

## RESEARCH AREA

- ❖ Data Mining, Machine learning, Feature Selection and Dimensional Reduction, Image Processing and Classification.

## PUBLICATION

### *International Journals*

1. H. S. Hota, **Akhilesh Kumar Shrivastava**, and S. K. Singhai (2011), An ensemble classification model for Intrusion Detection System (IDS) with feature selection, International Journal, International Journal of Decision science and Information Technology, Vol. 5 pp. 13-24.
2. H. S. Hota, S. K. Singhai and **Akhilesh Kumar Shrivastava** (2012), An ensemble model for classification of spam E-mail with feature selection techniques, General of global information technology, Vol. 7, pp. 32-37.
3. **Akhilesh Kumar Shrivastava**, S. K. Singhai and H. S. Hota (2013), An efficient decision tree model for classification of attacks with feature selection, International Journal of Computer Applications (IJCA). Vol. 84, pp. 42-48.
4. H. S. Hota, **Akhilesh Kumar Shrivastava** and S. K. Singhai (2013), Tuned artificial neural network model for e-mail data classification with feature Selection, International Journal of Computer Applications (IJCA). Vol. 67, pp. 20-25.
5. H. S. Hota, **Akhilesh Kumar Shrivastava** and S. K. Singhai (2013), Artificial neural network, Decision tree and Statistical techniques applied for designing and developing e-mail classifier. International Journal of Recent Technology and Engineering (IJRTE). Vol. 1, Issue 6, pp.164-169.
6. **Akhilesh Kumar Shrivastava** and Amit Kumar Dewangan (2014), An ensemble model for classification of attacks with feature selection based on KDDCUP'99 and NSL- KDD data set, International Journal of Computer Applications (IJCA), Vol. 99, No. 15, pp. 8-13.
7. Suman Pandey, Anshu Tiwari , **Akhilesh Kumar Shrivastava**, and Vivek Sharma (2015) , Thyroid Classification using Ensemble Model with Feature Selection, International Journal of Computer Science and Information Technologies, Vol. 6 (3) ,pp. 2395-2398.
8. **Akhilesh Kumar Shrivastava** and Rahul Hota (2015), Decision Tree Model for Classification of E-mail Data with Feature Selection, International Journal of Research Studies in Computer Science and Engineering (IJRSCSE), ISSN 2349-4840 (Print) & ISSN 2349-4859 (Online), pp. 15-19.
9. Amit Kumar Dewangan, **Akhilesh Kumar Shrivastava** and Prem Kumar(2016), Classification of Thyroid Disease with Feature Selection Technique, International Journal of Engineering and Techniques , Vol. 2 Issue 3, pp. 128-131.
10. **Akhilesh Kumar Shrivastava** and Shikha Mishra (2016),Application of Data Mining with Teaching Assistant Evaluation: A Review, International Journal of Innovations in Engineering and Technology (IJIET),Vol 7, Issue 2, pp. 8-13.
11. Srikant Singh and **Akhilesh Kumar Shrivastava** (2016), Big Data Analytics: A Review, International Journal of Computer Science and Technology,Vol. 7, Issue 3, pp. 92-94.
12. **Akhilesh Kumar Shrivastava** and Prabhat Kumar Mishra (2016), Intrusion Detection System for Classification of Attacks with Cross Validation, International Journal of Engineering Science Invention, Vol. 5, Issue 9, pp. 21-24.

