IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 4, March 2024

Utilizing Watermarking Technique for Detecting Data Leakage in Cloud Environment

Sibi Sharan S[1] and Haripriya V[2]
PG Student, Department of MSc CS-IT[1]
Assistant Professor, School of CS & IT[2]
Jain (Deemed-to-be University), Bangalore, India
[1]isibisharan@gmail.com and [2]v.haripriya@jainuniversity.ac.in

Abstract: *Ensuring safety in dossier management is paramount due to the immense value of stored information. While hackers are often attributed to security breaches, the reality is that a significant portion of data loss stems from insiders. In traditional setups, the transfer of critical data from suppliers to trusted entities is a frequent occurrence. Preserving the security and integrity of these transactions is crucial to meeting the increasing demands of consumers. Any leakage of sensitive data exposes customers to potential risks from the outset. Therefore, establishing secure channels for data transfer between suppliers and recipients is imperative. This project proposes a solution for detecting data leaks using watermarking technology, which detects tampering attempts and identifies the source of leaked information. The system operates within a cloud environment, ensuring accessibility and scalability.*

Keywords: Watermark, Data leakage, Tampering, Steganography, Cloud, AES, QR code, DCT, DWT, SVD.

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