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Selected Journal Publications Year-wise

2022

1. Vyas S., Gupta S., **Bhargava D.**, Boddu R., "Fuzzy Logic System Implementation on the Performance Parameters of Health Data Management Frameworks", *Journal of Healthcare Engineering*, 2022. <https://doi.org/10.1155/2022/9382322> [**Indexed in Web of Science**], [IF- 3.822], **April 2022.**
2. **K. Jain**, A. Agarwal and A. Abraham, "A Combinational Data Prediction Model for Data Transmission Reduction in Wireless Sensor Networks," *IEEE Access*, vol. 10, pp. 53468-53480, 2022, DOI: <http://doi.org/10.1109/ACCESS.2022.3175522> [**Indexed in Web of Science**], [IF 3.557], **May 2022.**
3. **P. Dahiya, A. Kumar, A. Kumar** and Bijan Nahavandi "Modified Artificial Bee Colony Algorithm-Based Strategy for Brain Tumor Segmentation", *Computational Intelligence and Neuroscience Journal*, Volume 2022, Article ID 5465279, <https://doi.org/10.1155/2022/5465279> [**Indexed in Web of Science**],[IF: 3.120], **May 2022.**
4. **A. Kumar**, Abolfazlmehbodniya Julian, L Webber, MohdAnul Haq, Kamal Kumar Gola-PritpalSingh SathishkumarKarupusamy MalikBader Alazzam, "Optimal cluster head selection for energy efficient wireless sensor network using hybrid competitive swarm optimization and harmony search algorithm," *Sustain. Energy Technol. Assessments*, vol. 52, p. 102243, 2022, <https://doi.org/10.1016/j.seta.2022.102243> [**Indexed in Web of Science**], [IF-7.632], **April 2022.**
5. P. K. Chaurasiya, J. L. Webber, A. Mehbodniya, M. A. Haq, **A. Kumar**, and P. Paliwal, "Multi-agent-based approach for generation expansion planning in isolated micro-grid with renewable energy sources and battery storage," *J. Supercomput.*, pp. 1-28, 2022. <https://doi.org/10.1007/s11227-022-04609-x> [**Indexed in Web of Science**], [IF-2.557], **June 2022.**
6. J. Refonaa, Dinh Tran Ngoc Huy, Nguyen Dinh Trung, Hoang Van Thuc, Roop Raj, Mohd Anul Haq, **A. Kumar**, "Probabilistic methods and neural networks in structural engineering," *International Journal of Advanced Manufacturing Technology*, pp. 1-9, 2022. [10.1007/s00170-022-09335-5](https://doi.org/10.1007/s00170-022-09335-5) [**Indexed in Web of Science**], [IF-3.563], **June 2022.**
7. A. Nautiyal and **A. K. Mishra**, "Machine learning approach for intelligent prediction of petroleum upstream stuck pipe challenge in oil and gas industry," *Environment, Development and Sustainability*, DOI: <https://doi.org/10.1007/s10668-022-02387-3> [**Indexed in Web of Science**], [IF-4.080], **May 2022.**

