

WoS Indexed-Journal Publications

2025

1. Singh, A., Sharma, D., & **Singh, V. K.** (2025). Misogynistic attitude detection in YouTube comments and replies: A high-quality dataset and algorithmic models. *Computer Speech & Language*, 89, 101682.

2024

1. Sharma, D., Gupta, V., **Singh, V. K.**, & Pinto, D. (2024). Should we stay silent on violence? An ensemble approach to detect violent incidents in Spanish social media texts. *Natural Language Processing*, 1-20.
2. Sharma, D., **Singh, V. K.**, & Gupta, V. (2024). TABHATE: A Target-based hate speech detection dataset in Hindi. *Social Network Analysis and Mining*, 14(1), 190.
3. Nandy, A., Lathabai, H. H., & **Singh, V. K.** (2024). Xd-index and its variants: a set of overall scholarly expertise diversity indices for the research portfolio management of institutions. *Scientometrics*, 1-26.
4. **Singh, V. K.**, Singh, P., & Kanaujia, A. (2024). Open access availability patterns of Indian research publications during the last two decades. *Current Science (00113891)*, 127(4).
5. Gupta, S., **Singh, V. K.**, & Banshal, S. K. (2024). Altmetric data quality analysis using Benford's law. *Scientometrics*, 1-25.
6. Singh, A., Sharma, D., & **Singh, V. K.** (2024). MIMIC: Misogyny Identification in Multimodal Internet Content in Hindi-English Code-Mixed Language. *ACM Transactions on Asian and Low-Resource Language Information Processing*.
7. Sharma, D., Singh, A., & **Singh, V. K.** (2024). THAR-Targeted Hate Speech Against Religion: A high-quality Hindi-English code-mixed Dataset with the Application of Deep Learning Models for Automatic Detection. *ACM Transactions on Asian and Low-Resource Language Information Processing*.
8. Singh, A., Kanaujia, A., & **Singh, V. K.** (2024). A Bibliometric Analysis of Research on Sustainable Development Goals by the G20 Countries: RESEARCH ON SUSTAINABLE DEVELOPMENT GOALS BY THE G20 COUNTRIES. *Journal of Scientific & Industrial Research (JSIR)*, 83(7), 796-803.
9. **Singh, V. K.**, Karmakar, M., Kanaujia, A., & Bhattacharya, S. (2024). Social Media for Science-Science and Science-Society Connects: Assessing the Readiness in Indian Context through an Analysis of Social Media Visibility of Research Papers. *Journal of Scientometric Research*, 13(1), 239-244.
10. Gupta, S., & **Singh, V. K.** (2024). Distributional characteristics of Dimensions concepts: An Empirical Analysis using Zipf's law. *Scientometrics*, 129(2), 1037-1053.

