A Secured Watermarking Algorithm for Medical Images

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Introduction

In this system, our goal is to design a security scheme to protect patient information. To overcome the difficulty of change in medical reports and unwanted person presence.

This model is based on a digital watermarking technique as embedding a watermark in a video frame and extracting it without loss of quality.

This system core feature is separate a components of reliable size to which embed a watermark of same size.

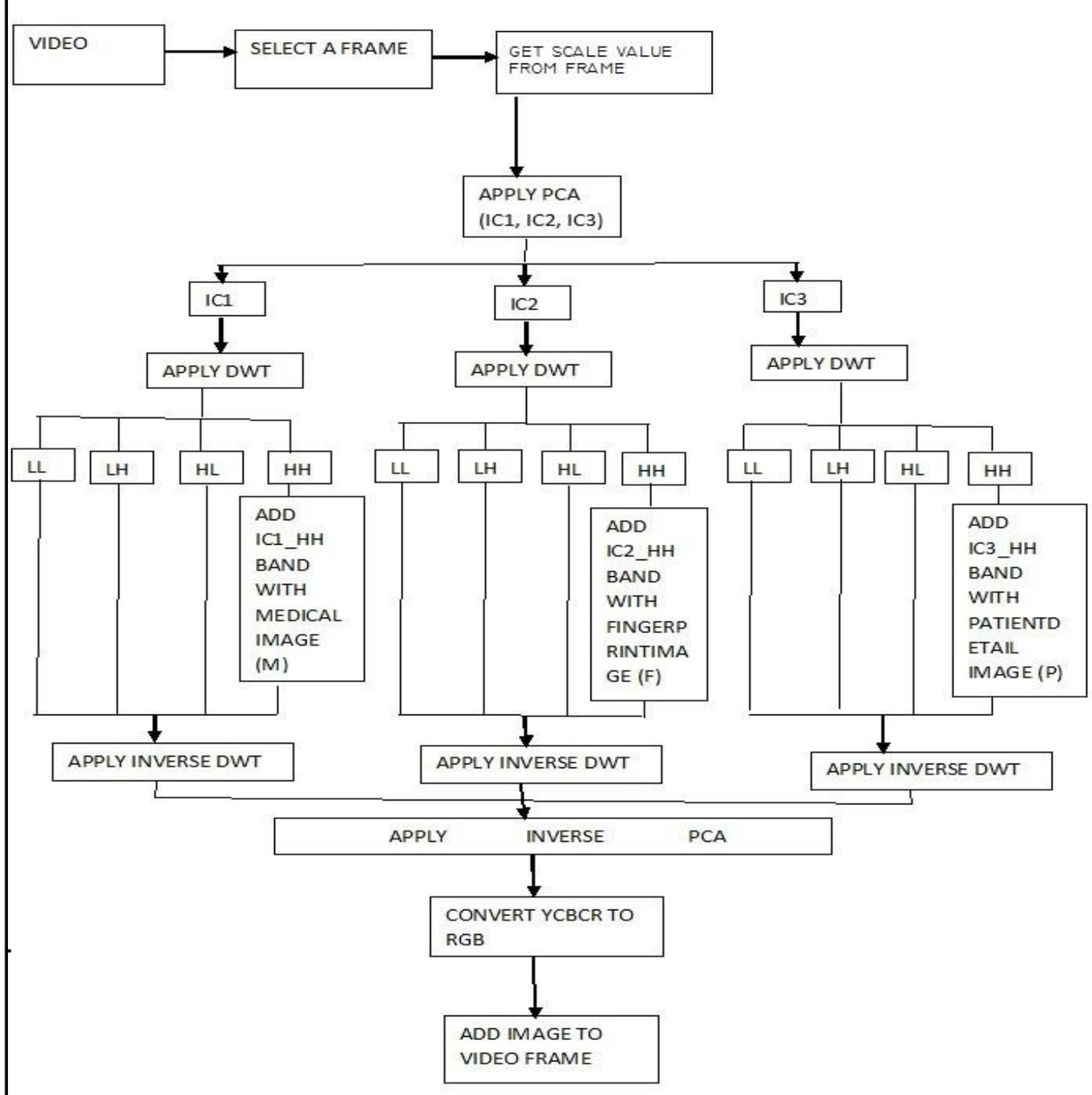
Scope of the Project

To provide security of patient information these methods use watermark like medical images, patient report and fingerprint used for authentication.

Our objective is to separate the frame image from video to three component as we have three watermark. And embed these watermark into these three components.

