

List of Publications

Journals

1. P. S. Tanwer, **S. Maheshwari**, S. Behera, A. Chauhan and T. Sunil Kumar, "Evaluation of vision transformers for the detection of fullness of garbage bins for efficient waste management", *Frontiers in Artificial Intelligence*, vol. 8, 612080, 2025. (Impact factor: 4.7)
DIO: <https://doi.org/10.3389/frai.2025.1612080>
2. **S. Maheshwari**, Kandala NVPS Rajesh, Vivek Kanhangad, U. Rajendra Acharya, and T. Sunil Kumar. "Entropy difference-based EEG channel selection technique for automated detection of ADHD." *PloS one*, vol. 20, no. 4, 2025. (Impact factor: 2.6)
DOI: <https://doi.org/10.1371/journal.pone.0319487>
3. Abhay B. Nayak, Aastha Shah, **S. Maheshwari**, Vijay Anand, Subrata Chakraborty and T. Sunil Kumar, "An empirical wavelet transform-based approach for motion artifact removal in electroencephalogram signals" *Elsevier Decision Analytics Journal*, vol. 10, 100420, 2024.
DOI: <https://doi.org/10.1016/j.dajour.2024.100420>
4. T. Sunil Kumar, Kandala N.V.P.S. Rajesh, **S. Maheshwari**, V. Kanhangad, and U. R. Acharya, "Automated Schizophrenia detection using local descriptors with EEG signals" *Elsevier Engineering Applications of Artificial Intelligence*, vol. 117(A), 105602, 2023. (Impact factor: 7.5)
DOI: <https://doi.org/10.1016/j.engappai.2022.105602>
5. Abhishek Iyer, Srimithritik Das, Reva Teotia, **S. Maheshwari**, Rishi Raj Sharma, "CNN and LSTM based Ensemble Learning for Human Emotion Recognition using EEG Recordings" *Springer Multimedia Tools and Applications*, vol. 82, pp. 4883–4896, April 2022.(Impact factor: 3)
DOI: <https://doi.org/10.1007/s11042-022-12310-7>
6. **S. Maheshwari**, Rishi Raj Sharma and Mohit Kumar, "LBP-based information assisted intelligent system for COVID-19 identification" *Elsevier Computers in Biology and Medicine*, vol. 134,104453, July 2021. (Impact factor: 7)
DOI: <https://doi.org/10.1016/j.compbiomed.2021.104453>
7. R. R. Sharma, M. Kumar, **S. Maheshwari** and K. P. Ray, "EVD-ARIMA based time series forecasting model and its application for COVID-19 cases", *IEEE Transactions on Instrumentation and Measurement*, vol. 70, pp. 1-10, Dec 2020. (Impact factor: 5.6)
DOI: <https://doi.org/10.1109/TIM.2020.3041833>
8. **S. Maheshwari**, V. Kanhangad, R. B. Pachori, S. V. Bhandary, and U. R. Acharya, "Automated glaucoma diagnosis using bit-plane slicing and local binary pattern techniques," *Elsevier Computers in Biology and Medicine*, vol. 105, pp. 72 – 80, Feb. 2019. (Impact Factor: 7)
DOI:<https://doi.org/10.1016/j.compbiomed.2018.11.028>
9. **S. Maheshwari**, R. B. Pachori, V. Kanhangad, S. V. Bhandary, and U. R. Acharya, "Iterative variational mode decomposition based automated detection of glaucoma using fundus images," *Elsevier Computers in Biology and Medicine*, vol. 88, pp. 142 – 149, Sept. 2017. (Impact Factor: 7)

DOI:<https://doi.org/10.1016/j.compbiomed.2017.06.017>

10. **S. Maheshwari**, R. B. Pachori and U. R. Acharya, "Automated diagnosis of glaucoma using empirical wavelet transform and correntropy features extracted from fundus images," *IEEE Journal of Biomedical and Health Informatics*, vol. 21, no. 3, pp. 803-813, March 2016. (Impact Factor: 6.7)

DOI: <https://doi.org/10.1109/JBHI.2016.2544961>

Book Chapters

1. **S. Maheshwari**, Kandala N V P S Rajesh, Usha Desai, and T. Sunil Kumar, "An Overview of Recent Approaches in Brain-Computer Interface Systems using Electroencephalography", in **Human-Machine Interface Technology Advancements and Applications** (CRC Press), Taylor and Francis, 2023. (<https://doi.org/10.1201/9781003326830>)
2. **Shishir Maheshwari**, E. Sathiya, Palani Thanaraj Krishnan, Chunzhuo Wang, and T. Sunil Kumar, "Performance Evaluation of Vision Transformers for AI-driven Diagnosis of Bleeding Detection in Wireless Endoscopy Bleeding" in **AI-driven Human-machine Interaction for Biomedical Engineering** (Elsevier), 2025.

Conferences

1. **S. Maheshwari**, T. S. Kumar and Kandala N V P S Rajesh, "Schizophrenia detection using Entropy Difference-based Electroencephalogram Channel Selection Approach," 46th International Conference of the IEEE Engineering in Medicine & Biology Society, Orlando, Florida, USA, July 2024. DOI: [10.1109/EMBC53108.2024.10782840](https://doi.org/10.1109/EMBC53108.2024.10782840)
2. **S. Maheshwari** and T. S. Kumar, "A Comparison of Local Descriptor-based Data Augmentation Techniques for Glaucoma Detection using Retinal Fundus Images," IEEE 10th International Conference on e-Health and Bioengineering (EHB), Iasi, Romania, Nov. 2022, pp. 01-04. DOI: [10.1109/EHB55594.2022.9991688](https://doi.org/10.1109/EHB55594.2022.9991688).
3. **S. Maheshwari** and U. C. Pati, "Mosaicing of images using unsharp masking algorithm for interest point detection," 2014 IEEE International Conference on Advanced Communications, Control and Computing Technologies, Ramanathapuram, May 2014, pp. 1431-1434. DOI: [10.1109/ICACCCT.2014.7019338](https://doi.org/10.1109/ICACCCT.2014.7019338)