11. **Singh, V. K.**, Kanaujia, A., Singh, P., Dua, J., & Lathabai, H. H. (2024). International research collaboration among the G-20 countries. *Current Science (00113891)*, 126(1).
12. Bareja, C., Dwivedi, K., Uboveja, A., Mathur, A., **Kumar, N.**, & Saluja, D. (2024). Identification and clinicopathological analysis of potential p73-regulated biomarkers in colorectal cancer via integrative bioinformatics. *Scientific Reports*, 14(1), 9894. DOI: <https://doi.org/10.1038/s41598-024-60715-1>
13. Pandey, G., Bagri, R., Gupta, R., **Rajpal, A.**, Agarwal, M., & **Kumar, N.** (2024). Robust weighted general performance score for various classification scenarios. *Intelligent Decision Technologies*, 18(3), 2033-2054. DOI: <https://doi.org/10.3233/IDT-240465>
14. Singh, O., Jaiswal, A., Kumar, N., & **Kumar, N.** Random permutation-based linear regression for cancelable biometrics. *Expert Systems*, e13652. DOI: <https://doi.org/10.1111/exsy.13652>
15. Dalabehera, A. R., Beborrtta, S., **Kumar, N.**, & Senapati, D. (2024). Mist-fog-assisted real-time emotion recognition using deep transfer learning framework for smart city 4.0. *Internet of Things*, 101237. DOI: <https://doi.org/10.1016/j.iot.2024.101237>
16. **Rajpal, A.**, Mishra, R., Rajpal, S., Kavita, Bhatia, V., & **Kumar, N.** (2024). Explaining deep learning-based leaf disease identification. *Soft Computing*, 1-24. DOI: <https://doi.org/10.1007/s00500-024-09939-x>
17. Dwivedi, K., **Rajpal, A.**, Rajpal, S., Kumar, V., Agarwal, M., & **Kumar, N.** (2024). XL1R-Net: Explainable AI-driven improved L1-regularized deep neural architecture for NSCLC biomarker identification. *Computational Biology and Chemistry*, 108, 107990. DOI: <https://doi.org/10.1016/j.compbiolchem.2023.107990>
18. Dwivedi, K., **Rajpal, A.**, Rajpal, S., Kumar, V., Agarwal, M., & **Kumar, N.** (2024). Enlightening the path to NSCLC biomarkers: Utilizing the power of XAI-guided deep learning. *Computer Methods and Programs in Biomedicine*, 243, 107864. DOI: <https://doi.org/10.1016/j.cmpb.2023.107864>
19. **Rajpal, A.**, Kumar, S., Sharma, N. K., Abraham, A., Mishra, A., & **Kumar, N.** (2024). CXRmark: A Watermarking Scheme for Chest X-Rays Using Online Sequential Reduced Kernel ELM. *Circuits, Systems, and Signal Processing*, 43(2), 965-993. DOI: <https://doi.org/10.1007/s00034-023-02491-3>
20. Khurana, P., Gupta, B., Sharma, R., & **Bedi, P.** (2024). A Sentiment-Guided Session-aware Recommender System. *The Journal of Supercomputing*, 80, 27204-27243. DOI: <https://doi.org/10.1007/s11227-024-06456-4>
21. Singhal, A. & **Bedi, P.** (2024). USteg-DSE: Universal quantitative Steganalysis framework using DenseNet merged with Squeeze & Excitation net. *Signal Processing: Image Communication*, 128, 117171. <https://doi.org/10.1016/j.image.2024.117171>
22. Khurana, P., Gupta, B., Sharma, R., & **Bedi, P.** (2024). Session-aware recommender system using double deep reinforcement learning. *Journal of Intelligent Information Systems*, 62(2), 403-429. <https://doi.org/10.1007/s10844-023-00824-x>

23. **Bedi, P.**, Gole, P., & Marwaha S.. (2024). PDSE-Lite: lightweight framework for plant disease severity estimation based on Convolutional Autoencoder and Few-Shot Learning. *Frontiers in Plant Science*, 14, 1319894. <https://doi.org/10.3389/fpls.2023.1319894>
24. Gupta, O., Agarwal, A. & **Pal, O.** (2024). Innovative approach of Masked Facial Recognition. *Electronic Government, an International Journal*. DOI: 10.1504/EG.2025.10063683.
25. Kumari, S., Rana, B., Kumaran, S. S., Chaudhary, S., Jain, S., Srivastava, A. K., & Rajan, R. (2024). Gray matter atrophy in a 6-OHDA-induced model of Parkinson's disease. *Neuroscience*. <https://doi.org/10.1016/j.neuroscience.2024.05.029>
26. Agrawal, S., Agrawal, R. K., Kumaran, S. S., Rana, B., & Srivastava, A. K. (2024). Integration of graph network with kernel SVM and logistic regression for identification of biomarkers in SCA12 and its diagnosis. *Cerebral Cortex*, 34(4), bhae132. <https://doi.org/10.1093/cercor/bhae132>
27. Lohani, D. C., & Rana, B. Role of personal characteristics data for classification of attention-deficit hyperactivity disorder (2024). *Intelligent Decision Technologies*, 18(3), 2559-2575. DOI: 10.3233/IDT-230223.
28. Shyam, A., **Kumar, V.**, Kagita, V. R., & Pujari, A. K. (2024). UniRecSys: A unified framework for personalized, group, package, and package-to-group recommendations. *Knowledge-Based Systems*, 289, 111552.
29. Shaikh, S., Kagita, V. R., **Kumar, V.**, & Pujari, A. K. (2024). Data augmentation and refinement for recommender system: a semi-supervised approach using maximum margin matrix factorization. *Expert Systems with Applications*, 238, 121967.
30. Kumar Meena, S., Sheshar Singh, S., and **Singh, K.** (2024a). Cuckoo search optimization-based influence maximization in dynamic social networks. *ACM Trans. Web*, 18(4). <https://doi.org/10.1145/3690644>
31. Kumar Meena, S., Sheshar Singh, S., and **Singh, K.** (2024b). Diversified budgeted influence maximization in dynamic social networks. *IEEE Transactions on Computational Social Systems*. <https://doi.org/10.1109/TCSS.2024.3473948>
32. Meena, S. K., Singh, S. S., and **Singh, K.** (2024). DCDIMB: Dynamic community-based diversified influence maximization using bridge nodes. *ACM Trans. Web*, 18(4). <https://doi.org/10.1145/3664618>
33. **Singh, K.** and Biswas, B. (2024). Mining top-k high on-shelf utility itemsets using novel threshold raising strategies. *ACM Trans. Knowl. Discov. Data*, 18(5). <https://doi.org/10.1145/3645115>

