

BIO-DATA

Ramesh Kumar Agrawal
Mobile: 9810115033
Telephone: 26738734(O)
email: rkajnu@gmail.com

Office Address: School of Computer & Systems Sciences,
Jawaharlal Nehru University, New Delhi- 110 067

Designation: Professor, School of Computer & Systems Sciences;
Professor, School of Engineering

Educational Qualifications:

Course	Institution/University
Ph.D	University of Delhi
M.Tech (C.S)	IIT, Delhi

Teaching Experience: 30 years approximately

Administrative Appointments:

Chief Coordinator Communication & Information Services, August, 2022 – till date

Dean, School of Engineering: January, 2018- January, 2020

Dean, School of Computer & Systems Sciences: July, 2015- July, 2017

Research Areas: Data Mining, Machine Learning, Pattern Recognition and Medical Imaging

Research Collaborations (with):

Prof. Madhuri Behari, Prof. Senthil Kumaran, Prof. Achal Kumar Srivastava, Dr. Leve Joseph from AIIMS

Number of Sponsored Projects: 05 (Completed)

Invited Talk/Lecture in International Workshop/Symposium/Conference: 15

Invited Talk/Lecture in National Workshop/Symposium/Conference: 180

No. of Supervision of Ph. D Thesis: 20 (Awarded), 5 (ongoing)

No. of Supervision of M. Tech Dissertation: 38 (Awarded), 3 (ongoing)

Scopus link: <https://www.scopus.com/authid/detail.uri?authorId=35291228900>

Orcid link: <https://orcid.org/0000-0003-3122-5096>

Google Scholar link: <https://scholar.google.com/citations?user=w3HUzy-W9GYC&hl=en>

