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Privacy Preservation in ROI of Medical Images Using LSB Manipulation

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Abstract

In the current era of digitization, the medical images are getting transmitted over the communication channel for diagnosis. During this process, it can be modified accidentally or intentionally. This occurs because of the insecure Internet network, which ultimately affects the sent image information. Thus, it results in wrong diagnostic decisions. Here, the basic purpose is to secure image transmission, without changing the sensitive areas of images that carry medical information. One of the possible watermarking methods to avoid erroneous diagnosis and checking the reliability of the received medical image is region-based analysis using ROI. The ROI of