2023

1. Gupta, S., **Kumar, N.**, & Bhalla, S. (2023). Citation metrics and evaluation of journals and conferences. *Journal of Information Science*, 01655515231151411. DOI: <https://doi.org/10.1177/01655515231151411>

2. Kumar, S., Sharma, N. K., & **Kumar, N.** (2023). WSOmark: An adaptive dual-purpose color image watermarking using white shark optimizer and Levenberg–Marquardt BPNN. *Expert Systems with Applications*, 226, 120137. DOI: <https://doi.org/10.1016/j.eswa.2023.120137>
3. Sharma, N. K., Kumar, S., & **Kumar, N.** (2023). HGSmark: An efficient ECG watermarking scheme using hunger games search and Bayesian regularization BPNN. *Biomedical Signal Processing and Control*, 83, 104633. DOI: <https://doi.org/10.1016/j.bspc.2023.104633>
4. Dua, V., **Rajpal, A.**, Rajpal, S., Agarwal, M., & **Kumar, N.** (2023). I-flash: Interpretable fake news detector using lime and shap. *Wireless Personal Communications*, 131(4), 2841-2874. DOI: <https://doi.org/10.1007/s11277-023-10582-2>
5. Mishra, R., Kavita, **Rajpal, A.**, Bhatia, V., Rajpal, S., Agarwal, M., & **Kumar, N.** (2023). I-LDD: an interpretable leaf disease detector. *Soft Computing*, 28(3), 2517-2533. DOI: <https://doi.org/10.1007/s00500-023-08512-2>
6. Rajpal, S., **Rajpal, A.**, Agarwal, M., Kumar, V., Abraham, A., Khanna, D., & **Kumar, N.** (2023). XAI-CNVMarker: Explainable AI-based copy number variant biomarker discovery for breast cancer subtypes. *Biomedical Signal Processing and Control*, 84, 104979. DOI: <https://doi.org/10.1016/j.bspc.2023.104979>
7. Rajpal, S., **Rajpal, A.**, Saggar, A., Vaid, A. K., Kumar, V., Agarwal, M., & **Kumar, N.** (2023). XAI-MethylMarker: Explainable AI approach for biomarker discovery for breast cancer subtype classification using methylation data. *Expert Systems with Applications*, 225, 120130. DOI: <https://doi.org/10.1016/j.eswa.2023.120130>
8. Dwivedi, K., **Rajpal, A.**, Rajpal, S., Agarwal, M., Kumar, V., & **Kumar, N.** (2023). An explainable AI-driven biomarker discovery framework for Non-Small Cell Lung Cancer classification. *Computers in Biology and Medicine*, 153, 106544. DOI: <https://doi.org/10.1016/j.compbiomed.2023.106544>
9. **Bedi, P.**, Singhal, A., & Bhasin, V. (2023). Deep learning based active image steganalysis: a review. *International Journal of System Assurance Engineering and Management*, 15(3), 786-799. <https://doi.org/10.1007/s13198-023-02203-9>
10. **Bedi P.**, Jindal, V., & Dua, A. (2023). SPYIPv6: Locating Covert Data in One or a Combination of IPv6 Header Field(s). *IEEE Access*, 11, 103486-103501. <https://doi.org/10.1109/ACCESS.2023.3318172>
11. Bisht, S., Taneja, S. B., Jindal, V., & **Bedi, P.** (2023). APSO Based Automated Planning in Constructive Simulation. *Defence Science Journal*, 73(5), 564-571. <https://doi.org/10.14429/dsj.73.18497>
12. Kumari, T., Sharma, R., Gupta, B., & **Bedi, P.** (2023). Generating Popularity-Aware Reciprocal Recommendations Using Siamese Bi-Directional Gated Recurrent Units Network. *Vietnam Journal of Computer Science*, 10(3), 273-301. <https://doi.org/10.1142/S2196888823500045>
13. Kumari, T., Gupta, B., Sharma, R., & **Bedi, P.** (2023). Empowering reciprocal recommender system using contextual bandits and argumentation based explanations. *World Wide Web*, 26, 2969-2300. <https://doi.org/10.1007/s11280-023-01173-z>