13. Aakanksha Shakshi, **Akhilesh Shrivastava**, Ayush Agrawal and Rohit Miri (2016), ERP of Employee Management System Using MVC Architecture with Strong Session Management, Software Engineering and Technology, Vol 8, No 9, ISSN: 0974 – 9632.
14. **Akhilesh Kumar Shrivastava** and Ankur Singh (2016), Classification of Breast Cancer Diseases using Data Mining Techniques, International Journal of Engineering Science Invention, Vol. 5, Issue 12, pp. 62-65.
15. Purushottam Kewat and **Akhilesh Kumar Shrivastava** (2016), Comparative Study of Throughput in MANET Routing Protocols with Variable Nodes using NS-2, International Journal of Computer Applications, Vol.152, No.10, pp. 38-41.
16. Rishi Tiwari, A. K. Shrivastava and **Akhilesh Kumar Shrivastava** (2016), Identification of Liver Disease using Classification Technique, International Journal of Recent Trends in Engineering and Research, Vol. 02, Issue 01, pp. 71-76.
17. **Akhilesh Kumar Shrivastava** and Shashibhushan Singh Mahto (2016), An Ensemble Model for Classification of Phishing e-mail, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Vol. 4 , Issue X, pp. 579-582.
18. **Akhilesh Kumar Shrivastava** and Sikha Mishra (2016), An Ensemble Model for Teaching Assistant Evaluation using Classification Technique, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Vol. 4, Issue XII, pp. 404-407. .
19. **A. K. Shrivastava** and Pragya Tiwari (2017), Comparative Analysis of Models for Student Performance with Data Mining Tools, International Journal of Computer Trends and Technology (IJCTT), Vol. 46, No. 1, pp. 42-46.
20. Satish Tewalker and **A. K. Shrivastava** (2017), An Efficient and Computationally Efficient Model for Classification of Heart Disease , Bharat Journal of Science Technology and Humanities, Vol. 3, No. 1, pp. 15-19.
21. **A. K. Shrivastava** and Ramkishun Suryawanshi (2017), Decision Tree Classifier for Classification of Phishing Website with Info Gain Feature Selection, International Journal for Research in Applied Science & Engineering Technology (IJRASET), Vol. 5 Issue V, pp. 780-783. .
22. **A. K. Shrivastava** and Swati Bareth (2017), Applications of Biometric Authentication: An Analysis and Comparison, International Education & Research Journal, Vol. 3, Issue 5, pp. 181-183.
23. **A. K. Shrivastava** and Rajat Kumar Yadu (2017), An Effective Prediction Factors for Coronary Heart Disease using Data Mining based Classification Technique, International Journal on Recent and Innovation Trends in Computing and Communication, Vol. 5 Issue 5, pp. 813-816.
24. **A. K. Shrivastava** and Pallavi Ambastha (2017), An Ensemble Approach for Classification of Thyroid Disease with Feature Optimization, International Education & Research Journal, Vol. 3, Issue 5, pp. 112-113.
25. H.S. Hota, Richa Handa and **A.K. Shrivastava** (2017), Time Series Data Prediction Using Sliding Window based RBF Neural Network, International Journal of Computational Intelligence Research, Vol. 13, No. 5, pp. 1145-1156.
26. Ashutosh Dwivedi, Amit Kumar Dewangan and **A. K. Shrivastava** (2017), Analysis and Comparison of Models for Classification of Diabetic Disease, International Journal for Research in Applied Science & Engineering

