A Novel Approach to Improve Invisibleness and Robustness of a Digital Watermark in Copyright Protection

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Abstract

Rapid penetration of internet and advancements in communication technology is a paved way to easy access of digital images. Nevertheless, these advancements also create ways for malicious users to pirate and sell the copyrighted content. Digital watermarking techniques have been deployed in combating the piracy issue. The current digital watermarking methods are facing the problems in maintaining invisibleness, robustness, capacity and security. In this article, authors are analyzing the various popular algorithms used in digital watermark of copyright protection and propose a novel approach by combining three such algorithms aiming to increase the invisibleness and robustness of the watermarked image. The experimental results, exemplifies much increase in invisibleness and a nominal increase in robustness.

References

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Index Terms

Computer Science  Security

Keywords

LWT  SVD  DCT  DWT  Watermarking