

A Project Report on

**Combined DWT-DCT Digital
Watermarking Technique for Cheque
Transactions**

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ABSTRACT

In this era of internet, technology has done development of network and digital communication. Bank Cheque Truncation System (CTS) use cheque image as data and transfer it to drawee branch of bank for payment through the clearing house. There is a need for security and copyright protection of cheque images. Security can be provided by various methods like encryption and decryption, stenography, digital watermarking etc.

For faster clearing of cheques, a CTS is used. It is normally believed that system is safe and secure. However, the intruders may damage the data and can degrade the quality of cheque image or can duplicate cheque image. There is necessity of security and copyright protection. This software implements combined Discrete Wavelet Transform-Discrete Cosine Transform (DWT-DCT) digital watermarking technique for CTS of bank.

It is important to ensure security and copyright of cheque images. So we implement a digital watermarking scheme combining the DWT and DCT watermarking algorithms to increase the security and robustness of the system. The cheque images are first decomposed using DWT and then DCT transformed to embed the watermark image. Inverse transforms are performed to get the watermarked image. At the receiver the procedure is repeated and the watermark is retrieved. The retrieved watermark is checked for tamper to know whether it has been compromised.