27. **A. K. Shrivias** and Priyanka Gupta (2017), Analysis and Comparison of Data Mining Tools and Techniques for Classification of Banknote Authentication, International Journal of Advanced Research in Computer Science, Vol. 8 , No. 5, pp. 1917-1921.
28. **A. K. Shrivias** and Shatruhan Prasad (2017), An Ensemble Model with Feature Selection Technique for Classification of Lung Cancer Disease, International Journal of Advanced Research in Computer Science, Vol. 8, No. 7. , pp. 198-201.
29. **A. K. Shrivias** and Amit Kumar Dewangan (2017), Identification and Classification of Heart Disease with Feature Selection, International Journal of Engineering Science and Technology, Vol. 9, No.05, pp. 459-463.
30. H. S. Hota, Dinesh K. Shirma and **A. K. Shrivias** (2018), Development of An Efficient Classifier using Proposed Sensitivity-Based Feature Selection Technique For Intrusion Detection System, Int. Journal of Information and Computer Security , **Inderscience**, Vol. 10., No. 1, pp. 80-101.
31. H. S. Hota, Richa Handa and **A. K. Shrivias** (2018), Neural Network Techniques to Develop a Robust Financial Time Series Forecasting System, International Journal of Pure and Applied Mathematics, Vol. 118, No. 19, pp. 125-133.
32. **A. K. Shrivias** and Shishir Kumar Sharma (2018), A Robust Predictive Model for Stock Market Index Prediction using Data Mining Technique, International Research Journal of Engineering and Technology (IRJET), Vol. 05(05), pp. 1893-1896.
33. **A. K. Shrivias** and Sanat Kumar Sahu(2018), Classification of Chronic Kidney Disease using Feature Selection Techniques, International Journal of Computer Sciences and Engineering, Vol. 06(05), pp. 649-653.
34. Sanat Kumar Sahu and **A. K. Shrivias** (2018), Comparative Study of Classification Models with Genetic Search Based Feature Selection Technique, International Journal of Applied Evolutionary Computation, IGI Global, Vol. 09(03), pp. 01-11.
35. Sanat Kumar Sahu and **A. K. Shrivias** (2018), Analysis and Comparison of Clustering Techniques for Chronic Kidney Disease With Genetic Algorithm, International Journal of Computer Vision and Image Processing, **IGI Global**, Vol. 08(04), pp. 16-25.
36. Suraj Kumar Soni and **A. K. Shrivias** (2018), Analysis and Dimension Reduction of Big Data: A Review, International International Journal of Recent Trends in Engineering and Research, Vol. 04(06), pp. 81-85.
37. **Richa Handa**, **A. K. Shrivias** and H. S. Hota (2019), Prediction of FX Data using ANFIS And ANN with Combined Approach of Wavelet and Feature Extraction Technique, International Journal of Computer Sciences and Engineering, Vol. 7, Special Issue 3, pp. 15-18.
38. **A. K. Shrivias** and Prem Chandrakar (2019), Feature Selection on High Dimensional Big Data of Gens Expression using Filter based Feature Selection Methods, International Journal of Computer Sciences and Engineering, Vol. 7, Special Issue 3, pp. 105-108.
39. Sibuthamas and **A. K. Shrivias** (2019), Study of Unsharp Masking and Contrast Limited Adaptive Histogram Equalization on CT Images of Emphysema, International Journal of Computer Sciences and Engineering, Vol. 7, Special Issue 3, pp. 162-166.
40. **A. K. Shrivias** and Sanat Sahu (2019), Classification of Chronic Kidney Disease using Combination Feature Selection Techniques and Classifiers, International Journal of Computer Sciences and Engineering, Vol. 7, Special Issue 3, pp. 114-117.
41. M. Mahto and **A. K. Shrivias** (2019), Removal of the Load Traffic in Cellular Network and Data Availability to Maintain Load Balancing, International Journal of Computer Sciences and Engineering, Vol. 7, Special Issue 3, pp. 70-75.