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8. N. Singh, V. K. Gunjan, **A. K. Mishra**, R. K. Mishra, and N. Nawaz, "SeisTutor: A Custom-Tailored Intelligent Tutoring System and Sustainable Education," *Sustainability*, vol. 14, no. 7, p. 4167, 2022, DOI: <https://doi.org/10.3390/su14074167>. [Indexed in Web of Science], [IF-3.889], April 2022.
9. A. Singh, **K. Jain**, "An efficient secure key establishment method in cluster-based sensor network", *Telecommunication Systems*, 79, 3–16 DOI: <https://doi.org/10.1007/s11235-021-00844-4> [Indexed in Web of Science], [IF-2.5], Jan 2022.
10. **K. Jain**, P. Mehra, A.K. Dwivedi, A. Agarwal, "SCADA: scalable cluster-based data aggregation technique for improving network lifetime of wireless sensor networks", *The Journal of Supercomputing*, 1-29. DOI: <https://doi.org/10.1007/s11227-022-04419-1> [Indexed in Web of Science], [IF-2.5], March 2022.
11. D. K. Saini, **H. Saini**, P. Gupta, & A.B. Mabrouk, "Prediction of Malicious Objects Using Prey-Predator Model in Internet of Things (IoT) for Smart Cities," *Computers & Industrial Engineering*, 108061. DOI: <https://doi.org/10.1016/j.cie.2022.108061> [Indexed in Web of Science], [IF: 5.431], March 2022.
12. **D. Bhargava**, Prasanalakshmi, B., Vaiyapuri, T., Alsulami, H., Serbaya, S. H., & Rahmani, A. W, "CUCKOO-ANN Based Novel Energy-Efficient Optimization Technique for IoT Sensor Node Modelling", *Wireless Communications and Mobile Computing*, Vol. 2022, pp. 1-9, ISSN 1530-8677, DOI: <https://doi.org/10.1155/2022/8660245>. [Indexed in Web of Science], [IF- 2.336], Jan 2022.
13. Mustafa, M., Alshare, M., **D. Bhargava**, Neware, R., Singh, B., & P. Ngulube, "Perceived Security Risk Based on Moderating Factors for Blockchain Technology Applications in Cloud Storage to Achieve Secure Healthcare Systems", *Computational and Mathematical Methods in Medicine*, Vol. 2022, pp. 1-10, ISSN 1748-6718, DOI: <https://doi.org/10.1155/2022/6112815>. [Indexed in Web of Science], [IF- 2.238], Jan 2022.
14. Rakhra M., Bhargava A., **D. Bhargava**, Singh R., Bhanot A., Rahmani A.W., "Implementing Machine Learning for Supply-Demand Shifts and Price Impacts in Farmer Market for Tool and Equipment Sharing", *Journal of Food Quality*, Vol. 2022, pp. 1-19, ISSN 1745-4557 (Online), DOI: <https://doi.org/10.1155/2022/4496449>. [Indexed in Web of Science], [IF- 2.450], March 2022.
15. Vyas S., **D. Bhargava**, Bhola J., Ujjan J.A., Eswaran S., Rahmani A.W., "Critical Retrospection of Performance of Emerging Mobile Technologies in Health Data Management", *Journal of Healthcare Engineering*, vol. 2022, pp. 1-12, ISSN: 2040-2309 (Online), <https://doi.org/10.1155/2022/8903604>. [Indexed in Web of Science], [IF- 2.682], March 2022.

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16. A. Singh, S. K. Dargar, A. Gupta, A. Kumar, **A. K. Srivastava**, M. Srivastava, P. K. Tiwari, and M. A. Ullah. "Evolving Long Short-Term Memory Network-Based Text Classification," *Computational Intelligence and Neuroscience*, Vol. 2022, ISSN 1687-5265, DOI: <https://doi.org/10.1155/2022/4725639>. [Indexed in Web of Science] [IF: 3.633], Feb 2022.
17. N. Kumar, D. Lohani, and **D. Acharya**, "Vehicle accident sub-classification modeling using stacked generalization: A multisensor fusion approach", *Future Generation Computer Systems*, DOI: <https://doi.org/10.1016/j.future.2022.03.005> [Indexed in Scopus], [IF: 7.187], March 2022.
18. S. Karupusamy, Refonaa, S. Sankaran, **P. Dahiya**, Mohd Anul Haq, **A. Kumar**, "Effective energy usage and data compression approach using data mining algorithms for IoT data ," *Expert Systems*, Online ISSN:1468-0394, DOI: <https://doi.org/10.1111/exsy.12997>, [Indexed in Web of Science], [IF: 2.587], March 2022.
19. F. N. Al-Wesabi, A. A. Malibari, A. M. Hilal, N. NEMRI, **A. Kumar**, and D. Gupta, "Intelligent ensemble of voting based solid fuel classification model for energy harvesting from agricultural residues," *Sustain. Energy Technologies and Assessments*, vol. 52, p. 102040, 2022. <https://doi.org/10.1016/j.seta.2022.102040>, [Indexed Web of Science], [IF-5.34], Jan 2022.
20. E. Balamurugan, A. Mehbodniya, E. Kariri, K. Yadav, **A. Kumar**, and M. Anul Haq, "Network optimization using defender system in cloud computing security based intrusion detection system with game theory deep neural network (IDSGT-DNN)," *Pattern Recognition Letters*, vol. 156, pp. 142–151, 2022, doi: <https://doi.org/10.1016/j.patrec.2022.02.013>. [Indexed in Web of Science] [IF-3.756], March 2022.
21. A. M. Hilal, Hadeel Alsolai, Fahd N. Al-Wesabi, Mohamed K Nour, Abdelwahed Motwakel, **A. Kumar**, I. Yaseen, and A. S. Zamani, "Fuzzy Cognitive Maps with Bird Swarm Intelligence Optimization-Based Remote Sensing Image Classification," *Comput. Intelligence and Neuroscience*, vol. 2022, 2022. <https://doi.org/10.1155/2022/4063354>, [Indexed in Web of Science], [IF-3.63], Mar 2022.
22. A. K. Sharma, S. Tiwari, G. Agarwal, N. Goenka, **A. Kumar**, P. Chakrabarti, T. Chakrabarti, "Dermatologist-Level Classification of Skin Cancer Using Cascaded Ensembling of Convolutional Neural Network and Handcrafted Features Based Deep Neural Network," *IEEE Access*, vol. 10, pp. 17920–17932, 2022. doi: [10.1109/ACCESS.2022.3149824](https://doi.org/10.1109/ACCESS.2022.3149824), [Indexed in Web of Science] [IF-3.36], Feb 2022.
23. F. N. Al-Wesabi, A. A. Malibari, A. M. Hilal, N. NEMRI, **A. Kumar**, and D. Gupta, "Intelligent ensemble of voting based solid fuel classification model for energy harvesting from agricultural residues," *Sustain. Energy Technologies and Assessments*, vol. 52, p. 102040,

