

Recent Trends in Audio Encryption

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Abstract

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The recent decade has witnessed a rise in digital content, especially multimedia and multimedia applications. The security requirements of these platforms need advanced encryption schemes. In this presentation the novelties of audio encryption are reviewed. These include a new method for audio. WAV file encryption using a random modification with two secret key applications, an encryption scheme grounded on the principalities of confusion and diffusion

References

1. N. Hassan, F. Al-Mukhtar, E. Ali, Encrypt Audio File using Speech Audio File As a key, 2nd International Scientific Conference of Al-Ayen University (ISCAU-2020) *IOP Conf. Series: Materials Science and Engineering* 928 (2020) 032066.
2. H. Aziz, S. Gilani, I. Hussain, A. Janjua, S. Khurram, A Noise-Tolerant Audio Encryption Framework Designed by the Application of S8 Symmetric Group and Chaotic Systems. *Mathematical Problems in Engineering*, 2021, Article ID 5554707.
3. A. Tamimi, A. Abdalla, An Audio Shuffle-Encryption Algorithm, *Proceedings of the World Congress on Engineering and Computer Science 2014 Vol I WCECS 2014*, 22-24 October, 2014, San Francisco, USA.

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