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

1. Agrawal R. K., (with Pinki Kumari; Aditi Priya), Weighted fuzzy clustering approach with adaptive spatial information and Kullback–Leibler divergence for skin lesion segmentation, International Journal of Machine Learning and Cybernetics, (Accepted) (2025)
2. Agrawal R. K., (with Aditi Priya; Bharti Rana), Noise and cluster size insensitive robust weighted fuzzy clustering for medical image segmentation, Soft Computing, 28, 13615-13638, (2024)
3. Agrawal R. K., (with Snigdha Agrawal; S Senthil Kumaran; Bharti Rana; Achal Kumar Srivastava), Integration of graph network with kernel SVM and logistic regression for identification of biomarkers in SCA12 and its diagnosis, Cerebral Cortex, 34 (4), 38679476, (2024)
4. Agrawal R. K., (with Trasha Gupta; Rishu Sangal; S. Avinash Rao), Performance Evaluation of Thermography-Based Computer-Aided Diagnostic Systems for Detecting Breast Cancer: An Empirical Study, ACM Transactions on Computing for Healthcare, 5 (4), 1-30, (2024)
5. 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)
6. Agrawal R. K., (with D Kumar, Puneet Kumar), Fast and robust spatial fuzzy bounded k-plane clustering method for human brain MRI image segmentation, Applied Soft Computing, 133, 109939 (2023)
7. 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)
8. 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)
9. 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)
 10. Agrawal R. K., (with D Kumar, Puneet Kumar), Fuzzy k-plane clustering method with local spatial information for segmentation of human brain MRI image, *Neural Comput. Applications*, 34(6), 4855- 4874 (2022)
 11. 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)
 12. Agrawal R. K., (with Harsh Bhasin), Triploid genetic algorithm for convolutional neural network-based diagnosis of mild cognitive impairment, *Alzheimer's & Dementia*, 18(11), 2283-2291 (2022)
 13. Agrawal R. K., (with Baljeet Kaur, Parul Agarwal), Quantum inspired Particle Swarm Optimization with guided exploration for function optimization, *Applied Soft Computing*, 102, 107122, (2021)
 14. Agrawal R. K., (with Akshansh Gupta, Jyoti Singh Kirar, Andreu Perez Javier, Weiping Ding, Chin-Teng Lin, Mukesh Prasad), On the Utility of Power Spectral Techniques with Feature Selection Techniques for Effective Mental Task Classification in Noninvasive BCI, *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, 51 (5), 3080-3092, (2021)
 15. Agrawal R. K., (with Harsh Bhasin), A combination of 3-D discrete wavelet transform and 3-D local binary pattern for classification of mild cognitive impairment, *BMC Medical Informatics and Decision Making*, 20, 1-10, (2020)
 16. Agrawal R. K., (with Baljeet Kaur, Surbhi Sharma), Quantum based Whale Optimization Algorithm for Wrapper Feature Selection, *Applied Soft Computing*, 89, 106092, (2020)
 17. Agrawal R. K., (with D Kumar, H Verma), Kernel intuitionistic fuzzy entropy clustering for MRI image segmentation, *Soft Computing*, 24, 4003–4026, (2020)
 18. Agrawal R. K., (with Jyoti Singh Kirar), A combination of spectral graph theory and quantum genetic algorithm to find relevant set of electrodes for motor imagery classification, *Applied Soft Computing*, 97(Part B), 105519, (2020)
 19. Agrawal R. K., (with Akshansh Gupta, Jyoti Singh Kirar, Baljeet Kaur, Weiping Ding, Chin-Teng Lin, Andreu Perez Javier, Mukesh Prasad), A hierarchical meta-model for multi-class mental task based brain-computer interfaces, *Neurocomputing*, 389, 207-217, (2020)
 20. Agrawal R. K., (with N Aggarwal, B Rana), Role of surfacelet transform in diagnosing Alzheimer's disease, *Multidimensional Systems and Signal Processing*, 30(4), 1839-1858, (2019)
 21. Agrawal R. K., (with Utkarsh Niranjana, Anurag Singh), A Mean-Field-Theoretic Model for Dual Information Propagation in Networks, *Journal of Complex Networks*, 7(4), 585-602, (2019)
 22. Agrawal R. K., (with Navjot Singh, Rinki Arya), A novel approach for salient object detection using double-density dual-tree complex wavelet transform in conjunction with superpixel segmentation, *Knowledge and Information Systems*, 60 (1), 327-361,(2019)
 23. Agrawal R. K., (with D Kumar, H Verma, A Mehra), A modified intuitionistic fuzzy c-means clustering approach to segment human brain MRI image, *Multimedia Tools and Applications*, 78 (10), 12663-12687 (2019)
 24. Agrawal R. K., (with Utkarsh Niranjana, B Lall), Analysis of the SIRP Epidemic Model with Anti-worm Patching, *International Journal of Computer Mathematics: Computer Systems Theory*, 3(2), 122-143(2018)
 25. Agrawal R. K., (with Jyoti Singh Kirar), Relevant Feature Selection from a Combination of Spectral-Temporal and Spatial Features for Classification of Motor Imagery EEG, *Journal of medical systems*, 42(5), 78 (2018)
 26. Agrawal R. K., (with A Juneja, B Rana), A Novel Fuzzy Rough Selection of Non-linearly Extracted Features for Schizophrenia Diagnosis using fMRI, *Computer Methods and Programs in Biomedicine*, 155, 139-152 (2018)
 27. Agrawal R. K., (with A Juneja, B Rana), fMRI based computer aided diagnosis of schizophrenia using fuzzy kernel feature extraction and hybrid feature selection, *Multimedia Tools and Applications*, 77 (3), 3963-3989 (2018)
 28. Agrawal R. K., (with Navjot Singh, Rinki Arya), Performance enhancement of salient object detection using superpixel based Gaussian mixture model, *Multimedia Tools and Applications*, 77 (7), 8511–8529 (2018)
 29. Agrawal R. K., (with Rinki Arya, Navjot Singh), A novel combination of second-order statistical features and segmentation using multi-layer superpixels for salient object detection, *Applied Intelligence*, 46 (2) 254- 271 (2017)
 30. Agrawal R. K., (with Navjot Singh, Rinki Arya), A novel position prior using fusion of rule of thirds and image center for salient object detection, *Multimedia Tools and Applications*, 76(8): 10521-10538 (2017)
 31. Agrawal R. K., (with B Rana, A Juneja, M Saxena, S Gudwani, SS Kumaran, Madhuri Bihari), Relevant 3D local binary pattern based features from fused feature descriptor for differential diagnosis of Parkinson's disease using structural MRI, *Biomedical Signal Processing and Control*, 34, 134-143 (2017)
 32. Agrawal R. K., (with Jyoti Singh Kirar), Composite Kernel Support Vector Machine based Performance Enhancement of Brain Computer Interface in Conjunction with Spatial Filter, *Biomedical Signal Processing and Control*, 33, 151-160 (2017)

