

BIO-DATA

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Invited Talk/Lecture in International Workshop/Symposium/Conference: 16

Invited Talk/Lecture in National Workshop/Symposium/Conference: 185

No. of Supervision of Ph. D Thesis: 21 (Awarded), 5 (ongoing)

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No. of Publications of SCI/SCIE/Scopus indexed Journals

1. Agrawal R. K., (with Pankaj, S Senthil Kumaran, Achal Kumar Srivastava, M Kumar, S Chaudhari, A Nehra, A Garg, R Ranjan, R M Pandey, D Joshi), Metabolic and Structural Insights of Cerebellar Dysfunction in Spinocerebellar Ataxia Type 12, Magnetic Resonance in Chemistry, 64 (2), 237-250, (2026)
2. Agrawal R. K., (Rashmi Mishra, Jyoti Singh Kirar), MSST-EEGNet: Multi-scale spatio-temporal feature extraction using inception and temporal pyramid pooling for motor imagery classification, Cognitive Neurodynamics, 19, 150 (2025)
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7. Agrawal R. K., (with Ashish Kumar; Leve Joseph), IterMiUnet: A lightweight architecture for automatic blood vessel segmentation, Multimedia Tools and Applications, 82, 43207–43231(2023)

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9. Agrawal R. K., (with Baljeet Kaur, Swati Rathi), Enhanced Depression Detection from Speech using Quantum Whale Optimization Algorithm for Feature Selection, *Computers in Biology and Medicine*, 150, 106122, November (2022)
10. Agrawal R. K., (with Baljeet Kaur, Parul Agarwal), Multi-objective particle swarm optimization with guided exploration for multimodal problems, *Applied Soft Computing*, 120, 108684, (2022)
11. Agrawal R. K., (with Swati Rathi, Baljeet Kaur), Selection of Relevant Visual Feature Sets for Enhanced Depression Detection using Incremental Linear Discriminant Analysis. *Multimedia Tools Appl.* 81(13), 17703-17727 (2022)
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13. Agrawal R. K., (with D Kumar, Puneet Kumar), Bias-corrected intuitionistic fuzzy c-means with spatial neighborhood information approach for human brain MRI image segmentation, *IEEE Transaction on Fuzzy Systems*, 30 (3), 687-700 (2022)
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Publications in Proceedings of Conferences

1. Agrawal R. K. (Mishra Rashmi), MSST-EEGNet: Multi-scale spatio-temporal feature extraction using inception and temporal pyramid pooling for motor imagery classification, *Conference on Artificial Intelligence*, Plash University, Mohali, India, (November 28-30, 2025).
2. Agrawal R. K. (Kumari, Pinki), Adaptive Spatial Information in Conjunction with Type-1 Fuzzy Clustering for Skin Lesion Segmentation, *International Conference on Artificial Intelligence(ICAI)*, Shillong, India (4th October 2025).
3. Agrawal R. K. (Kumari, Pinki), Exploring Lightweight Deep Learning Models for Skin Lesion Classification towards Mobile Healthcare Applications, *7th International Conference on Communication and Computational Technologies (ICCCT)*, Goa, India (14-16 February 2025).
4. Agrawal R. K. (Avni Mishra, Pinki Kumari), Neutrosophic Clustering Method with Local Spatial Information for Dermoscopic Image Segmentation, *The 12th International Conference on Big Data and Artificial Intelligence*, *Lecture Notes in Computer Science*, vol 15526, 18-33, (2024) Springer, Cham. https://doi.org/10.1007/978-3-031-81821-9_2
5. Agrawal R. K. (Rathi, S., Kaur; B.) Bi-stage QWOA-Based Efficient Feature Selection for Enhanced Depression Detection Based on Facial Cues. In: Abraham, A., Hanne, T., Gandhi, N., Manghirmalani Mishra, P., Bajaj, A., Siarry, P. (eds) *Proceedings of the 14th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2022)*. SoCPaR 2022. *Lecture Notes in Networks and Systems*, vol 648. 248-264, Springer, Cham. December 14-16, (2023).
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 13. Agrawal R. K. (with Akanksha Juneja), Deep Learning Models for Medical Image Analysis: Challenges and Future Directions. International Conference on Big Data Analytics (BDA 2019), 20-32, (2019)
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 15. Agrawal R. K., (with D Kumar), Intuitionistic Fuzzy Clustering Method with Spatial Information for MRI Image Segmentation, 2019 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2019, New Orleans, LA, USA, IEEE 2019, 1-7, (2019) ISBN 978-1-5386-1728-1
 16. Agrawal R. K., (with Jyoti Singh Kirar, Ayesha Chaudhary), Selection of Relevant Electrodes Based on Temporal Similarity for Classification of Motor Imagery Tasks, Proceedings of the International Conference on Pattern Recognition and Machine Intelligence, PREMI 2017, 96-102 (2017).
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33. Agrawal R. K., (Ratnadip Adhikari), A Novel Weighted Ensemble Technique for Time Series Forecasting. PAKDD (1) 2012: 38-49, Kuala Lumpur, Malaysia, May 29-June 1, 2012, Proceedings, Part I. Lecture Notes in Computer Science 7301 Springer 2012, ISBN 978-3-642-30216-9.
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- Member, Nokia Advisory Committee, IIT Delhi
- Member, Project Review and Steering Group, DST

- Member, Project Review and Steering Group for the project at: CDAC Mohali; Tezpur University; Assam University; MNIT, Jaipur
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