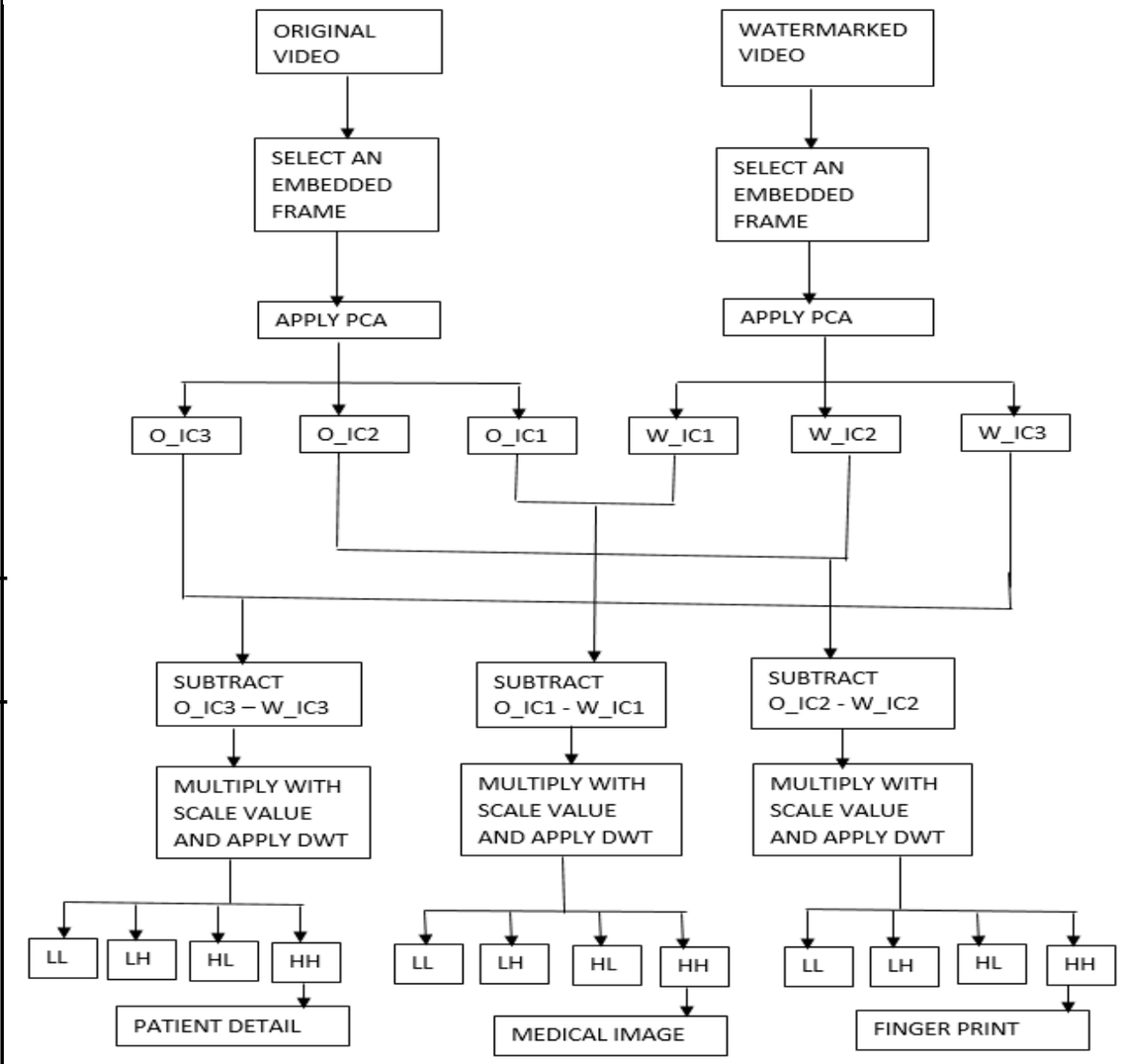
After that extract these watermark from the actual content with less fidelity and provide the performance measure.

Methodology



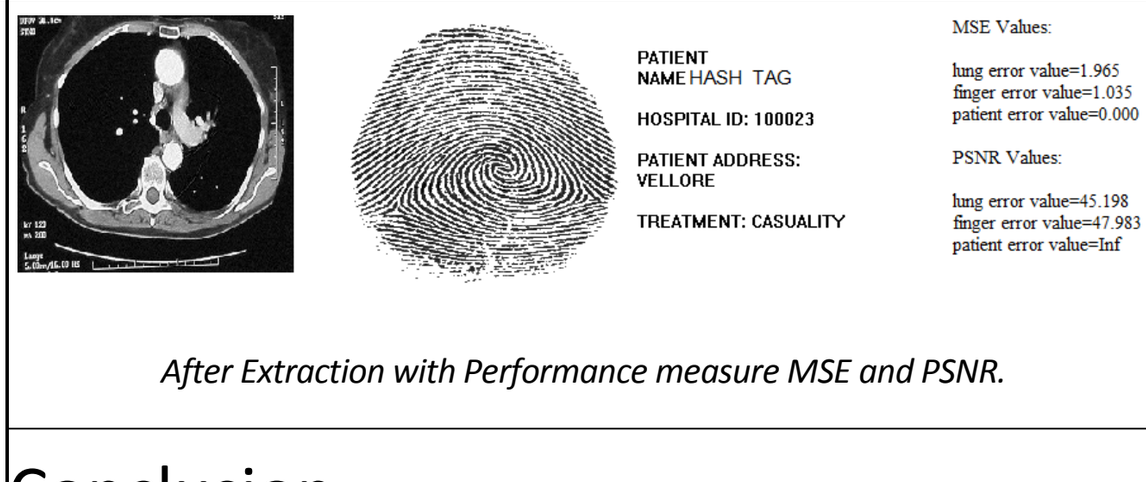
Embedding process

Methodology (cont.)



Extraction process

Results



After Extraction with Performance measure MSE and PSNR.

Conclusion

The proposed algorithm of a secured watermarking algorithm for medical image is provided lossless medical image watermarking technique.

The value of PSNR for proposed work of watermark image with original image is 40 to 45 dB these provided good visualization of output.

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