Computed Tomography Images	Supervisor: Dr. Abhishek Gupta	Awarded: Dec 01, 2023, (Submitted Jan 2023)
9.	Ifrah Roof (19DCS002)	Full Time	"Improved Approaches for Motor Imagery Based Classification"		Awarded (Sep 06, Sep 2024)
10	Deo Prakash	Part Time	Optimized Routing and Secure Data Dissemination in Mobile Ad Hoc Networks"	Administrative Supervisor	July 26, 2024

M.Tech Supervision

Sr. No.	Name of Student/ Regd. No.	Title of Dissertation	Year of Award	
1	Syed Asma Andrabi	Similarity analysis of DNA sequence using BWT Technique	June, 2014	
2	Ibrahim Umar Said	Association Rule Mining on Medical Data to Predict Heart Disease	June, 2015	
3	Abdulahi Haruna Adam	Data Cleaning on Payroll System For Educational Sector in Nigeria	June, 2015	
4	Mustapha Muhammad Abubakar	Frequent Pattern Mining –A comparative study of various algorithm	June, 2015	
5	Shalu Bhati	Multiclass imbalanced classification with missing value imputation	June, 2016	
6	Harshit Tandon	Enhanced DBSCAN clustering algorithm using fuzzy logic	June, 2016	
7	Temitope Bamidele Salau	Privacy Preserving Data Mining	June,2016	
8	Sukanya Gupta	Performance analysis of imputation of missing	June, 2018	

		values with noise filtration on medical data		
9	Kirti Sharma	E-Music	June, 2018 (MCA)	
10	Wajeeha Rashid (17MMS012)	Missing value imputation using cosine similarity measure	June, 2019	Dr. Shakshi
11	Duraksha Ali (17MMS003)	Deadline sensitive lease scheduling using Hungarian-Genetic algorithm(HGA) in cloud computing	June, 2019	
12	Tanzeela Javid(18MMS013)	A Hybrid-Security Model for Privacy-Enhanced Distributed Data Mining.	June 2020	
13	Rakhi Vatsal (18MMS017)	Two stage feature extraction and selection technique for mental task classification in noninvasive brain-computer interface	June 2020	
14	Zahid Maqsood 19mms015	Automatic detection of diabetic Retinopathy on the edge	June 2021	
15	Amit Kumar	Abstractive Summarization System	Aug 2022	
16	SHAHID UL ISLAM DAR 21MMS007	Deep learning based identification of genetic syndromes using facial images	Aug 2023	Mr. Deoprakash

Research Project Submitted:
Title: Deep Learning based model for Effective Energy Management for Smart Buildings
PI and CoPI: Dr. Manoj Kumar Gupta, Dr. Yathestha Anand, Dr. Sanjeev Anand

Scheme :	State University Research Excellence (SERB SURE)		
Research Area :	Electrical Electronics & Computer Engineering (Engineering Sciences)		
Duration :	36 Months	**Contact No :**	+919458393844
Date of Birth :	24-Jan-1979		
Nationality :	INDIAN	**Total Cost (INR) :**	23,14,200