

Brief Profile

Prof. Nasib Singh Gill

Dr. Nasib Singh Gill is currently a Professor in the Department of Computer Science & Engineering, Faculty of Engineering & Technology, at South Asian University (SAU), New Delhi—an international university established by the SAARC nations. With over 36 years of rich experience in academia, research, and university administration, he was a founder member of the Department of Computer Science & Applications at Maharshi Dayanand University (MDU), Rohtak, upon its inception in 1990.



Prof. Gill earned his Ph.D. in Computer Science in March 1996 under the joint supervision of Prof. P.S. Grover (University of Delhi) and Prof. D.R. Taneja (MDU Rohtak). He carried out his Post-Doctoral Research at Brunel University, West London, UK (2001–2002), and also holds an MBA with a specialization in Information Technology.

A recipient of the prestigious **Commonwealth Fellowship Award** (ACU, UK) in 2001, Prof. Gill honed his leadership capabilities at Cambridge University, UK, and IIT Kharagpur in 2019 under the Ministry of Education's flagship **LEAP (Leadership for Academicians Programme)**.

To date, Prof. Gill has supervised **16 Ph.D. scholars** (with 6 currently under his guidance) and authored **5 widely acclaimed books** featured in AICTE model curricula and 31 Book Chapters in Edited Books of leading International Publishers. His research spans AI, Machine & Deep Learning, IoT, Blockchain Technology, Data Analytics, Cloud Computing, Information & Network Security, Data Mining, NLP, and Component-Based Systems. He has published **254+ research papers** in international journals of repute including high-impact international journals (including 35+ in Q1 journals and few papers with Impact Factors even exceeding 15), holds **5 granted patents**, and has published 5 additional patents. He has also developed 13 MOOC modules for MHRD's SWAYAM/ARPIT platforms and delivered keynote addresses at **188+ FDPs and conferences**.

Among his accolades, Prof. Gill received the **Best Paper Award** from the Computer Society of India (1994) and the **Best Paper Presentation Award** at ICISDM-23 in Atlanta, USA (May 2023).

Prior to joining SAU, he served as Senior Professor (since 2018) and Professor (since 2008) at MDU Rohtak, holding key administrative roles including Founder Dean of the Faculty of Mathematical & Computational Sciences, Head of the Department of Computer Science & Applications (4 terms each of 3 years), Director of the Centre for Distance and Online Education (~9 years), and Director of the Digital Learning Centre (~8 years).

Prof. Gill has travelled extensively for academic assignments several universities in Europe, USA and UK including leading institutions such as Oxford, Cambridge, Princeton, NYU, and the University of Paris. He regularly serves as a subject expert and assessor for UPSC, UGC, AICTE, NAAC, NBA, and MoE, and is a Fellow of IETE, CSI, and IAENG.

Qualifications

Post-Doctoral Research (Brunel University, West London, UK: 2001–2002)

Ph.D.(Computer Science) : March 1996

Research Interests

AI, Machine & Deep Learning
Data Analytics
Cybersecurity and Blockchain Technology

Awards & Honours

A) Recipient of Commonwealth Fellowship Award by ACU, London (UK)

A Commonwealth Fellowship Award for the year 2001 by Association of Commonwealth Universities (ACU), London (United Kingdom).

B) Proud Participant to LEAP – Leadership for Academicians Programme

A proud participant to LEAP, a flagship programme of MHRD, Govt of India in May-June 2019 at University of Cambridge, UK and IIT, Kharagpur, India

C) Best Paper/Article Award by Computer Society of India

In 1994, CSI conferred Best Paper award for contributing the paper titled ***“A New Program Complexity Measure”*** published in November 1994 issue of ‘CSI Communications’.

D) Best Paper Presentation Award in the International Conf. – ICISDM- 2023, USA

Best Presentation Award for the paper ***“Preserving Users’ Sensitive Data in Physical and Virtual World Using Machine Learning: A Strategy”*** authored by Nasib Singh Gill, Preeti Gulia, Amit Sagu, Bharti Goyal in the 7th International Conference on Information System and Data Mining (ICISDM- 2023), held during May 10-12, 2023 in USA.