14. Gole, P., **Bedi, P.**, Marwaha, S., Haque, Md. A., & Deb, C. K. (2023). TrIncNet: a lightweight vision transformer network for identification of plant diseases. *Frontiers in Plant Science*, 14, 1221557. <https://doi.org/10.3389/fpls.2023.1221557>
15. Kirti Jain, **Vasudha Bhatnagar**, and Sharanjit Kaur (2023), Epidemic dynamics in census-calibrated modular contact network, *Network Modeling Analysis in Health Informatics and Bioinformatics*, Springer Nature, Volume 12, Issue 1, p. 14. DOI: 10.1007/s13721-022-00402-1. **(2022 IF: 2.045)**
16. Lohani, D. C., & Rana, B. (2023). ADHD diagnosis using structural brain MRI and personal characteristic data with machine learning framework. *Psychiatry Research: Neuroimaging*, 334, 111689. <https://doi.org/10.1016/j.pscychresns.2023.111689>
17. **Rajpal, A.**, Sehra, K., Mishra, A., & Chetty, G. (2023). A low-resolution real-time face recognition using extreme learning machine and its variants. *The Imaging Science Journal*, 71(5), 456-471. DOI: <https://doi.org/10.1080/13682199.2023.2183544>
18. **Rajpal, A.**, Sehra, K., Bagri, R., & Sikka, P. (2023). XAI-FR: Explainable AI-Based Face Recognition Using Deep Neural Networks. *Wireless Personal Communications*, 129(1), 663-680. DOI: <https://doi.org/10.1007/s11277-022-10127-z>
19. Kumar, R. and **Singh, K.** (2023). High utility itemsets mining from transactional databases: a survey. *Applied Intelligence*, 53(22):2765527703. <https://doi.org/10.1007/s10489-023-04853-5>

2022

1. Sharma, N. K., Kumar, S., **Rajpal, A.**, & **Kumar, N.** (2022). MantaRayWmark: An image adaptive multiple embedding strength optimization based watermarking using Manta Ray Foraging and bi-directional ELM. *Expert Systems with Applications*, 200, 116860. DOI: <https://doi.org/10.1016/j.eswa.2022.116860>
2. Kumar, S., **Rajpal, A.**, Sharma, N. K., Rajpal, S., Nayyar, A., & **Kumar, N.** (2022). ROSEmark: Robust semi-blind ECG watermarking scheme using SWT-DCT framework. *Digital Signal Processing*, 129, 103648. DOI: <https://doi.org/10.1016/j.dsp.2022.103648>
3. Rajpal, S., Agarwal, M., **Rajpal, A.**, Lakhyani, N., Saggarr, A., & **Kumar, N.** (2022). COV-ELM Classifier: An Extreme Learning Machine based Identification of COVID-19 using Chest X-Ray Images. *Intelligent Decision Technologies*, 16(1), 193-203. DOI: <https://doi.org/10.3233/IDT-210055>
4. Dua, A., Jindal, V., & **Bedi, P.** (2022). Detecting and Locating Storage-based Covert Channels in Internet Protocol version 6. *IEEE Access*, 10, 110661-110675. <https://doi.org/10.1109/ACCESS.2022.3215132>
5. Kumari, T., Sharma, R., & **Bedi, P.** (2022). A Contextual-Bandit Approach for Multifaceted Reciprocal Recommendations in Online Dating. *Journal of Intelligent Information Systems*, 59, 705-731. <https://doi.org/10.1007/s10844-022-00708-6>