33. Agrawal R. K., (with A Juneja, B Rana), An enhanced texture-based image retrieval approach with features selected from integration of feature extraction techniques, *International Journal of Computer Vision and Robotics*, 7(4), 357-380 (2017)
34. Agrawal R. K., (with Nitin Kumar, Ajay Jaiswal), Incremental and Decremental Nonparametric Discriminant Analysis for Face Recognition, *Computing and Informatics*, 35(5), 1231-1248 (2016)
35. Agrawal R. K., (with Hanuman Verma, Aditi Sharan), An improved intuitionistic fuzzy c-means clustering algorithm incorporating local information for brain image segmentation. *Applied Soft Computing*, 46: 543-557 (2016)
36. Agrawal R. K., (with A Juneja, B Rana), A combination of singular value decomposition and multivariate feature selection method for diagnosis of schizophrenia using fMRI, *Biomedical. Signal Processing and Control* 27: 122-133 (2016)
37. Agrawal R. K.,(with Navjot Singh, Rinki Arya), A convex hull approach in conjunction with Gaussian mixture model for salient object detection. *Digital Signal Processing* 55: 22-31 (2016)
38. Agrawal R. K., (Rinki Arya, Navjot Singh), A novel hybrid approach for salient object detection using local and global saliency in frequency domain. *Multimedia Tools Application*,75(14): 8267-8287 (2016)
39. Agrawal R. K., (Manju Sardana, Baljeet Kaur), A hybrid of clustering and quantum genetic algorithm for relevant genes selection for cancer microarray data. *KES Journal* 20(3), 161-173 (2016)
40. Agrawal R. K., (with Namita Aggarwal, Bharti Rana), 3D discrete wavelet transform for computer aided diagnosis of Alzheimer's disease using t1-weighted brain MRI, *Int. J. Imaging Systems and Technology*, 25(2): 179-190 (2015)
41. Agrawal R. K., (with Manju Sardana, Baljeet Kaur), An Incremental Feature Selection approach based on Scatter Matrices for Classification of Cancer Microarray data, *International Journal of Computer Mathematics*, 92(2), 277-295 (2015)
42. Agrawal R. K., (M Saxena, B Rana, A Juneja, SS Kumaran, M Behari), Imaging neurodegeneration in Movement Disorders: A VBM study, *Movement Disorders*, 30, S393-S394 (2015)
43. Agrawal R. K., (with Hanuman Verma), Possibilistic Intuitionistic Fuzzy c-Means Clustering Algorithm for MRI Brain Image Segmentation, *International Journal on Artificial Intelligence Tools*, 24 (5) (2015)
44. Agrawal R. K., (with Akshansh Gupta, Baljeet Kaur), Performance Enhancement of Mental Task Classification Using EEG Signal: A Study of Multivariate Feature Selection Methods, *Soft Computing*, 19 (10), 2799-2812 (2015)
45. Agrawal R. K., (with Bharti Rana, Akanksha Juneja, Mohit Saxena, Sunita Gudwani, S. Senthil Kumaran, Madhuri Behari), Graph theory-based spectral feature selection for computer aided diagnosis of Parkinson's disease using T1-weighted MRI, *Int. J. Imaging Systems and Technology* 25(3), 245-255 (2015)
46. Agrawal R. K., (with Navjot Singh), Combination of Kullback-Leibler Divergence and Manhattan Distance Measures as a Center surround Feature Statistics to Detect Salient Object, *Signal Image and Video Processing*, 9(2), 427-435 (2015)
47. Agrawal R. K., (with B Rana, A Juneja, M Saxena, S Gudwani, SS Kumaran, Madhuri Bihari), Regions-of-Interest based Automated Diagnosis of Parkinson's Disease using T1-weighted MRI, *Expert Systems with Applications*, 42 (9), 4506-4516 (2015)
48. Agrawal R. K., (with Nitin Kumar), Block LDA via QR-decomposition for face recognition with single image per person. *KES Journal* 19(3): 173-181 (2015)
49. Agrawal R. K., (with Namita Aggarwal, Bharti Rana, S. Senthil Kumaran), A combination of dual-tree discrete wavelet transform and minimum redundancy maximum relevance method for diagnosis of Alzheimer's disease, *International Journal of Bioinformatics Research and Applications*, 11(5), 433-461 (2015)
50. Agrawal R. K., (with Ajay Jaiswal, Nitin Kumar), Analysis and evaluation of regression-based methods for facial pose classification. *Int. J. Appl. Pattern Recognition*, 2(1), 24-45 (2015)
51. Agrawal R. K., (with B Rana, A Juneja), Relevant Feature Subset Selection from Ensemble of Multiple Feature Extraction Methods for Texture Classification. *Int. J. Comput. Vis. Image Process.* 5(1), 48-65, (2015)
52. Agrawal R. K., (with B Rana, A Juneja, M Saxena, S Gudwani, SS Kumaran, M Behari), A machine learning approach for classification of Parkinson's disease and controls using T1-weighted MRI, *MOVEMENT DISORDERS* 29, S88-S89 (2014)
53. Agrawal R. K., (with Hanuman Verma Naveen Kumar), Improved Fuzzy Entropy Clustering Algorithm for MRI Brain Image Segmentation, *International Journal of Imaging Systems & Technology Journal*, 24 (4), 277-283 (2014)
54. Agrawal R. K., (with Ratnadip Adhikari), A linear hybrid methodology for improving accuracy of time series forecasting, *Neural Computing and Applications* 25 (2), 269-281 (2014)
55. Agrawal R. K., (with Navjot Singh, Rinki Arya), A novel approach to combine features for salient object detection using constrained particle swarm optimization. *Pattern Recognition* 47 (4), 1731-1739 (2014)
56. Agrawal R. K., (with Ratnadip Adhikari), A Combination of Artificial Neural Network and Random Walk Models for Financial Time Series Forecasting, *Neural Computing and Applications*, 24 (6), 1441-1449 (2014)
57. Agrawal R. K., (with Ratnadip Adhikari), Performance Evaluation of Weights Selection Schemes for Linear Combination of Multiple Forecasts, *Artificial Intelligence Review*, 42(4), 529-548 (2014)