E) Best Paper Award in 1st International Conference on Innovations in Data Analytics

For the paper ***“A Deep Learning Based Framework for Analysing Stress factors among Working Women”*** by C. Gupta, Sangeeta Rao, Nasib Singh Gill and Preeti Gulia in 1st International Conference on Innovations in Data Analytics, November 2022 (ICIDA-2022), Springer (Scopus indexed)

Recent Publications

List of Journal Publications (Last five years):

2026

1. Bharti Goyal, Nasib Singh Gill, Preeti Gulia, et al. (May, 2026), ***“Deep learning with optimization for social media fake profile detection”***, Social Network Analysis and Mining. [DOI: 10.1007/s13278-026-01586-4] [SCI, SCOPUS, IF-3.2]
2. Sangeeta Duhan, Preeti Gulia, Nasib Singh Gill et al.(April, 2026), ***“A Comprehensive Review of Image Segmentation Techniques for Plant Disease Detection in Precision Agriculture: Models, Trends, and Challenges”***, Archives of Computational Methods in Engineering, ISSN: 1886-1784. DOI: 10.1007/s11831-026-10582-y. [SCIE,SCOPUS][IF:12.9] Q1 Journal
3. Ashish Saini, Nasib Singh Gill, Preeti Gulia et al.(April,2026), ***“An Empirical study for Image Denoising and Image Quality Enhancement: a Challenging Overview”***, International Journal of Computational Intelligence Systems ISSN 1875-6883. [DOI: [10.1007/s44196-026-00000-0](https://doi.org/10.1007/s44196-026-00000-0)]

4. Chhaya Gupta, Nasib Singh Gill, Preeti Gulia et al.(April, 2026), “**An efficient hybrid federated learning framework for pneumonia diagnosis with proximal optimization**”, *BioData Mining* ISSN: 1756-0381. . [DOI: [10.1186/s13040-026-00543-3](#)] [SCIE,SCOPUS][IF:7.9] Q1 Journal
5. Ashish Saini, Nasib Singh Gill, Preeti Gulia et al.(March,2026), “**Leveraging haze-aware features for improved image clarity and detection accuracy with an optimized DCNN-YOLOv8 network**”, *Scientific Reports* ISSN 2045-2322 (online). [DOI: [10.1038/s41598-026-38265-5](#)] [SCIE,SCOPUS][IF:4.9] Q1 Journal
6. Sangeeta Duhan, Preeti Gulia, Nasib Singh Gill et al.(February,2026), “**Evaluation of Lightweight and Efficient deep learning models for plant disease classification**”, *Discover Internet of Things*, Volume 6, article number 43, [DOI:[10.1007/s43926-026-00310-0](#)] [SCOPUS]
7. Preeti Chaudhary, Preeti Gulia, Nasib Singh Gill et al.(February,2026), “**An Evaluation of Machine Learning for soil Analysis in Internet of Things-enabled Smart Farming**”, *Scientific Reports*, ISSN 2045-2322 (online) Article Number: 10318 [DOI: 10.1038/s41598-026-36017-z] [SCIE, SCOPUS, IF-4.9] Q1 Journal
8. Amit Sagu, Nasib Singh Gill, Preeti Gulia et al.(January,2026), “**Scalable and Interpretable Deep Learning-Based Intrusion Detection Framework for Secure Internet of Things Networks**”, *Security and Privacy* <https://doi.org/10.1002/spy2.70179>, ISSN:2475-6725[SCIE,ESCI, SCOPUS] [IF:2.1]
9. Deepak Kaushik, Preeti Gulia, Nasib Singh Gill et al.(January,2026) , “**Synergizing blockchain and AI to fortify IoT security: A Comprehensive Review**”, *Artificial Intelligence Review* vol. 59, 41. <https://doi.org/10.1007/s10462-025-11434-0> ISSN: 0269-2821, [SCIE,SCOPUS][IF:13.9]