42. Hitesh Chandrakar and **A. K. Shrivias** (2019), Comparative analysis of cluttering approach for academic performance of student, International journal of Research and Analytical Reviews(IJRAR), Vol 06(02), pp. 351-356.
43. **A. K. Shrivias** and Shivshankar Gupta (2019), Comparative Analysis of Learning Techniques for Breast Cancer Detection, International journal of Research Journal of Analytical Reviews (IJRAR), Vol. 06(02), pp. 521-526.
44. Jitendra Singh Narwariya and **A.K. Shrivias** (2019), Classification of Skin Disease with Data Mining Based Ensemble Approach, International Journal for Science and Advance Research in Technology (IJSART),vol. 05(05), pp. 418-420.
45. Amit Kumar Dewangan, S. M. Ghosh and **A. K. Shrivias** (2019), Text Preprocessing and Classification Using Machine Learning Technique, Anusandhan (AUJ-AN)', Vol. VIII (XVI), pp. 1766-1769.
46. Prem Chandrakar and **A. K. Shrivias** (2019), Feature Selection of High Dimensional Big Data of Gene Expression for Cancer Dataset, Anusandhan (AUJ-AN), ol. VIII (XVI), pp. 1818-1822.
47. Pratibha Verma, Sanat Sahu and **A. K. Shrivias** (2019), Classification of High Time Resolution Universe Survey 2 Data by Machine Learning Technique, Anusandhan (AUJ-AN), ol. VIII (XVI), pp. 1814-1817.
48. Richa Handa and A. K. Shrivias(2019), Comparative Analysis of ANN Techniques for Stock Market Prediction, International journal of Decision Science and Information Technology(IJDSIT), Vol. 08, pp. 28-34.
49. Richa Handa, **A.K. Shrivias**, H.S. Hota (2019), Financial Time Series Forecasting using Back Propagation Neural Network and Deep Learning Architecture, International Journal of Recent Technology and Engineering (IJRTE), Vol. 8(1), pp. 3487-3492.
50. **A. K. Shrivias**, S. M. Ghosh, Amit Kumar Dewangan (2019), Text Classification of Cornell Movie Data using Data Mining with Feature Selection, International Journal of Engineering and Advanced Technology (IJEAT), Vol. 9(2), pp. 2950-2955.
51. **A. K. Shrivias**, Sanat Kumar Sahu (2019), A Proposed Ensemble Model with Feature Selection Technique for Classification of Chronic Kidney Disease, International Journal of Engineering and Advanced Technology (IJEAT) Vol. 9(2), pp. 966-972.
52. Amit Kumar Dewangan, S.M. Ghosh, **Akhilesh Kumar Shrivias** (July-2020), Design of Novel ETL Model to Analyse Corona Virus Data, International Journal on EAI Endorsed Transactions on Pervasive Health and Technology, pp. 1-11, doi:10.4108/eai.13-7-2018.165671.
53. Prem Chandrakar, **Akhiesh Kumar Shrivias** and Neelam Sahu (Nov-2020), A Novel Meta-Ensemble Model Of Gene-Expression Big Data, PalArch's Journal of Archaeology of Egypt/Egyptology, Vol. 17(9), pp. 4109-4117.
54. Prem Chandrakar, **Akhiesh Kumar Shrivias** and Neelam Sahu (Jan 2021), Design of a Novel Ensemble Model of Classification Technique for Gene-Expression Data of Lung Cancer with Modified Genetic Algorithm, International Journal on EAI Endorsed Transactions on Pervasive Health and Technology, Vol. 07(25), pp. 01-13, doi:10.4108/eai.8-1-2021.167845.
55. **A. K. Shrivias**, Vineet Kumar Awasthi and Devendra Singh Suman (Jan 2021), A Robust Divorce Predictive Model Using Data Mining with Feature Selection Technique, Global Journal of Computer and Engineering Technology (GJCET), Vol. 1, No. 1, pp. 28-33.
56. **Akhilesh Kumar Shrivias**, Amit Kumar Dewangan, S. M. Ghosh and Devendra Singh (SEP 2021), Development of Proposed Ensemble Model for Spam e-mail Classification, Information Technology and Control, Vol. 50, No. 3, pp. 411-

