Abstract

As information transmission technology progresses, the technology to protect data from unauthorized users also needs to be enhanced. Data can be plagiarized, modified, deleted etc without proper authentication and authorization. Various security mechanisms have evolved that enhances the security of digital media. Each technology to be applied successfully should ensure a balance between the three pillars of security; confidentiality, integrity and availability. Digital watermarking is one such technique. It is a mechanism to monitor the digital media with the help of information residing within the content itself. To put it simply, digital watermarking is embedding of information into source content that can be detected and extracted. Digital watermarking can be applied to media like text, audio, image, video etc. This paper provides a comprehensive idea behind this technology and its usage.

References

Digital Watermarking: Applications, Techniques and Attacks

(ISIE2001), Volume. 1, pp: 272-277,

- Akira Nishimura, "Presentation of Information Synchronized with the Audio Signal reproduced by Loudspeakers using an AM based Watermark.",
- Nedeljko Cvejic, Tapio Seppanen, "Improving Audio Watermarking Scheme Using Psychoacoustic Watermark Filtering.",
- W. N. Lie and L. C. Chang, "Robust and High-Quality Time-Domain Audio Watermarking Subject to Psychoacoustic Masking.", proceedings of IEEE International
Digital Watermarking: Applications, Techniques and Attacks

- Hyoung Joong Kim, &quot;Audio Watermarking Techniques&quot;.
- G. Coatrieux H. Maitre, B. Sankur, Y. Rolland, R. Collorec, &quot;Relevance of Watermarking in Medical Imaging&quot;; in Proc. IEEE Int. Conf. ITAB, USA, 2000, pp. 250-255.

Index Terms

Computer Science
Security
Keywords

Steganography  Fingerprinting  Phase Encoding  Spread Spectrum Watermarking  Echo Watermarking  Dual Watermark  Class A Attacks  Class B Attacks