School of Computing

2022. <https://doi.org/10.1016/j.seta.2022.102040>, [Indexed Web of Science], [IF-5.34], Jan 2022..
24. E. Balamurugan, A. Mehbodniya, E. Kariri, K. Yadav, **A. Kumar**, and M. Anul Haq, "Network optimization using defender system in cloud computing security based intrusion detection system with game theory deep neural network (IDSGT-DNN)," *Pattern Recognition Letters*, vol. 156, pp. 142–151, 2022, doi: <https://doi.org/10.1016/j.patrec.2022.02.013>. [Indexed in Web of Science] [IF-3.756], March 2022.
25. A. M. Hilal, Hadeel Alsolai, Fahd N. Al-Wesabi, Mohamed K Nour, Abdelwahed Motwakel, **A. Kumar**, I. Yaseen, and A. S. Zamani, "Fuzzy Cognitive Maps with Bird Swarm Intelligence Optimization-Based Remote Sensing Image Classification," *Comput. Intelligence and Neuroscience*, vol. 2022, 2022. <https://doi.org/10.1155/2022/4063354>, [Indexed in Web of Science], [IF-3.63], Mar 2022.
26. S. Tanwar and **A. Kumar**, "Secure key issuing scheme in ID-based cryptography with revocable ID," *Information Security Journal, A Global Perspective*, pp. 1–10, 2022. <https://doi.org/10.1080/19393555.2022.2033366>, [Indexed in Web of Science], Feb 2022.
27. A. K. Sharma, S. Tiwari, G. Agarwal, N. Goenka, **A. Kumar**, P. Chakrabarti, T. Chakrabarti, "Dermatologist-Level Classification of Skin Cancer Using Cascaded Ensembling of Convolutional Neural Network and Handcrafted Features Based Deep Neural Network," *IEEE Access*, vol. 10, pp. 17920–17932, 2022. doi: [10.1109/ACCESS.2022.3149824](https://doi.org/10.1109/ACCESS.2022.3149824), [Indexed in Web of Science] [IF-3.36], Feb 2022.
28. S. S. L. P. J. Shabu, K. Yadav, E. Kariri, K. K. Gola, M. AnulHaq, and **A. Kumar**, "Trajectory clustering and query processing analysis framework for knowledge discovery in cloud environment," *Expert Systems*, p. e12968. <https://doi.org/10.1111/exsy.12968>, [Indexed in Scopus] [IF-2.57], March 2022.

2021

29. Y. Gupta, G. Raghuvanshi, U. Sharma, **A.K. Mishra**, W.K. Mashwani, P. Goktas, "Impact of Weather Predictions on COVID-19 Infection Rate by Using Deep Learning Models," *Complexity*, vol. 2021, pp. 1–11, Doi: [10.1155/2021/5520663](https://doi.org/10.1155/2021/5520663). [Indexed in Web of Science], [IF: 2.833], Dec. 2021.
30. S. Rani, R.K. Mishra, M. Usman, A. Kataria, P. Bhambri, **A.K. Mishra**, "Amalgamation of advanced technologies for sustainable development of smart city environment: A review," *IEEE Access*, vol. 9, pp. 150060–150087, Doi: [10.1109/ACCESS.2021.3125527](https://doi.org/10.1109/ACCESS.2021.3125527). [Indexed in Web of Science], [IF-3.367], Nov 2021.