2025

10. Aarti Punia, Preeti Gulia, Nasib Singh Gill et al.(December, 2025) , “**An Access control system for cloud-based healthcare systems driven by blockchain**, *Journal of Cloud Computing*, vol. 14, 78, <https://doi.org/10.1186/s13677-025-00831-z>, ISSN: 2192-113X[SCIE,SCOPUS][IF:4.3]
11. Rashi Singh, Nasib Singh Gill, Preeti Gulia (November,2025), “**Attentional LSTM-ensemble architecture for intrusion detection in smart grids**”, *Scientific Reports*, vol. 15, 41977, <https://doi.org/10.1038/s41598-025-25992-4>, ISSN 2045-2322 (online)[SCIE,SCOPUS][IF:3.9]
12. Chhaya Gupta, Nasib Singh Gill, Preeti Gulia et al.(November,2025), “**Deep Vision in Agriculture: Assessing the function of YOLO in the classification of Plant Leaf Diseases(PLDs)**”, *BioData Mining*, vol. 18, 91 . <https://doi.org/10.1186/s13040-025-00497-y> ISSN:1756-0381, [SCIE,SCOPUS][IF:6.1]
13. Chhaya Gupta, Nasib Singh Gill, Preeti Gulia et al. (November 2025), “**A multimodal fusion model for real-time environment emotion recognition using audio-visual-textual features**”, *Journal of Big Data*, vol. 12, article 256, DOI: 10.1186/s40537-025-01300-9. [SCIE, SCOPUS] [IF-6.4]
14. Chhaya Gupta, Nasib Singh Gill, Preeti Gulia, Sangeeta Duhan et al. (12 November 2025), “**An enhanced deep learning-based framework for diagnosing apple leaf diseases**”, *Scientific Reports*, vol. 15, article 39699, DOI: 10.1038/s41598-025-23272-9. [SCIE, SCOPUS] [IF-3.9]
15. Aayushi Chahal, Chhaya Gupta, Nasib Singh Gill, Preeti Gulia et al. (November 2025), “**A Federated Learning-Based Traffic Congestion and Fuel Monitoring**”, *Neural Processing Letters*, vol. 57, no. 6, Nov. 2025, DOI: 10.1007/s11063-025-11811-4. [SCIE, SCOPUS] [IF-2.8]
16. Preeti Chaudhary, Preeti Gulia, Nasib Singh Gill (November 2025), “**Machine Learning and IoT for Smart Agriculture: A Comprehensive review**”, *International Journal of Basic and Applied Sciences*, vol. 14, no. 7, Nov. 2025, pp. 187–198, DOI: 10.14419/8fb5k746. [SCOPUS]
17. Deepak Sharma, Preeti Gulia, Nasib Singh Gill et al. (November 2025), “**Applying stacked ensemble methods to predict future rainfall based on historical weather data**”, *Theoretical and Applied Climatology*, vol. 156, no. 11, Nov. 2025, DOI: 10.1007/s00704-025-05764-w.

[SCIE, SCOPUS] [IF-2.7]

