

January 2023: Monthly Departmental Activities

Journal Publications

- Chinu, Bansal, U. (2023). Explainable AI: To Reveal the Logic of Black-Box Models. *New Gener. Comput.* <https://doi.org/10.1007/s00354-022-00201-2>
- Singh A. B., Awasthi L. K., Bansal U. (2023). Chained dual-generative adversarial network: a generalized defense against adversarial attacks; *Computers, Materials & Continua*, vol. 74, no.2, pp. 2541–2555, 2023.
- Wadhera, T., Kakkar, D., Singh, J. K., Sharma, N., & Rani, R. (2023). Quantitative analysis of perception ability in autism spectrum disorder. *International Journal of Learning and Change*, 15(1), 70-84.
- Poddar, A. K., & Rani, R. (2023). Hybrid Architecture using CNN and LSTM for Image Captioning in Hindi Language. *Procedia Computer Science*, 218, 686-696.
- Kumar, A., Rani, R., & Singh, S. (2023). Encoder-Decoder Architecture for Image Steganography using Skip Connections. *Procedia Computer Science*, 218, 1122-1131.
- Lone, F., Verma, H. K., & Sharma, K. P. (2023). A systematic study on the challenges, characteristics and security issues in vehicular networks. *International Journal of Pervasive Computing and Communications*, (ahead-of-print).
- Manju, Singh, S. (2023). Modified energy-efficient partial coverage methodology for optimizing coverage in WSN. *Multimedia Tools and Applications*, 1-17.
- Singh, N.P. (2023). Novel ALBP and OLBP features for gender prediction from offline handwriting, *International Journal of Information Technology*, DOI: 10.1007/s41870-023-01166-1 (Scopus Indexed and Under Publication)
- Singh, N.P. (2023). Retinal Disease Prediction through Blood Vessel Segmentation and Classification Using Ensemble Based Deep Learning Approaches" Accepted for publication, *Neural Computing and Applications* (SCIE and Under Publication)
- Singh, N.P. (2023). Identification of Retinal Diseases based on Retinal blood Vessel Segmentation using Dagum PDF and Feature-Based Machine Learning Accepted for publication, *Imaging Science Journal*. (SCIE and Under Publication)
- Ansari, M.S.A., Pal, K., Govil, P., Govil, M.C. (2023). A Fuzzy Based Hierarchical Flash Crowd Controller for Live Video Streaming in P2P Network *Peer-to-Peer Networking and Applications*. (Accepted)
- Kumar, R., Kumar and Malik, A. (2023). Reversible Data Hiding with High Visual Quality using Pairwise PVO and PEE, *Multimedia Tools and Applications*, 6 Feb., 2023. (Accepted)

Conference Publications

- Sharma, Y. and Kaur, J. A Review of Deep Learning Algorithms for Early detection of oral mouth cancer in 3rd International Conference on Information Technology, 2023(Accepted)

Book Chapters

- Pall, A. S., Sharma, N., Sharma, K. P., & Wadhwa, V. (2023). A Systematic Review of Deep Learning Techniques for Semantic Image Segmentation: Methods, Future Directions, and Challenges. *Handbook of Research on Machine Learning*, 49-86.
- Dev, J., Mangla, M., Sharma, N., & Sharma, K. P. (2023). Time Series Forecasting Techniques for Infectious Disease Prediction. In *Handbook of Research on Machine Learning* (pp. 269-287). Apple Academic Press.

Expert Talks:

- **Dr Rajneesh Rani** delivered one lecture on 14th January 2023 on the topic '**Role of Artificial Intelligence in Machine Vision**' in the Refresher Course of Artificial Intelligence and Machine Learning organized by the UGC- Human Resource Development Center, Punjabi University, Patiala.

Online Workshop

- Dr. Jagdeep Kaur was convener of two days workshop(online) on "Design thinking, Critical thinking & Innovation design" held on 28-29 January 2023 organized by IIC of NIT Jalandhar

Student's Activities

- First-Year CSE Students: Naseem Akhtar, Vandana Sah, Prabhpreet Kaur and Anita Sai Participated in the Inter-NIT Women's Cricket tournament held at NIT Rourkela from 28th to 30th Jan 2023 and secured 1st Runner-Up position.
- Rashmi Kumari, Third Year CSE, Participated in All India Inter NIT Sports meet 2023 volleyball(women) held at Surathkal from 20-22 January 2023. The women's team played in quarter finals and won a match against NIT Agartala.



- Ramdayal – 20103119 - Attended two-days online workshop on “Design Thinking, Critical Thinking, and Innovation Design’ from 28th -29th Jan 2023, organized by IIC of NIT Jalandhar.