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31. A. Prasad, S. S. Verma, **P. Dahiya**, and **A. Kumar**, "A Case study on the Monitor Mode Passive Capturing of WLAN Packets in an On-The-Move Setup," *IEEE Access*, 2021. Vol.9, pp. 152408-152420, **[Indexed in Web of Science]**, **Doi:** <https://doi.org/10.1109/ACCESS.2021.3127079>. **[IF: 3.367], Nov 2021.**
32. S. S. Verma, A. Prasad, and **A. Kumar**, "CovXmlc: High performance COVID-19 detection on X-ray images using Multi-Model classification," *Biomed. Signal Process. Control*, vol. 71, p.103272, 2022. **[Indexed in Web of Science]**, <https://doi.org/10.1016/j.bspc.2021.103272>. **[IF: 3.880], Oct 2021.**
33. I. Kumar, **Jyoti Rawat**, N. M. S. Husain, "Opportunities of Artificial Intelligence and Machine Learning in the Food Industry," *Journal of Food Quality*, vol. 2021, Article ID 4535567, 10 pages, 2021. DOI: <https://doi.org/10.1155/2021/4535567>. **[Indexed in Web of Science]**, **[IF: 2.4], July 2021.**
34. **C. Joshi**, **R. K. Ranjan** and V. Bharti, "A Fuzzy Logic based Feature Engineering Approach for Botnet Detection using ANN", in *Journal of King Saud University- Computer and Information Sciences*, ISSN: 1319-1578. Elsevier. <https://doi.org/10.1016/j.jksuci.2021.06.018>, **[Indexed in Web of Science]**, **[IF-13.473], July. 2021.**
35. Singh, A., **K. Jain**, "An efficient secure key establishment method in cluster-based sensor network," *Telecommun Syst* (2021). <https://doi.org/10.1007/s11235-021-00844-4>. **[Indexed in Web of Science]** **[IF-2.314], Sept 2021.**
36. A. Singh, **R. K. Ranjan**, A. Tiwari, "Credit Card Fraud Detection under Extreme Imbalanced Data: A Comparative Study of Data-level Algorithms," *Journal of Experimental & Theoretical Artificial Intelligence*, Taylor and Francis, p.p. 1-28, ISSN: 1362-3079, DOI: <https://doi.org/10.1080/0952813X.2021.1907795>. **[Indexed in Web of Science]**, **[IF-2.34], April 2021.**
37. S. Kumar, P. Singh, **R. Sushil**, P. Singh, A. Tiwari, "Microtremor measurement to evaluate site characteristics by horizontal to vertical spectral ratio technique in Sikkim, Northeast Himalayas, India", *Quaternary international*, Vol. 585, pp: 134-142, ISSN 1040-6182, DOI: <https://doi.org/10.1016/j.quaint.2020.11.028>, **[Indexed in Web of Science]**, **[IF: 2.13], May 2021.**
38. A. Rawat, **R. Sushil**, A. Agarwal, A. Skinder, R S Bhadoria, "A New Adaptive Fault Tolerant Framework in the Cloud," *IETE Journal of Research*, Taylor & Francis United kingdom, DOI: <https://doi.org/10.1080/03772063.2021.1907231>, **[Indexed in Web of Science]**, **[IF- 2.33], April 2021.**