58. Agrawal R. K., (with Ajay Jaiswal, Nitin Kumar), Incremental and Decremental Exponential Discriminant Analysis for Face Recognition. *Int. J. Comput. Vis. Image Process.* 4(1), 40-55, (2014)
59. Agrawal R. K., (with Ratnadip Adhikari), Hybridization of Artificial Neural Network and Particle Swarm Optimization Methods for Time Series Forecasting *International Journal of Applied Evolutionary Computation*, 4(3), 75-90 (2013)
60. Agrawal R. K., (with Ratnadip Adhikari), Forecasting Strong Seasonal Time Series with Artificial Neural Networks, *Journal of scientific and industrial research*, 71(10), 657-666 (2012)
61. Agrawal R. K., (with Gaurav Rajput, Namita Aggarwal), Performance Evaluation of Exponential Discriminant Analysis with Feature Selection for Steganalysis, *Defence Science Journal*, Vol. 62, No. 1, 19-24 (2012)
62. Agrawal R. K., (with Rajni Bala), Clustering in conjunction with wrapper approach to select discriminatory genes for microarray dataset classification, *Computing and Informatics*, Computing and Informatics 31(5), 921-938 (2012)
63. Agrawal R. K., (with Ajay Jaiswal, Nitin Kumar), *Local Linear Regression on Hybrid Eigenfaces for Pose Invariant Face Recognition*, *Int. J. Comput. Vis. Image Process.* 2(2), 48-58 (2012)
64. Agrawal R. K., (with Rajni Bala), Mutual Information and Cross Entropy Framework to Determine Relevant Gene Subset for Cancer Classification, *Informatica* 35, 375-382 (2011).
65. Agrawal R. K., (with Manju Bala), Optimal Decision Tree Based Multi-class Support Vector Machine, *Informatica*, 35, 197– 209 (2011).
66. Agrawal R. K., (with Manju Bala), Statistical Measures to Determine Optimal Structure of Decision Tree: One Versus One Support Vector Machine, *Defence Science Journal*, 6(4), 399-404 (2010)
67. Agrawal R. K., (with Karmeshu), Perturbation Scheme for online learning of features, *Incremental principal component analysis*, *Pattern Recognition* 41,1452-1460 (2008)
68. Agrawal R. K., (with Rajni Bala), Incremental Bayesian classification for multivariate normal distribution data, *Pattern Recognition Letters* 29(13):1873-1876 (2008)
69. Agrawal R. K., (with V. S. Varma), Improved Hill determinant method for the solution of quantum anharmonic oscillators, *Physical Review A* 49, 5089-5091 (1994)
70. Agrawal R. K., (with V. S. Varma), Rational potential using a modified Hill determinant method, *Physical Review A* 48 (3), 1921 (1993)
71. Agrawal R. K., (with V. S. Varma), Phase transition in an ensemble of anharmonic oscillators, *Chemical physics letters* 181(5), 441-444 (1991)
72. Agrawal R. K., (with V. S. Varma), Finite discontinuities in the energy eigenvalue spectra of anharmonic oscillators, *Pramana* 36 (5), 489-496 (1991)