18. Sangeeta Duhan, Preeti Gulia, Nasib Singh Gill et al. (October 2025), “**LiteCShuffle: a lightweight and efficient deep learning approach for plant disease classification**”, *Cogent Food & Agriculture*, vol. 11, no. 1, Oct. 2025, DOI: 10.1080/23311932.2025.2568197. [SCIE, SCOPUS] [IF-2.3]
19. Chhaya Gupta, Nasib Singh Gill, Preeti Gulia et al. (October 2025), “**CODNet: Context-based object detection network for multimodal image captioning and virtual question answering**”, *Image and Vision Computing*, vol. 163, Oct. 2025, article 105768, DOI: 10.1016/j.imavis.2025.105768. [SCIE, SCOPUS] [IF-4.2]
20. Chhaya Gupta, Nasib Singh Gill, Preeti Gulia et al. (September 2025), “**An optimized YOLO NAS based framework for real time object detection**”, *Scientific Reports*, vol. 15, no. 1, Sept. 2025, article 32903, DOI: 10.1038/s41598-025-17919-w. [SCIE, SCOPUS] [IF-3.9]
21. Bharti Goyal, Nasib Singh Gill, Preeti Gulia et al. (July 2025), “**Instagram fake profile detection using an ensemble learning method**”, *Scientific Reports*, vol. 15, no. 1, July 2025, article 26464, DOI: 10.1038/s41598-025-03973-x. [SCIE, SCOPUS] [IF-3.9]
22. Chhaya Gupta, Nasib Singh Gill, Preeti Gulia et al. (July 2025), “**Surface defect detection on bolt surface using a real-time fine-tuned YOLOv6 model**”, *Journal of Big Data*, vol. 12, no. 1, July 2025, DOI: 10.1186/s40537-025-01226-2. [SCIE, SCOPUS] [IF-6.4]
23. Aarti Punia, Preeti Gulia, Nasib Singh Gill et al. (July 2025), “**QuickMedBlock: A framework for enhanced attribute-based access control using blockchain for EHR in cloud**”, *Peer-to-Peer Networking and Applications*, vol. 18, no. 5, July 2025, DOI: 10.1007/s12083-025-02063-z. [SCIE, SCOPUS] [IF-2.6]
24. Ashish Saini, Nasib Singh Gill, Preeti Gulia, and Khushwant Singh (June 2025), “**A hierarchical multi-class classification system for face and text datasets**”, *Frontiers in Computer Science*, vol. 7, article 1550453, DOI: 10.3389/fcomp.2025.1550453, ISSN 2624-9898 (online) [ESCI, SCOPUS] [IF-2.7]
25. Aarti Punia, Preeti Gulia, Nasib Singh Gill et al. (May 2025), “**The security and vulnerability issues of blockchain technology: A SWOC analysis**”, *Peer-to-Peer Networking and Applications*, vol. 18(4), pp. 1–31, DOI: [10.1007/s12083-025-01981-2](https://doi.org/10.1007/s12083-025-01981-2) ISSN: 1936-6450 (online)[SCIE, SCOPUS] [IF-3.3]
26. Amit Sagu, Nasib Singh Gill, Preeti Gulia et al. (May 2025), “**Advances to IoT security using a GRU-CNN deep learning model trained on SUCMO algorithm**”, *Scientific Reports*, vol. 15(1), pp. 1–16, DOI: [10.1038/s41598-025-99574-9](https://doi.org/10.1038/s41598-025-99574-9), ISSN 2045-2322 (online) [SCIE, SCOPUS] [IF-3.8]
27. Ritu Ratra, Preeti Gulia, Nasib Singh Gill et al. (April 2025), “**A technique for improving healthcare privacy by applying principal component analysis**”, *Peer-to-Peer Networking and Applications*, vol. 18(1), article 151, DOI: [10.1007/s12083-025-01948-3](https://doi.org/10.1007/s12083-025-01948-3), ISSN 1936-6450 (online) [SCIE, SCOPUS] [IF-3.3]
28. Rahul, Preeti Gulia, and Nasib Singh Gill (April 2025), “**Articulation of blockchain enabled e-voting systems: a systematic literature review**”, *Peer-to-Peer Networking and Applications*, vol. 18(1), article 142, DOI: [10.1007/s12083-025-01956-3](https://doi.org/10.1007/s12083-025-01956-3), ISSN 1936-6450 (online) [SCIE, SCOPUS] [IF-3.3]
29. Ayushi Chahal, Preeti Gulia, Nasib Singh Gill, and Deepti Rani (February 2025), “**Design of a Federated Ensemble Model for Intrusion Detection in Distributed IIoT Networks for Enhancing Cybersecurity**”, *Journal of Industrial Information Integration*, vol. 44, article 100800, DOI: 10.1016/j.jii.2025.100800, ISSN 2452-414X (online) [SCIE, SCOPUS] [IF-11.6]
30. Sangeeta Duhan, Preeti Gulia, Nasib Singh Gill, and Ekta Narwal (February 2025), “**RTR_Lite_MobileNetV2: A Lightweight and Efficient Model for Plant Disease Detection and Classification**”, *Current Plant Biology*, vol. 33, article 100459, DOI: [10.1016/j.cpb.2025.100459](https://doi.org/10.1016/j.cpb.2025.100459), ISSN 2214-6628 (online) [ESCI, SCOPUS] [IF-4.5]
31. Chhaya Gupta, Nasib Singh Gill, Preeti Gulia et. al (January, 2025), “**Applying YOLOv6 as an ensemble federated learning framework to classify breast cancer pathology images**”,

32. Ashish Saini, Nasib Singh Gill, Preeti Gulia et. al (January, 2025),”**Smart crop disease monitoring system in IoT using optimization enabled deep residual network**” *Scientific Reports*, vol. 15(1), DOI:[10.1038/s41598-025-85486-1](https://doi.org/10.1038/s41598-025-85486-1) ISSN 2045-2322 (online) [SCIE, SCOPUS] [IF-3.8]