6. **Bedi, P.** & Singhal, A. (2022). Estimating cover image for Universal payload region detection in stego images. *Journal of King Saud University*, 34(8), 5797-5809. <https://doi.org/10.1016/j.jksuci.2022.01.010>
7. Gupta, B., Kaur, H., & **Bedi, P.** (2022). Enhancing System Robustness of Active Products using Trust based Collaboration. *Journal of Intelligent & Fuzzy Systems*, 43, 939-956. <https://doi.org/10.3233/JIFS-212691>
8. Gupta, N., Jindal, V., & **Bedi, P.** (2022). CSE-IDS: Using Cost-Sensitive Deep Learning and Ensemble algorithms to handle class imbalance in Network-based Intrusion Detection Systems. *Computers & Security*, 112, 102499. <https://doi.org/10.1016/j.cose.2021.102499>
9. Kirti Jain, **Vasudha Bhatnagar**, Sadanand Prasad and Sharanjit Kaur (2022), Coupling Fear and Contagion for Modeling Epidemic Dynamics, *IEEE Transactions on Network Science and Engineering (TNSE)*. DOI: 10.1109/TNSE.2022.3187775. **(2022 IF: 5.033)**
10. Alka Khurana, **Vasudha Bhatnagar** (2022), Investigating Entropy for Extractive Document Summarization, *Expert Systems with Applications*, Vol 187, Jan, p. 115820, Elsevier. **(2020 IF: 6.954)**
11. Kagita, V. R., Pujari, A. K., Padmanabhan, V., & **Kumar, V.** (2022). Inductive conformal recommender system. *Knowledge-Based Systems*, 250, 109108.
12. Veeramachaneni, S. D., Pujari, A. K., Padmanabhan, V., & **Kumar, V.** (2022). A hinge-loss based codebook transfer for cross-domain recommendation with non-overlapping data. *Information Systems*, 107, 102002.
13. Kumar, R. and **Singh, K.** (2022). A survey on soft computing-based high-utility itemsets mining. *Soft Comput.*, 26(13):63476392. <https://doi.org/10.1007/s00500-021-06613-4>
14. **Singh, K.**, Kumar, R., and Biswas, B. (2022). High average-utility itemsets mining: a survey. *Applied Intelligence*, 52(4):39013938. <https://doi.org/10.1007/s10489-021-02611-z>

2021

1. Gupta, N., Jindal, V., & **Bedi, P.** (2021). LIO-IDS: Handling class imbalance using LSTM and Improved One-vs-One technique in Intrusion Detection System. *Computer Networks*, 192, 108076. <https://doi.org/10.1016/j.comnet.2021.108076>
2. **Bedi, P.** & Gole, P. (2021). Plant disease detection using hybrid model based on convolutional autoencoder and convolutional neural network. *Artificial Intelligence in Agriculture*, 5, 90-101. . <https://doi.org/10.1016/j.aiia.2021.05.002>
3. Richa & **Bedi, P.** (2021). Trust and Distrust based Cross-Domain Recommender System. *Applied Artificial Intelligence*, 35(4), 326-351. <https://doi.org/10.1080/08839514.2021.1881297>
4. Singhal, A. & **Bedi, P.** (2021). Multi-Class Blind Steganalysis using Deep Residual Networks. *Multimedia Tools and Applications*, 80, 13931-13956. <https://doi.org/10.1007/s11042-020-10353-2>