Publications in Proceedings of Conferences

1. Agrawal R. K. (Pinki Kumari)), Exploring Lightweight Deep Learning Models for Skin Lesion Classification Towards Mobile Healthcare Applications, 7th International Conference on Communication and Computational Technologies (ICCCCT 2025), Accepted
2. Agrawal R. K. (Avni Mishra, Pinki Kumari), Neutrosophic Clustering Method with Local Spatial Information for Dermoscopic Image Segmentation, 12th International Conference on Big Data and Artificial Intelligence, (2024), Accepted
3. 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).
4. Agrawal R. K. (Kumar, P; Kumar, D), Kullback–Leibler Distance-Based Fuzzy K-Plane Clustering Approach for Noisy Human Brain MRI Image Segmentation. In: Tistarelli, M., Dubey, S.R., Singh, S.K., Jiang, X. (eds) *Computer Vision and Machine Intelligence*. Lecture Notes in Networks and Systems, vol 586, 615-630. Springer, Singapore. (2023)
5. Agrawal R. K. (A. Priya, B. Rana), Fusion-based Multilevel Thresholding For Image Segmentation Using Evolutionary Algorithm; 2022 IEEE 9th Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), Prayagraj, India, 2022, pp. 1-7, December (2022)
6. Agrawal R. K. (with Harsh Bhasin), Multiple-Activation Parallel Convolution Network in Combination with t-SNE for the Classification of Mild Cognitive Impairment. *BIBE 2021*: 1-7, (2021)
7. Agrawal R. K., (with Puneet Kumar, D Kumar), Fuzzy Entropy k-Plane Clustering Method and Its Application to Medical Image Segmentation. *CVIP (2) 2021*: 350-361, (2021)
8. Agrawal R. K. (with Snigdha Agrawal, S. Senthil Kumaran, Achal Kumar Srivastava, Manpreet Kaur Narang), Study of 2D Feature Extraction Techniques for Classification of Spinocerebellar Ataxia Type 12 (SCA12). *MedInfo 2021*: 670-674, (2021)
9. Agrawal R. K. (with Harsh Bhasin), Applicability of Manually Crafted Convolutional Neural Network for Classification of Mild Cognitive Impairment, 2nd Asia Conference on Computers and Communications (ACCC), 127-131, (2021)
10. Agrawal R. K. (with Pankaj, S S Kumaran, Snigdha Agrawal, Achal Kumar Srivastava), Structural and resting

- state network alterations in Spinocerebellar Ataxia Type 2 in comparison with healthy controls, International Society for Magnetic Resonance in Medicine (ISMRM) 2020, (2020)
11. 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)
 12. Agrawal R. K., (with Swati Rathi, Baljeet Kaur), Enhanced Depression Detection from Facial Cues Using Univariate Feature Selection Techniques, International Conference on Pattern Recognition and Machine Intelligence (PReMI 2019), 22-29, (2019)
 13. 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
 14. 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).
 15. Agrawal R. K., (with Jyoti Singh Kirar) Relevant Frequency Band Selection using Sequential Forward Feature Selection for Motor Imagery Brain Computer Interfaces, IEEE Symposium Series on Computational Intelligence, SSCI 2018, Bangalore, India, November 18-21, 2018. IEEE 2018, ISBN 978-1-5386-9276-9
 16. Agrawal R. K., (Bharti Rana, Akanksha Juneja, Mohit Saxena, Sunita Gudwani, S Kumaran, Madhuri Behari), Voxel-based Morphometry and Minimum Redundancy Maximum Relevance Method for Classification of Parkinson's Disease and Controls from T1-Weighted MRI, ICVGIP 2016, 22:1-22:6
 17. Agrawal R. K., (Jyoti Singh Kirar), Optimal Spatio-spectral Variable Size Subbands Filter for Motor Imagery Brain Computer Interface, IHCI, 14-21, 2015
 18. Agrawal R. K., (Akanksha Juneja, Bharti Rana), A Novel Approach for Computer Aided Diagnosis of Schizophrenia using Auditory Oddball Functional MRI. ICVGIP 2014: 37:1-37:6