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33. Deepti Rani, Nasib Singh Gill, Preeti Gulia et. al (December, 2024), “**A secure digital evidence preservation system for an IoT-enabled smart environment using IPFS, blockchain, and smart contracts**”, *Peer-to-Peer Networking and Applications*, vol. 18(2), DOI: [10.1007/s12083-024-01855-z](https://doi.org/10.1007/s12083-024-01855-z) Electronic ISSN: 1936-6450. Print ISSN: 1936-6442. [SCIE, SCOPUS] [IF-3.3]
34. Bharti Goyal, Nasib Singh Gill, Preeti Gulia (December, 2024), **Securing social spaces: machine learning techniques for fake profile detection on Instagram**”, *Social Network Analysis and Mining*, vol. 14(1), DOI: [10.1007/s13278-024-01399-3](https://doi.org/10.1007/s13278-024-01399-3) E-ISSN:1869-5469 [SCIE, SCOPUS] [IF-2.3]
35. Ayushi Chahal, Preeti Gulia, Nasib S. Gill et. al (November, 2024), “**Predictive Analytics Technique based on hybrid Sampling to manage Unbalanced Data in Smart Cities**” *Heliyon*, DOI: [10.1016/j.heliyon.2024.e39275](https://doi.org/10.1016/j.heliyon.2024.e39275) E-ISSN 2405-8440. [SCIE, SCOPUS] [IF-3.4]
36. Aarti Punia, Preeti Gulia, Nasib S. Gill and others (Sept., 2024), “**A Systematic Review on Blockchain-based Access Control Systems in Cloud Environment**”, *Journal of Cloud Computing*, Volume 13(146), pp. 1-37 <https://doi.org/10.1186/s13677-024-00697-7> [SCIE, SCOPUS, UGC-CARE Listed, IF-3.7]
37. Nisha, Nasib S. Gill, Preeti Gulia (July, 2024), “**A Review of Intrusion Detection System and Security Threat in Internet of Things enabled environment**”, *International Journal of Electrical Engineering and Computer Science*, Volume 35(1), pp. 428-435 <http://doi.org/10.11591/ijeecs.v35.i1.pp428-435> [UGC-CARE Listed, IF-3.7]
38. Ayushi Chahal, Preeti Gulia, Nasib S. Gill, (June, 2024), “**Systematic Analysis based on Conflux of Machine Learning and Internet of Things using Bibliometric analysis**”, *Journal of Intelligent Systems and Internet of Things*, Volume 13(1), pp. 196-224, DOI: [10.54216/JISIoT.130115](https://doi.org/10.54216/JISIoT.130115) [SCOPUS]
39. Chhaya Gupta, Nasib S. Gill, Preeti Gulia (June, 2024), “**A Novel Secured Deep Learning model for Covid Detection using Chest X-Rays**”, *Journal of Cyber Security and Information Management*, Volume 14(1), pp. 227-244, DOI: [10.54216/JCIM.140116](https://doi.org/10.54216/JCIM.140116) [SCOPUS]
40. Chhaya Gupta, Nasib S. Gill, Preeti Gulia (June, 2024), “**An Ensemble Machine Learning Method for Analyzing various Medical Datasets**”, *Journal of Intelligent Systems and Internet of Things*, Volume 13(1), pp. 177-195, DOI: [10.54216/JISIoT.130114](https://doi.org/10.54216/JISIoT.130114) [SCOPUS]
41. Sangeeta Duhan, Preeti Gulia, Nasib S. Gill,(April, 2024), “**Investigating Attention Mechanisms for Plant Disease Identification in Challenging Environments**”, *Heliyon*, Volume 10(9), <http://dx.doi.org/10.1016/j.heliyon.2024.e29802> [SCIE, SCOPUS, IF-3.4]
42. Sangeeta Duhan, Preeti Gulia, Nasib S. Gill,(March, 2024), “**Analysis to investigate Plant Disease Identification based on Machine Learning techniques**”, Volume 41(8), <https://doi.org/10.1111/exsy.13576> [SCIE, SCOPUS, IF-3.0]

