References

1. Nair, A. M., & Savithri, S. P. (2021). Classification of pitch and gender of speakers for forensic speaker recognition from disguised voices using novel features learned by deep convolutional neural networks. *Traitement du Signal*, 38(1).
2. Zhang, C., & Tan, T. (2008). Voice disguise and automatic speaker recognition. *Forensic Science International, 175*(2–3), 118–122.
3. Singh, M. K., Singh, A. K., & Singh, N. (2018). Multimedia analysis for disguised voice and classification efficiency. *Multimedia Tools and Applications, 78*(20), 29395–29411.
4. Ahmed, B., & Holmes, P. H. (2004). A voice activity detector using the chi-square test. In *2004 IEEE international conference on acoustics, speech, and signal processing* (Vol. 1, pp. I-625). IEEE.
5. Perrot, P., & Chollet, G. (2008). The question of disguised voice. *Journal of the Acoustical Society of America, 123*(5), 3878.
6. Singh, M. K. (2023). A text independent speaker identification system using ANN, RNN, and CNN classification technique. *Multimedia Tools and Applications*, 1–13.
7. Rodman, R. (1998). Speaker recognition of disguised voices: A program for research. In *Proceedings of the consortium on speech technology in conjunction with the conference on speaker by man and machine: Direction for forensic applications* (pp. 9–22). COST 250.
8. Singh, M. K. (2023). Feature extraction and classification efficiency analysis using machine learning approach for speech signal. *Multimedia Tools and Applications*, 1–16.
9. Wu, H., Wang, Y., & Huang, J. (2014). Identification of electronic disguised voices. *IEEE Transactions on Information Forensics and Security, 9*(3), 489–500.
10. Reich, A. R., Moll, K. L., & Curtis, J. F. (1976). Effects of selected vocal disguises upon spectrographic speaker identification. *The Journal of the Acoustical Society of America, 60*(4), 919–925.
11. Singh, M. K., Singh, A. K., & Singh, N. (2018). Multimedia analysis for disguised voice and classification efficiency. *Multimedia Tools and Applications, Springer Journal, 78*(20), 29395–29411.
12. Nandan, D., Singh, M. K., Kumar, S., & Yadav, H. K. (2022). Speaker identification based on physical variation of speech signal. *Traitement du Signal*, 39(2).
13. Farrús, M. (2018). Voice disguise in automatic speaker recognition. *ACM Computing Surveys (CSUR), 51*(4), 1–22.
14. Wolf, J. J. (1972). Efficient acoustic parameters for speaker recognition. *The Journal of the Acoustical Society of America, 51*(6B), 2044–2056.
15. Liang, H., Lin, X., Zhang, Q., & Kang, X. (2017). Recognition of spoofed voice using convolutional neural networks. In *2017 IEEE global conference on signal and information processing (GlobalSIP)* (pp. 293–297). IEEE.
16. Wang, L., Liang, H., Lin, X., & Kang, X. (2018). Revealing the processing history of pitch-shifted voice using CNNs. In *2018 IEEE international workshop on information forensics and security (WIFS)* (pp. 1–7). IEEE.
17. Satorra, A., & Bentler, P. M. (2001). A scaled difference chi-square test statistic for moment structure analysis. *Psychometrika, 66*(4), 507–514.
18. Yao, L. (2020). A compressed deep convolutional neural networks for face recognition. In *2020 IEEE 5th international conference on cloud computing and big data analytics (ICCCBDA)* (pp. 144–149). IEEE.
19 Lakshmi, P. A., Veerapandu, G., Gamini, S., & Singh, M. K. (2022). CNN Classification of multi-scale ensemble OCT for macular image analysis. Algorithms. *International Journal of Electrical and Electronics Research, 10*(4), 858–861. https://doi.org/10.37391/IJEER.100417
20. Yang, H., Yang, Z., & Huang, Y. (2019). Steganalysis of voip streams with cnn-lstm network. In *Proceedings of the ACM workshop on information hiding and multimedia security* (pp. 204–209).

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.