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39. **A. Kaur**, V. Puri, K. Verma, **K. Shashvat**, "Identification of inter-ictal activity in novel data by bagged prediction method using beta and gamma waves". *Multimedia Tools and Applications*, <https://doi.org/10.1007/s11042-021-11035-3>, **[Indexed in Web of Science]**, [IF: 2.757], May 2021.
40. **M. Srivastava**, **A.K Srivastava**, R. Garg, & P.K. Mishra, "Performance Evaluation of the MapReduce-based Parallel Data Preprocessing Algorithm in Web Usage Mining with Robot Detection Approaches", *IETE Technical Review*, Taylor and Francis, Vol. 38, no. 4, pp. 1-15, ISSN 0256-4602 , DOI: <https://doi.org/10.1080/02564602.2021.1918584> **[Indexed in Web of Science]**, [IF-2.20], April 2021.
41. **B. Kumar**, **R. K. Ranjan**, **A. Husain**, "A Multi-Objective Enhanced Fruit Fly Optimization (MO-EFOA) Framework for Despeckling SAR Images using DTCWT based Local Adaptive Thresholding," *International Journal of Remote Sensing*, Vol. 42, no. 14, pp. 5493-5514, ISSN 1366-5901, DOI: <https://doi.org/10.1080/01431161.2021.1921875>. **[Index in Web of Science]**, [IF-3.151], May 2021.
42. V. K. Yadav, **R. K. Yadav**, S. Verma, and S. Venkatesan. "CP2EH: A comprehensive privacy-preserving e-health scheme over cloud." *The Journal of Supercomputing*, 1-31., ISSN 1573-0484 / 0920-8542, DOI: <https://doi.org/10.1007/s11227-021-03967-2>. **[Index in Web of Science]**, [IF- 2.474], June 2021.
43. A. Barthwal, **D. Acharya** and D. Lohani, "Prediction and Analysis of Particulate Matter (PM2.5 and PM10) Concentrations using Machine Learning Techniques", *Journal of Ambient Intelligence and Humanized Computing*, in press, DOI: <https://doi.org/10.1007/s12652-021-03051-w> **[Indexed in Web of Science]**, [IF 4.594], March 21.
44. K. Rastogi, D. Lohani and **D. Acharya**, "Context-Aware Monitoring and Control of Ventilation Rate in Indoor Environments Using Internet of Things", *IEEE Internet of Things Journal*, in press, DOI: <https://doi.org/10.1109/IOT.2021.3057919> 2021. **[Indexed in Web of Science]**, [5Y IF 11.705], Feb 21.

2020

45. S. Kumar, P. Singh, **R. Sushil**, P. Singh, A. Tiwari, "Microtremor measurement to evaluate site characteristics by horizontal to vertical spectral ratio technique in Sikkim, Northeast Himalayas, India", *Quaternary international*, <https://doi.org/10.1016/j.quaint.2020.11.028> **[Indexed in Web of Science]**, [IF: 2.003], Nov 2020.

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46. **M. Bhushan**, J. Ángel G. Duarte, P. Samant, A. Kumar, A. Negi, "Classifying and resolving software product line redundancies using an ontological first-order logic rule based method", *Expert Systems with Applications*, Volume 168, , 114167, ISSN 0957-4174, **DOI: <https://doi.org/10.1016/j.eswa.2020.114167>**. [Indexed in Web of Science], [IF: 5.452], **Nov 2020**.
47. K. Pandey R, **A. K. Dahiya** A. Mandal, "Identifying Applications of Machine Learning and Data Analytics Based Approaches for Optimization of Upstream Petroleum Operations," *Energy Technology*, p.no. 202000749. **DOI: <https://doi.org/10.1002/ente.202000749>**, [Indexed in Web of Science], [IF: 3.43] **Oct 2020**.
48. N. Kumar, **D. Acharya** and D. Lohani, "An IoT Based Vehicle Accident Detection and Classification System using Sensor Fusion," in *IEEE Internet of Things Journal*, doi: <https://doi.org/10.1109/IJOT.2020.3008896> [Indexed in Web of Science] [5Y IF 11.705] **June 2020**.
49. A. Tyagi, **Ritika**, "Intelligent Prognostics Model for Automated Segmentation based Disease Prediction and Classification from Dermoscopy Images using a Hybrid Approach by Convolutional Neural Network with PSO Algorithm" in *Multimedia Tools and Applications*, ISSN: 1380-7501 (Print) 1573-7721 **DOI: <https://doi.org/10.1007/s11042-020-09074-3>**. [Indexed in Web of Science], [IF = 2.313], **June 2020**.
50. **S. Kanrar**, K. Dawar, "Pedestrian Localisation in the Typical Indoor Environments" In Press, *Multimedia Tools and Application*, Springer, **DOI: <https://doi.org/10.1007/s11042-020-09291-w>**. [Indexed in web of Science] (IF = 2.313), **May 2020**.