

A Hybrid Based Robust Watermarking Technique Using SVM

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ABSTRACT

To deliver enhanced e-health care access, conveyance for clinical data analysis which allows communication of medical images from one locality to another, is called as Teleradiology. Tele radiology is specified as distant transmission, in which there occur many issues like Image Retention, abuse liability, authorization of radiology information and communication system. Addressing these problems watermarking system is essential for Teleradiology. In this proposal transform domain based robust watermarking algorithm is used for medical image protection. Machine learning technique Support Vector Machine is applied for classification of Region of Interest to embed the encrypted message in medical image. Encryption method is carried out by Biometric key generated by Iris. The proposed work projects to outcomes, the view of access to the medical images with confidentiality, availability, integrity. The robust watermarking, encryption and the biometric enrollment are provided in protection stage such that extraction, decryption and verification can be processed independently. The experimental robustness and imperceptibility results of proposed method can have potential applications in telemedicine.