5. Richa & **Bedi, P.** (2021). Trust and Fuzzy Inference Based Cross Domain Serendipitous Item Recommendations (TFCDSRS), *Journal of Intelligent & Fuzzy Systems*, 41(5): 5511–5523. <https://doi.org/10.3233/JIFS-189872>
6. Gupta, N., Bedi, P., & Jindal, V. (2021). I-SiamIDS: An Improved Siam-IDS for handling class imbalance in Network-based Intrusion Detection Systems. *Applied Intelligence*, 51(2): 1133-1151. <https://doi.org/10.1007/s10489-020-01886-y>
7. Swagata Duari, **Vasudha Bhatnagar** (2021), FFCD: A Fast-and-Frugal Coherence Detection Method, doi: 10.1109/ACCESS.2021.3135048.
8. Sukhwani, N., Kagita, V. R., **Kumar, V.**, & Panda, S. K. (2021). Efficient computation of top-k skyline objects in data set with uncertain preferences. *International Journal of Data Warehousing and Mining (IJDWM)*, 17(3), 68-80.

2020

1. Dua, A. & **Bedi, P.** (2020). ARPNetSteg: Network Steganography using Address Resolution Protocol. *International Journal of Electronics and Telecommunications (IJET)*, 66(4), 671-677. <https://doi.org/10.24425/ijet.2020.134026>
2. Richa & **Bedi, P.** (2020). Combining Trust and Reputation as User Influence in Cross Domain Group Recommender System (CDGRS). *Journal of Intelligent and Fuzzy Systems*, 38(5), 6235- 6246. <https://doi.org/10.3233/JIFS-179705>
3. Swagata Duari, **Vasudha Bhatnagar** (2020), Complex Network based Supervised Keyword Extractor, *Expert Systems with Applications*, Volume 140, p. 112876. Elsevier. **(2020 IF: 6.954)**

2019

1. Jindal, V. & **Bedi, P.** (2019). Parameter tuning in MACO for actual road conditions. *Wireless Personal Communications*, 106(3), 1309-1323. <https://doi.org/10.1007/s11277-019-06215-2>
2. Singh, R. & **Bedi, P.** (2019). Parallel context-aware multi-agent tourism recommender system. *International Journal of Computational Science and Engineering*, 20(4):536-549. <https://doi.org/10.1504/IJCSE.2019.104440>
3. **Bedi, P.** & Bhasin, V. (2019). Multilayer ensemble of ELMs for image steganalysis with multiple feature sets. *International Journal of Computational Science and Engineering*, 20(4): 558-569. <https://doi.org/10.1504/IJCSE.2019.104442>
4. Gautam, A. & **Bedi P.** (2019). FS-CARS: fast and scalable context-aware news recommender system using tensor factorization. *International Journal of Computational Science and Engineering*, 18(2): 118-129. <https://doi.org/10.1504/IJCSE.2019.097949>

1. Jindal, V., & **Bedi, P.** (2018). High performance adaptive traffic control for efficient response in vehicular ad hoc networks. *International Journal of Computational Science and Engineering*, 16(4): 390-400. <https://doi.org/10.1504/IJCSE.2018.093780>
2. **Bedi, P.**, Agarwal, S. K., & Richa. (2018). Trust and reputation-based multi-agent recommender system. *International Journal of Computational Science and Engineering*, 16(4): 350-362. <https://doi.org/10.1504/IJCSE.2018.093776>
3. Sharma, C. & **Bedi, P.** (2018). Community based Hashtag Recommender System (CHRS) for twitter. *Journal of Intelligent and Fuzzy Systems* 34(3), 1511-1519. <https://doi.org/10.3233/JIFS-169446>
5. Richa & **Bedi, P.** (2018). Parallel proactive cross domain context aware recommender system. *Journal of Intelligent and Fuzzy Systems*, 34(3), 1521-1533. <https://doi.org/10.3233/JIFS-169447>
6. Jindal, V. & **Bedi, P.** (2018). An Improved Hybrid Ant Particle Optimization (IHAPO) algorithm for reducing travel time in VANETs. *Applied Soft Computing*, 64, 526-535. <https://doi.org/10.1016/j.asoc.2017.12.038>
7. Bisht, S., Bharati, H.S., Taneja, S.B., & **Bedi P.** (2018). Command Agent Belief Architecture to support Commander Decision Making in Military Simulation. *Defence Science Journal*, 68(1), 46-53. <https://doi.org/10.14429/dsj.68.11375>