57. **Akhilesh Kumar Shrivias**, Amit Kumar Dewangan, and Samrendra Mohan Ghosh (October 2021), Robust Text Classifier for Classification of Spam E-Mail Documents with Feature Selection Technique, *Ingénierie des Systèmes d'Information*, Vol. 26, No. 5, , pp. 437-444.
58. H. S. Hota, Dinesk K. Sharma, and **A. K. Shrivias** (2022), An Integrated Approach of Proposed Pruning Based Feature Selection Technique (PBFST) for Phishing E-mail Detection, *Recent Advances in Computer Science and Communications*, Bentham Science, Vol. 15, No. 5, pp. 683-692.
59. Pratibha Verma, Vineet Kumar Awasthi, Sanat Kumar Sahu and **Akhilesh Kumar Shrivias**(Jan 2022), Coronary Artery Disease Classification Using Deep Neural Network and Ensemble Models Optimized by Particle Swarm Optimization, *International Journal of Applied Metaheuristic Computing*, Vol. 13, Issue 1, pp. 1-25. (IGI Global)
60. A. K. Agrawal, **A.K. Shrivias**, V. K. Awasthi (2022), An Improved and Customized Hybrid of Deep and Machine Learning Technique Model for Handwritten Digit Recognition, *SAMRIDDHI : A Journal of Physical Sciences, Engineering and Technology*, Vol. 14, Issue 01, pp. 13-19.
61. Ashutosh Mohite, Askhilesh A. Waoo, **Akhilesh Kumat Shrivias** ( July 2022), Machine and Deep Learning Techniques with Human Gesture Recognition and Classification for Human computer Interaction: A Review, *Global Journal of Computer and Engineering Technology (GJCET)*, Vol. 2, No. 2, pp. 15-21.
62. Prem Kumar Chandrakar and **Akhilesh Kumar Shrivias** (2022), Classification Performance Of Gene Expression Lung Cancer Data Set Using Deep Learning, *International Journal of Decision Science and Information Technology*, Vol. 9, pp. 1-7.

### *Proceedings of International Conference*

1. H. S. Hota, S. K. Singhai and **Akhilesh Kumar Shrivias** (2012), Data mining techniques and its ensemble model applied for classification of e-mail data, *Proceeding of "Review of Business and Technology Research" in International conference EPPICTM 2012 held in Gautam budha University Noida (U.P.)*. Vol. 5, pp. 473-479 .
2. H. S. Hota and **Akhilesh Kumar Shrivias** and S. K. Singhai (2012), Classification model as Intrusion Detection Sysstem (IDS) using data mining technique, *Proceeding of "Review of Business and Technology Research" in International conference sponsored by MTMI,USA and Department of business, management and accounting ,University of Maryland Eastern Shore (USA.)*, Vol. 8,No. 1, pp. 150-154.
3. H. S. Hota and **Akhilesh Kumar Shrivias** (2012), E-mail and its security: A modern way of teaching and research, *Proceeding of International conference on Innovation and Research in Technology for Sustainable Development held in OPJIT Raigarh (C.G.)*, ISBN 978-93-82338-21-5, pp. 168-170.
4. H. S. Hota and **Akhilesh Kumar Shrivias** (2014), Data mining approach for developing various models based on types of attack and feature selection as intrusion detection systems (IDS), *Proceeding of International Conference on Intelligent, Computing Networking, and Informatics, Advances in Intelligent Systems and Computing*, **Springer**, Vol. 243, pp. 845-851.
5. H. S. Hota and **Akhilesh Kumar Shrivias** (2014), Decision Tree Techniques Applied on NSL-KDD Data and its Comparison with Various Feature Selection Techniques, *Proceeding of International Conference on Advanced Computing, Networking, and Informatics (ICACNI-2014)*, **Springer**. Vol. 1, pp. 205-211.
6. H. S. Hota and **Akhilesh Kumar Shrivias** and Rahul Hota (2016), A Proposed Bucket Based Feature Selection Technique (BBFST) for Phishing E-mail Classification ,**Proceeding of International Conference on Advanced Computing, Networking, and Informatics (ICACNI-2016)**, Vol. 2, held on 22-24 September (2016) at NIT, Rourkela, India, Vol. 2, pp. 189-194. **(Presented)**.