 19. Agrawal R. K., (Akanksha Juneja, Bharti Rana), A Novel Approach for Classification of Schizophrenia Patients and Healthy Subjects Using Auditory Oddball Functional MRI. MICAI (Special Sessions) 2014: 75-81
 20. Agrawal R. K., (Nitin Kumar, Ajay Jaiswal), A Comparative Study of Linear Discriminant and Linear Regression Based Methods for Expression Invariant Face Recognition, Advances in Signal Processing and Intelligent Recognition Systems, 23-32, 2014
 21. Agrawal R. K., (Namita Aggarwal, Bharti Rana), Detection of Alzheimer's Disease via Statistical Features from Brain Slices, Proceedings of the Twenty-Sixth International Florida Artificial Intelligence Research Society Conference, FLAIRS 2013, St. Pete Beach, Florida. May 22-24, 2013. AAAI Press , 2013
 22. Agrawal R. K., (Manju Sardana, Baljeet Kaur), Clustering in Conjunction with Quantum Genetic Algorithm for Relevant Genes Selection for Cancer Microarray Data. PAKDD Workshops 2013, 428-439, Lecture Notes in Computer Science, ISBN 978-3-642-40318-7
 23. Agrawal R. K., (Ajay Jaiswal, Nitin Kumar), Statistical Framework for Facial Pose Classification, MICAI 2012: 87-98, 11th Mexican International Conference on Artificial Intelligence, , San Luis Potosí, Mexico, October 27 - November 4, 2012, Proceedings, Part I. Lecture Notes in Artificial Intelligence, vol. 7629, ISSN 0302-9743
 24. Agrawal R. K., (Bharti Rana), Salient Features Selection for Multiclass Texture Classification, MICAI 2012: 206-216, 11th Mexican International Conference on Artificial Intelligence, , San Luis Potosí, Mexico, October 27 - November 4, 2012, Proceedings, Part I. Lecture Notes in Artificial Intelligence, vol. 7629, ISSN 0302-9743
 25. Agrawal R. K., (Manju Sardana, Baljeet Kaur), , Performance Evaluation of Ranking Methods for Relevant Gene Selection in Cancer Microarray Datasets, MICAI 2012: 406-417, 11th Mexican International Conference on Artificial Intelligence, , San Luis Potosí, Mexico, October 27 - November 4, 2012, Proceedings, Part I. Lecture Notes in Artificial Intelligence, vol. 7629, ISSN 0302-9743.
 26. Agrawal R. K., (Ratnadip Adhikari), Combining Multiple Time Series Models Through A Robust Weighted Mechanism, First IEEE International Conference on Recent Advances in Information Technology (RAIT), ISM Dhanbad, Jharkhand (INDIA); 455 – 460, 2012
 27. Agrawal R. K., (Ajay Jaiswal, Nitin Kumar), A Hybrid of Principal Component Analysis and Partial Least Squares for Face Recognition across Pose. CIARP 2012: 67-73, Buenos Aires, Argentina, September 3-6, 2012. Proceedings. Lecture Notes in Computer Science 7441 Springer 2012, ISBN 978-3-642-33274-6.
 28. Agrawal R. K., (Akshansh Gupta, Baljeet Kaur), A three phase approach for mental task classification using EEG. ICACCI 2012: 898-904, Chennai, India, August 3-5, 2012. ACM 2012, ISBN 978-1-4503-1196-0.
 29. Agrawal R. K., (Nitin Kumar, Ajay Jaiswal), Performance evaluation of subspace methods to tackle small sample size problem in face recognition. ICACCI 2012: 938-944, Chennai, India, August 3-5, 2012. ACM 2012, ISBN 978-1-4503-1196-0.
 30. Agrawal R. K., (Namita Aggarwal, Bharti), Computer Aided Diagnosis of Alzheimer's Disease from MRI Brain Images. ICIAR (2) 2012: 259-267, Aveiro, Portugal, June 25-27, 2012. Proceedings, Part II. Lecture Notes in Computer Science 7325 Springer 2012, ISBN 978-3-642-31297-7.
 31. 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.
 32. Agrawal R. K., (Akshansh Gupta), Relevant Feature Selection from EEG Signal for Mental Task Classification. PAKDD (2) 2012: 431-442, Kuala Lumpur, Malaysia, May 29 - June 1, 2012, Proceedings,