43. Gupta C, Gill Nasib Singh, Gulia, P et al. (March, 2024), "**A Novel Finetuned YOLOv8 Model for Real-Time Underwater Trash Detection**", Journal of Real Time Image Processing, Volume 21(2), <https://doi.org/10.1007/s11554-024-01439-3> [SCIE, SCOPUS, IF-2.9]
44. Sangeeta, Gulia, P., Gill Nasib Singh et.al (March, 2024), "**Video Compression-cum-Classification Network for Classification from Compressed Video Streams**", The Visual Computer, <https://doi.org/10.1007/s00371-023-03242-w> [SCIE, SCOPUS, IF-3.0]
45. Amit Sagu, Nasib Singh Gill and Preeti Gulia, J.M. Chatterjee (February, 2024), "**Hybrid Optimization Algorithm for detection of Security Attacks in IoT enabled Cyber- Physical Systems**", IEEE Transaction on Big Data [SCIE, Scopus, UGC-Care Listed] (Impact Factor: 7.5).
46. Sangeeta, Gulia, P., Gill Nasib Singh et al. (February, 2024), "**An Analysis to Investigate Plant Disease Identification based on Machine Learning techniques**", Expert Systems, <https://onlinelibrary.wiley.com/doi/abs/10.1111/exsy.13382> [SCIE, SCOPUS, IF-2.812]
47. Deepak, Gulia, P., Gill Nasib Singh et al. (February, 2024), "**Exploring the Potential of Blockchain Technology in an IoT-Enabled Environment: A Review**", IEEE Access, DOI: 10.1109/ACCESS.2023.3276863 [SCIE, SCOPUS, IF-3.9]
48. Gupta C, Gill Nasib Singh, Gulia, P, Chatterjee, J.M. (February,2024), "**A Novel Fine- tuned YOLOv8 model for Real-time Underwater Trash Detection**", Journal of Real-Time Image Processing, doi: 10.1007/s11554-023-01299-3 [SCIE,SCOPUS, IF: 2.293]
49. Nisha, Gill Nasib Singh, Preeti Gulia (February, 2024), "**A Review of Intrusion Detection System and Security Threats in IoT Enabled Environment**", Indonesian Journal of Electrical Engineering and Computer Science [SCOPUS]
50. Nisha, Gill Nasib Singh, Preeti Gulia (January, 2024), "**A Review on Machine Learning based Intrusion Detection System for IoT Enabled Environment**", International Journal of Electrical and Computer Engineering [SCOPUS]
51. Deepti Rani, Gill Nasib Singh, Preeti Gulia (January, 2024), "**A Forensic Framework to Improve Digital Image Evidence Administration in IIoT**", *Journal of Industrial Information Integration*, 38 (2024), pp. 1-30. <https://doi.org/10.1016/j.jii.2024.100568> [SCIE, SCOPUS, IF-15.7]
52. Chahal, A, Gulia, P., Gill Nasib Singh, Nishat Sultana. (January, 2024), "**Aquila Optimizer-Based Hybrid Predictive Model for Traffic Congestion in an IoT-Enabled Smart City**" International Journal of Intelligent Systems, Volume 2024, Article ID 5577278, pages 1-20. <https://doi.org/10.1155/2024/5577278> [SCIE, SCOPUS, IF: 8.992]
53. Sangeeta Yadav, Preeti Gulia, Nasib Singh et al. (January, 2024), "**Design of a Lightweight Compressed video stream-based Patient Activity Monitoring System**", *CMC: Computer, Material, Continua*, vol. 78, no.1, pp. 1253–1274, 2024. DOI - 10.1109/OJCS.2023.3334528 (SCIE, SCOPUS, UGC-CARE LIST), IF: 3.86

2023

54. Chhaya Gupta Gill Nasib Singh, Preeti Gulia, Fabio Arena, Giovanni Pau et al. (November, 2023), "**A Real-time 3-Dimensional Object Detection Based Human Action Recognition Model**", *IEEE Open Journal of the Computer Society*, pp 1-12, ISSN- 2644-1268 (SCIE, SCOPUS, UGC-CARE LIST), IF: 5.9.