7. **A. K. Shrivias** , Sanat Kumar and S. K. Singhai (2017), Decision Support System for Classification of Chronic Kidney Disease with Principle Component Analysis, Proceeding of “Review of Business and Technology Research” in International Conference at the Hotel Holiday Inn Express **Dubai Airport, Dubai, UAE** during December 2017, Vol. 14, No. 2, pp. 105-110.
8. Richa Handa, **A. K. Shrivias** and H. S. Hota (2017), Prediction of Forex Data using Neural Network with Feature Extraction, , Proceeding of “Review of Business and Technology Research” in International Conference at the Hotel Holiday Inn Express **Dubai Airport, Dubai, UAE** during December 2017, Vol. 14, No. 2, pp. 111-116.
9. Prem Kumar Chandrakar and **A. K. Shrivias** (2017), An Analysis of Big Data Dimensionality Reduction Technique, Proceeding of “Review of Business and Technology Research” in International Conference at the Hotel Holiday Inn Express **Dubai Airport, Dubai, UAE** during December 2017, Vol. 14, No. 2, pp. 117-122.
10. **A. K. Shrivias**, Sanat Kumar Sahu and H. S. Hota (2018), Classification of Chronic Kidney Disease with proposed Union Based Feature Selection Technique, Proceeding of “3<sup>rd</sup> International Conference on Internet of Things and Connected Technologies (ICIoTCT)”, 2018, Jaipur, Elsevier-SSRN Digital Library, pp. 503-50.
11. H. S. Hota, **A. K. Shrivias** and Rahul Hota (2018), An Ensemble Model for Detecting Phishing Attack with Proposed Remove-Replace Feature Selection Technique, *Procedia Computer Science*, Elsevier. Vol. 132, pp. 900-907.
12. **A. K. Shrivias**, Pallavi Ambastha and Laxmi Gupti (2018), Performance Evaluation of Classifiers for Classification of Chronic Kidney Disease, Proceeding of Review of Business and Technology Research of International Conference at Hotal Ananda Imperial organized by Bilaspur University, Bilaspur(C.G.) during 04-05 August 2018, Vol. 15, No. 1, pp. 120-124.
13. M. Mahto and **A. K. Shrivias** (2018), Trusted Multipath Energy Efficient Routing Technique for Congestion Avoidance in MANET, Proceeding of Review of Business and Technology Research in International Conference in Bangkok during 22-23 December 2018, Vol. 15, No. 3, pp. 56-62.
14. Sibum Thamas and **A. K. Shrivias** (2018), GLCM based Feature Extraction Of Emphysema Images, Proceeding of Review of Business and Technology Research in International Conference in Bangkok during 22-23 December 2018, Vol. 15, No. 3, pp. 269-273.
15. Ayush Kumar Agrawal, **A. K. Shrivias** and Vineet Kumar Awasthi (May 2021), A Robust Model for Handwritten Digit Recognition using Machine and Deep Learning Technique, Proceeding of 2nd International Conference for Emerging Technology (INCET) Belgaum, India during May 21-23, 2021, IEEE, pp. 1-4. (Presented)
16. Pratibha Verma, Vineet Awasthi, **A. K. Shrivias** and Sanat Kumar Sahu (2022), Stacked Generalization Based Ensemble Model for Classification of Coronary Artery Disease, **Conference Proceedings** on 6th International Conference on Internet of Things and Connected Technologies(ICIoTCT)-2021, Vol. 340, pp. 57–65.

### **Book Authored**

H. S. Hota and **A. K. Shrivias** and S. K. Singhai (2016), *Data Mining for Information Security: An Experimental Approach*, Lambert Academic Publishing.

### **Book Chapters**

1. H.S. Hota, Richa Handa and **A.K. Shrivias** (May 2021), COVID-19 Pandemic in India :Forecasting using Machine Learning Techniques, *Data Science for COVID-19*, Vol. 1, pp. 503-525, ISBN: 978-0-12-824536-1.
2. Rashmi Gupta, **Akhilesh Shrivias**, and Ragini Shukla (2022), A Two-Stage Multi feature Selection Method to Predict

### *Patent Granted*

Australian Patent on “Home Automation based on User Detection using Internet of Things” (7 April 2021).  
Patent number: 2021100439

## **MEMBER OF PROFESSIONAL BODIES**

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1. Member of International Associations of Engineers. Member Id: 190226
2. Member of American Institute of Management and Technology(AIMT), USA, Membership ID: AIMT/RM/2021/113
3. Member of BoS of Information Technology Department, Shaheed Mahendra Karma Vishwavidyalaya, Bastar (CG).

Google Scholar Link: <https://scholar.google.com/citations?user=0USS6eQAAAAJ&hl=hi>

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