Part II. Lecture Notes in Computer Science 7302 Springer 2012, Montreal, Quebec, Canada, May 16-18, 2011, Proceedings. ACM 2011, ISBN 978-1-4503-0626-3.

33. Agrawal R. K., (Hanuman Verma), Intuitionistic Gustafson-Kessel Algorithm for Segmentation of MRI Brain Image, International conference on soft computing for problem solving, SocProS (2) 2011: 133-144, Advances in Soft Computing 131 Springer 2012, ISBN 978-81-322-0490-9.
34. Agrawal R. K., (Ratnadip Adhikari), Effectiveness of PSO Based Neural Network for Seasonal Time Series Forecasting, Indian International Conference on Artificial Intelligence, Bangalore, 2011, 231-244, Tumkur, Karnataka State, India, December 14-16, 2011. IICAI 2011, ISBN 978-0-9727412-8-6.
35. Agrawal R. K., (Hanuman Verma), Automatic Segmentation of MRI Brain Image using Type-3 Fuzzy C-Means Clustering Algorithm, Indian International Conference on Artificial Intelligence, Bangalore, 2011, 1060-1069, Tumkur, Karnataka State, India, December 14-16, 2011. IICAI 2011, ISBN 978-0-9727412-8-6.
36. Agrawal R. K., (Ajay Jaiswal, Nitin Kumar), Performance evaluation of linear subspace methods for face recognition under illumination variation. C3S2E, 2011: 103-110, Montreal, Quebec, Canada, May 16-18, 2011, Proceedings. ACM 2011, ISBN 978-1-4503-0626-3.
37. Agrawal R. K., (Manju Bala, Namita Aggarwal), Performance Evaluation of Intrusion Detection System Using Optimal Decision Tree SVM. DMIN 2010: 98-105, July 12-15, 2010, Las Vegas, Nevada, USA. CSREA Press 2010, ISBN 1-60132-138-4
38. Agrawal R. K., (Rajni Bala), Entropy Based Clustering to Determine Discriminatory Genes for Microarray Dataset. IC3 (1) 2010: 403-411, Proceedings, Part I. Communications in Computer and Information Science 94 Springer 2010, ISBN 978-3-642-14833-0
39. Agrawal R. K., (Rajni Bala), Manju Sardana: Relevant Gene Selection Using Normalized Cut Clustering with Maximal Compression Similarity Measure. PAKDD (2) 2010: 81-88, Lecture Notes in Computer Science 6119 Springer 2010, ISBN 978-3-642-13671-9
40. Agrawal R. K., (Manju Bala), Decision Tree SVM Framework Using Ratio of Interclass and Intraclass Scatters, Indian International Conference on Artificial Intelligence, Bangalore, 2009, December 16-18, 2009. IICAI 2009, ISBN 978-0-9727412-7-9
41. Agrawal R. K., (Gaurav K. Rajput), Evaluation of Feature Selection Measures for Steganalysis, Third International Conference on Pattern Recognition and Machine Intelligence, IITD, New Delhi, 2009, December 16-20, 2009 Proceedings. Lecture Notes in Computer Science 5909 Springer 2009, ISBN 978-3-642-11163-1.
42. Agrawal R. K., (Manju Bala), Evaluation of Decision Tree SVM Framework Using Different Statistical Measures, International Conference on Advances in Recent Technologies in communication and computing, Kottayam, 2009. (IEEE), 27-28 October 2009. IEEE Computer Society 2009, ISBN 978-0-7695-3845-7
43. Agrawal R. K., (R. K. Agrawal), Perturbation Scheme for Online Incremental Learning of Features for Face Recognition, 5th International Conference on Data Mining, DMIN09, Las Vegas, Nevada, July 13-16, 2009, Las Vegas, USA. CSREA Press 2009, ISBN 1-60132-099-X
44. Agrawal R. K., (Gaurav K. Rajput), Detection of Stegoimages: A Comparative Study of Classifiers, International Conference on Information Security and Privacy, Orlando, Florida, July 13-16, 2009.
45. Agrawal R. K., (Ashish Chaudhary), Modified Incremental Linear Discriminant Analysis for Face Recognition, International Conference on Artificial Intelligence and Pattern Recognition, Orlando, Florida July 13-16, 2009.
46. Agrawal R. K., (Rajni Bala), A Two Stage Approach for relevant Gene Selection for Cancer Classification, IADIS European Conference on Data Mining 2009, Algarve, Portugal, June 17-23, 2009.
47. Agrawal R. K., (Namita Aggarwal, H. M. Jain), Genetic Algorithm to determine relevant features for intrusion detection, IADIS European Conference on Data Mining 2009, Algarve, Portugal, June 17-23, 2009.
48. Agrawal R. K., (Manju Bala and Rajni Bala), Incremental Framework for Feature Selection and Bayesian Classification for Multivariate Normal Distribution, IEEE International Conference on Advance Computing, Page(s):1469 –1474, 6-7 March 2009
49. Agrawal R. K., (Manju Bala), Kernel Parameter Selection for Support Vector Machine Using AdaBoost, International Congress on Pervasive Computing and Management 12-14, Dec 2008
50. Agrawal R. K., (Rajni Bala, Manju Bala) Discriminant Function Revisited for Incremental Learning, Sixth Indian Conference on Computer Vision, Graphics & Image processing, ICVGIP Dec. 16-19, 435-441, 2008, IEEE 2008
51. Agrawal R. K., (M. M. Fadel), Multimodal Biometric Authentication System: A Comparative Study of Classifier Fusion, National Conference on Mathematical Modeling Optimization and Their Applications, 28-29 April, 2007
52. Agrawal R. K., (Rajni Bala), Gene Selection for Multi-class Cancerous Datasets Using A Hybrid Approach, International Conference on Intelligent Systems & Networks, February 23-25, 2007
53. Agrawal R. K., (Rajni Bala, A hybrid of Feature Ranking and Genetic Algorithm with Multi-class SVM for Gene Subset Selection (Abstract), International Conference on Bioinformatics-2006, December 18th-20th, 2006

54. Agrawal R. K., (M. Agrawal, Naveen Kumar, Identification of Relevant Feature Sets for Multiclass Intrusion Detection Problem, National Conference on Methods and Models in Computing, December 18-19, 2006
55. Agrawal R. K., (M. Bala), Multi-class Support Vector Machines: A Comparative Study of Kernels, National Conference on Methods and Models in Computing, December, 2006

Membership of Boards/Committees (Present/Past):

