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Areas of interest:

Speech Processing, Soft Computing, Machine learning, Biomedical applications.

**Publications:**

1. Devi, G., Sharma, M., Sarma, P. et al. Flood Frequency Modeling and Prediction of Beki and Pagladia Rivers Using Deep Learning Approach. *Neural Process Lett* (2022). <https://doi.org/10.1007/s11063-022-10773-1>. [SCI-2.9]
2. Das H., Sharma M., Xu Q., Microstrip Antenna: An Overview and Its Performance Parameter, *Smart Antennas, EAI/Springer Innovations in Communication and Computing book series (EAISICC), Springer Cham* (2022), pp 3-14. [Scopus]
3. Sharma M., Sarma K. K., Enhancement of Assamese Speech Signals Using Learning Based Techniques, *Biosc. Biotech. Res. Comm. Special Issue* (2021), vol. 14, issue 5, pages 100-104. [Web of Science]
4. Mridusmita Sharma, Kandarpa Kumar Sarma, Nikos E Mastorakis, *Ethnographically Oriented Repository of Assamese Telephonic Speech, MATEC Web of Conferences* (2018), vol. 210, page 05019. [Web of Science]
5. Sharma M., & Sarma, K. K., Deep features-based dialect and mood recognition using Assamese telephonic speech, *International Journal of Information and Communication Technology* (2020), vol. 17, issue 4, pages 343-363. [Scopus]
6. Sharma M., Sarma K. K., Mastorakis N. E., Aircraft Image De-noising and Identification using Deep Neural Network, *International Journal Of Circuits, Systems And Signal Processing* (2019), vol. 13, pages 430-437. [Scopus]
7. Sharma M., Sarma K.K., Soft computation based spectral and temporal models of linguistically motivated Assamese telephonic conversation recognition, *CSI Transactions on ICT* (2017), vol. 5, pages 209–216.
8. Rajiv Barman, Mridusmita Sharma, Kandarpa Kumar Sarma, Parismita Sarma, Combination of Cepstral Features and Temporal Learning Approach for Emotion Recognition, *Lecture Notes in Networks and Systems* (2021), vol. 170 LNNS, pp. 277–286. [Scopus]

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11. Gautam Chakraborty, Mridusmita Sharma, Navajit Saikia, Kandarpa Kumar Sarma, Nikos E Mastorakis, Speech Database in Sylheti and Speech Recognition using Convolutional Neural Network, Proceedings: 24th International Conference on Circuits Systems Communications and Computers (CSCC 2020), pages 29–34, 9402663. [Scopus]
12. Sharma M., & Sarma K. K., Capturing Temporal Aspects for ASR Design using Time Shifted Examples-TDNN Combination, Proceedings of 5<sup>th</sup> International Conference on Signal Processing and Integrated Networks (SPIN-2018), pp. 253–257, 8474043. [Scopus]
13. Barman R., Sharma M., Sarma K. K., & Sarma, P., Content Capture and Noise Cancellation Aided Mood Recognition using Assamese Speech, 5th International Conference on Signal Processing and Integrated Networks (SPIN-2018) pages 811-815, 8474243. [Scopus]
14. Sharma M., Sarma K.K., Mastorakis N., AE and SAE Based Aircraft Image Denoising, Proceedings: 5th International Conference on Mathematics and Computers in Sciences and Industry (MCSI 2018), pages 81–85, 8769797. [Scopus]
15. Sharma M., & Sarma K. K., Soft-Computational Techniques and Spectro-Temporal Features for Telephonic Speech Recognition: An Overview and Review of Current State of the Art, Handbook of Research on Advanced Hybrid Intelligent Techniques and Applications (2016), IGI Global, pages 161-189.
16. Sharma, M., & Sarma, K. K. Learning Aided Mood and Dialect Recognition using Telephonic Speech, In Proceedings of 1st International Conference on Accessibility to Digital World (ICADW 2016), IEEE, pages 163-167.
17. Sharma M. & Sarma K., K., Dialectal Assamese Vowel Speech Detection using Acoustic Phonetic Features, KNN and RNN, In proceedings of 2<sup>nd</sup> International Conference on Signal Processing and Integrated Networks (SPIN-2015), IEEE, pages 674-678.
18. Sharma M., Sarma M. & Sarma K., K., Recurrent Neural network based Approach to Recognize Assamese Vowels using Experimentally Derived Acoustic Phonetic Features, In proceedings of 1<sup>st</sup> International conference on Emerging Trends and Applications in Computer Science (ICETACS-2013), pages 140-143.