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TEXT DOCUMENT PROTECTION USING DIGITAL WATERMARKING ALGORITHMS

ABSTRACT:

In the current era, information security is on its top priority for all organizations. The individuals, government officials, and military with the rapid development of Internet technologies like the Internet of Things (IoT), big data, and cloud computing facing data security problems. As the massive rate of data growth, it is a challenging task for the researcher that how to manage the vast amount of data safely and effectively while designing smart cities. It has been quite easy to produce an illegal copy of digital contents. The verification of digital content is one of the major issues because digital contents are regenerated daily and shared via the internet. The limited techniques are available for document copyright protection. However, most of the existing techniques produced distortion during watermark insertion or lack of capacity. In the said perspective, a digital watermarking technique is proposed for document copyright protection and ownership verification with the help of data mining. The techniques of data mining are applied to find suitable properties from the document for embedding watermark. The proposed model provides copyright protection to text documents on local and cloud computing paradigm. The proposed technique attained a high-level of imperceptibility where peak signal to noise ratio (PSNR) values are between 64.67% and 71.03%, and similarity (SIM) percentage is between 99.92% and 99.99%. The proposed technique is robust and resists from formatting attacks and capacity of the proposed technique is also improved as compared to the previous techniques.