- **Expert member, Selection Committee at:** IIM, Jammu; University of Delhi; University of Hyderabad; Banaras Hindu University; IIITM Gwalior; IIIT Bhopal; Delhi Technological University; Netaji Subhas University of Technology; National Institute of Technology, Delhi; IIM Bodh Gaya; Birla Institute of Technology and Science, Pilani; MNIT, Allahabad; Tezpur University; Jammu University, Jammu; Central University of Jammu, Jammu; Mahatma Gandhi Central University, Motihari; Kannur University, Kerala; Indira Gandhi Delhi Technical University for Women, Delhi; Guru Nanak Dev University, Amritsar; Tripura University, Tripura; Mizoram University, Mizoram; Gangadhar Meher University, Sambalpur; Indira Gandhi National Open University, New Delhi; INFLIBNET Centre, Gandhinagar; Shri *Lal Bahadur Shastri* National Sanskrit University, New Delhi; Gautam Buddha University, Greater Noida; Jaypee Institute of Information Technology, Noida; Benett University, Greater Noida; The Northcap University, Gurugram; Galgotia University, Noida; Amity University, Gurugram; Indian Council of Social Science Research (ICSSR), New Delhi; National Institute of Financial Management (NIFM), Faridabad; Morarji Desai National Institute of Yoga, New Delhi; Pt. Ravishankar Shukla University, Raipur; Banasthali University, Jaipur; Member, Selection committee, G L Bajaj group of Institutes, Mathura; ML Sukhadia University, Udaipur
- **Expert member, Selection Board at:** Staff Selection Commission, New Delhi; Haryana Staff Selection Commission; Rajasthan Staff Selection Commission; Jammu Kashmir Staff Selection Commission; Himachal Pradesh Staff Selection Commission; CSIR, New Delhi; ICMR, New Delhi; RAC (DRDO); UPSC; EdCIL (India) Limited, Ministry of Human Resource Development; Ministry of AYUSH; University Grant Commission, Bhopal;
- **Member, Academic Council:** Delhi Skill and Entrepreneurship University, Delhi; Delhi Doon University; Kannur University
- **Member, Governing Body:** BV Raju Institute of Technology, Hyderabad
- **Member, Board of Studies:** Department of Information Technology, NSUT; Department of Information Technology, Delhi Technological University; Member, Governing Body, Delhi School of Analytics, University of Delhi; Department of Electronics & Communication, Delhi Technological University; NIT, Uttarakhand; Department of Computer Science & Engineering, NSUT; School of Information Technology, Gautam Buddha University; School of Engineering & Technology, Central University of Rajasthan; Department of Computer Science & Engineering, Delhi Skill and Entrepreneurship University, Delhi; SOCIS, Indira Gandhi National Open University; Sushant University, Gurugram; Department of Computer Applications, Jaypee Institute of Information Technology, Noida; Sharda University, Greater Noida; Department of Computer Science, Central University of Rajasthan; Department of Computer Science, Jamia Hamdard; Department of Data Science & Analytics, Central University of Rajasthan; Department of Computer Science & Engineering, NIT, Srinagar; GLA University, Mathura; Department of Mathematics, Jaypee Institute of Information Technology, Noida; School of Engineering, BML Munjal University, Gurugram;
- **Member Steering Committee of International Conference:** The Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD); International Conference on Big Data and Artificial Intelligence (BDA)
- Chairperson, Department Research Committee, Department of ASH, IGDTUW, Delhi
- Member, Advisory Committee, Department of Computer Science, University of Delhi
- Convenor, the committee of the courses in Computer Science, CBSE, New Delhi
- Member, the Curriculum committee, CBSE, New Delhi
- Member, National Board of Accreditation
- Member, National Assessment and Accreditation Council
- Jury member, INSPIRE AWARD- National Level Exhibition and Project Competition, DST, Delhi
- Jury member for the Northern Region Level IET Scholarship Program
- Expert Member, National Research Development Corporation (NRDC), New Delhi
- Member, Expert Committee, Minor research projects and organization of seminars/conferences/workshop, University Grant Commission, New Delhi;
- Expert Member, Selection Committee, CSIR-SRF, Delhi;
- Chairperson, Project Advisory Monitoring Committee, DST, New Delhi
- 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
- Member, Project Review and Steering Group, Defence Research and Development Organisation (DRDO)

- Expert Member, Scientific Expert Committee for evaluation of ASIAN-India R&D proposals, SERB, N Delhi
- Member, Syllabus formulation Committee for UGC-NET in Computer Science & Applications
- Chairman, New course committee, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi
- Member, Curriculum Development for UG and PG programs, MNIT, Jaipur
- Member, Curriculum Development for M.Sc. (Maths), Delhi Technological University, Delhi
- Member, M. Sc, M.Phil/Ph. D in Information Technology, Curriculum Design & Syllabus Framing Committee, School of Mathematics, Computers and Information Technology, Central University of Himachal Pradesh
- Member, Curriculum Development for M. Sc. Computer Science, Central University of Rajasthan
- Expert member for E-Content development for the subject, “Digital Image Processing and Machine Vision”, IIT, BHU, Varanasi
- Member, The committee for creation of virtual class room/video conference room, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi
- Member Expert Committee for revision of Certificate in Information Technology programme, School of Computer and Information Sciences, IGNOU, New Delhi
- Member of the Technical committee, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi
- Expert Member, Selection Committee for MCA, Department of Computer Science, University of Delhi, Delhi