55. Ritu Ratra, Preeti Gulia, Nasib Singh (October, 2023), **“Performance analysis of perturbation-based privacy preserving techniques: an experimental perspective”**, *International Journal of Electrical and Computer Engineering (IJECE)*, 5273-5282, ISSN - 2088-8708. (SCOPUS, UGC- CARELIST) DOI: 10.11591/ijece.v13i5.pp5273-5281
56. Sangeeta Yadav, Preeti Gulia, Nasib Singh *et al.* (Oct, 2023), **"Video Object Detection From Compressed Formats for Modern Lightweight Consumer Electronics"**, *IEEE Transactions on Consumer Electronics*, ISSN- 1558-4127. DOI: 10.1109/TCE.2023.3325480. (SCIE, SCOPUS, UGC-CARE LIST), IF: 4.4
57. Deepti Rani, Gill Nasib Singh, Preeti Gulia, Fabio Arena, Giovanni Pau (June, 2023), **“Design of an Intrusion Detection Model for IoT-Enabled Smart Home”**, *IEEE Access*, Vol. 11, pp. 52509-52526, DOI: 10.1109/ACCESS.2023.3276863 [SCIE, SCOPUS, IF-3.476]
58. Sangeeta, Gulia, P., Gill Nasib Singh *et.al* (June, 2023), **“Object detection and classification from compressed video streams”**, *Expert Systems*, pp. 1-14 (<https://onlinelibrary.wiley.com/doi/abs/10.1111/exsy.13382>) [SCIE, SCOPUS, IF-2.812]
59. Bharti B., Gill Nasib Singh and Gulia P. (June, 2023), **“Exploring machine learning techniques for fake profile detection in online social networks”**, *International Journal of Electrical and Computer Engineering (IJECE)*. [ESCI, SCOPUS, IF-0.376]
60. Saini, A., Gill Nasib Singh, Gulia, P. (May, 2023), **“Gray scale image denoising technique using regression based residual learning”**, *Multimedia Tools and Applications*, <https://doi.org/10.1007/s11042-023-15603-7> [SCI, SCOPUS, IF: 2.757]
61. Ritu Ratra, Preeti Gulia, Nasib Singh Gill (2023), **“Performance analysis of perturbation-based privacy preserving techniques: an experimental perspective”**, *International Journal of Electrical and Computer Engineering (IJECE)*, Vol. 13, No. 5, pp. 5273~5281 ISSN: 2088-8708, DOI: 10.11591/ijece.v13i5.pp5273-5281 [ESCI, SCOPUS, IF-0.376]
62. Gupta C, Gill Nasib Singh, Gulia, P, Chatterjee, J.M. (April, 2023), **“ A Novel Fine-tuned YOLOv6 transfer learning model for real-time object detection”**, *Journal of Real-Time Image Processing*, Vol. 20, no. 3, doi: 10.1007/s11554-023-01299-3 [SCIE, SCOPUS, IF: 2.293]
63. Chahal, A, Gulia, P., Gill Nasib Singh, Priyadarshini, I. (April, 2023), **“A Hybrid Univariate Traffic Congestion Prediction Model for IoT-Enabled Smart City”**, *Information*, Vol. 14, p.268, <https://doi.org/10.3390/info14050268> [SCIE, SCOPUS, IF: 3.1]
64. Sagu A., Gill Nasib Singh, Gulia P., Singh P. K., and Hong W. C., (Jan, 2023) **“Design of Metaheuristic Optimization Algorithms for Deep Learning Model for Secure IoT Environment”**, *Sustainability*, vol. 15, no. 3, Art. no. 3, Jan. 2023, doi: 10.3390/su15032204.[SCIE, SCOPUS, IF-3.889]

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65. Sagu A., Gill Nasib Singh, Gulia P., Chatterjee J. M., and Priyadarshini I. (Oct, 2022), **“A Hybrid Deep Learning Model with Self-Improved Optimization Algorithm for Detection of Security Attacks in IoT Environment”**, *Future Internet*, Vol. 14, no. 10, doi: 10.3390/fi14100301. [SCIE, SCOPUS, IF-3.4]

66. Sangeeta, Preeti Gulia, Nasib Singh Gill (August, 2022), **“Flow-MotionNet: A Deep Learning based Video Compression Architecture”**, *Multimedia Tools and Applications* [SCI, Scopus, UGC-Care Indexed] (Impact Factor: 2.757)
67. Ritu Ratra, Preeti Gulia, Nasib Singh Gill, J.M. Chatterjee (August, 2022), **“Big Data Privacy Preserving using Principal Component Analysis and Random Projection in Healthcare”**, *Mathematical Problem In Engineering*, E-ISSN 1024-123X, [SCIE, Scopus, UGC-Care Listed] (Impact Factor: 1.23).
68. A. Chahal, P. Gulia, Nasib Singh Gill, J.M. Chatterjee (August, 2022), **“Performance analysis of an optimized ANN model to predict the stability of Smart Grid”**, *Complexity*, [SCIE, Scopus, UGC-Care Listed] (Impact Factor: 2.121)
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