Research Publications

Peer Review International Journals (SCIE/Scopus/WoS):

[1] **M. Bhagat**, U. Maulik : Advancing Breast Cancer Prediction using Blockchain-Secured Hybrid Genetic Algorithm. **Computers in Biology and Medicine, Elsevier**, 2025 (Q_1) Impact Factor 7.7.

[2] **M. Bhagat**, U. Maulik :StaBloCare: Blockchain-Secured Diabetes Monitoring System using Stacked Deep Learning. **Biomedical Signal Processing and Control, Elsevier**, 2025 (Q_1) Impact Factor 4.9.

[3] **Monu Bhagat**, Dilip Kumar: Performance Evaluation of PCA based Reduced Features of Leaf Images Extracted by DWT using Random Forest and XGBoost Classifier. **Multimedia Tools & Applications**, 82(17), 26225-26254, (2023) (Q_2) Impact Factor 3.6.

[4] **Monu Bhagat**, Dilip Kumar: Stability analysis of mathematical model for spread of pest in tea plant by RKM-4 and ABM-2. **Journal of Difference Equations and Applications**, 29(2), 121-142, (2023) (Q_2) Impact Factor 1.1.

[5] **Monu Bhagat**, Dilip Kumar: A comprehensive survey on leaf disease identification & classification. **Multimedia Tools & Applications**, 81, 33897–33925, (2022) (Q_2) Impact Factor 3.6.

[6] **Monu Bhagat**, Dilip Kumar, Sunil Kumar: Bell pepper leaf disease classification with LBP and VGG-16 based fused features and RF classifier. **International Journal of Information Technology**, 15(1), 465-475, (2023)., (Q_4)

[7] **Monu Bhagat**, Dilip Kumar: Efficient feature selection using BoWs and SURF method for leaf disease identification. **Multimedia Tools & Applications**, 82(18), 28187-28211, (2023) (Q_2) Impact Factor 3.6.

[8] Aditya Gupta, **Monu Bhagat**, Vibha Jain: Blockchain-enabled healthcare monitoring system for early Monkeypox detection. **The Journal of Supercomputing**, 79(14), 15675-15699, (2023) (Q_2) Impact Factor 2.7.

[9] **Monu Bhagat**, Dilip Kumar: Performance enhancement of kernelized SVM with deep learning features for tea leaf disease prediction. **Multimedia Tools & Applications**, 83(13), 39117-39134, (2024) (Q_2) Impact Factor 3.6.

[10] Ajay Kumar, Aditya Gupta, Yadvendra Pratap Singh, **Monu Bhagat**: A Deep Neural Network for Classification of Land Use Satellite Datasets in Mining Environments. **Journal of Mining and Environment**, 15(1), 465-475, (2023)., (Q_3)

[11] **Monu Bhagat**, Dilip Kumar, Sunil Kumar: Optimized transfer learning approach for leaf disease classification in smart agriculture. **Multimedia Tools & Applications**, 83, 58103–58123, (2024) (Q_2) Impact Factor 3.6.

[12] **Monu Bhagat**, Aayush Sharma, Piyanshi Agarwal:An efficient stacking-based ensemble technique for early heart attack prediction. **Multimedia Tools & Applications**, 2024 (Q_2) Impact Factor 3.6.

[13] Mukesh Kumar, Sonu Jha, Dilip Kumar, **Monu Bhagat**: A Study on Visual Secret Sharing Scheme using Speech Recognition. **Technology & Management, Rabindranath Tagore University Journal Vol.**,IX/Issue XVII September 2019, ISSN: 2278-4187, DOI: 10.29070/AUJ-AN.

Patents:

[1] Portable diagnostic imaging device for early disease detection. **Design Office, Kolkata**, Patent Design Application No. 413545-001, June. 2024 (Granted).

[2] Futuristic ai-enhanced air purifier for next-generation indoor environmental solutions. **Design Office,U.K.**, U.K. Patent Design No. 6332516, Jan. 2024 (Granted).

[3] A cloud-based platform for crop recommendation for precision farming driven by artificial intelligence. **The Patent Office, , India**, Application No. 202341036565, Journal No. 35/2023 Dated 01/09/2023. (Published).

[4] An agricultural robotic system and method thereof. **The Patent Office, Kolkata**, Patent Application No. 202431040115, May, 2024 (Published)

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[1] **Monu Bhagat**, Deobrata Kumar, Dilip Kumar: Role of Internet of Things (IoT) in Smart Farming: A Brief Survey. **Devices for Integrated Circuit (DevIC), IEEE**, 141-145, (2019) (Published) (Scopus Indexed).

[2] Manisha Sharma, **Monu Bhagat**, Dilip Kumar: Ubiquitous and Emerging Concepts of Sensors. **Devices for Integrated Circuit (DevIC), IEEE**, 341-347, (2019) (Published) (Scopus Indexed).

[3] Sunil Kumar, Dilip Kumar, **Monu Bhagat**: Rapid and efficient medical image segmentation using thresholding and CLAHE with 3-level FCM clustering. **Proceedings of the international conference on advances in electronics, electrical computational intelligence (ICAEEC), Elsevier**, (2019) (Published) (Scopus Indexed).

[4] **Monu Bhagat**, Dilip Kumar, Isharul Haque, Hemant Singh Munda, Ravi Bhagat: Plant leaf disease classification using grid search based SVM. **International conference on data, engineering and applications (IDEA), IEEE**, 1-6, (2020) (Published) (Scopus Indexed).

[5] **Monu Bhagat**, Dilip Kumar, Rehan Mahmood, Bibhudhendra Pati, Monu Kumar: Bell pepper leaf disease classification using CNN. **International conference on data, engineering and applications (IDEA), IEEE**, 1-5, (2020) (Published) (Scopus Indexed).

[6] Sunil Kumar, **Monu Bhagat**: A Comparative Analysis of Cryptographic Algorithms in IoT Environment.**International Conference on IoT and Its Application (ICIA), Springer**, (2024) (Accepted) (Scopus Indexed).

[7] **Monu Bhagat**, Sunil Kumar: A Coherent Solution of dataset crisis using GAN based transfer learning approach for leaf image classification & Disease Prediction, **ISBM 2025 Bangkok Thailand, Springer**, (2025) (Accepted) (Scopus Indexed).

Book Chapter:

[1] **Bhagat, M.**, Kumar, D., Balgi, S.M. (2021). Application of Internet of Things in Digital Pedagogy. In: Deyasi, A., Mukherjee, S., Mukherjee, A., Bhattacharjee, A.K., Mondal, A. (eds) Computational Intelligence in Digital Pedagogy. Intelligent Systems Reference Library, vol 197. Springer, Singapore. https://doi.org/10.1007/978-981-15-8744-3_11.