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Data Hiding using Image Steganography

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Abstract: Image Steganography is the artwork of concealing mystery data within the image such that the hacker will now no longer be capable of discover the records within inside the stego images. This is a useful approach to secure our sensitive information. Security has continually been a main difficulty from last many years to existing days. The topic of interest to researchers has long been the development of secure technologies for sending data to anyone other than the recipient without revealing it. Therefore, from nowadays, researchers have evolved many strategies to meet the steady transfer of information and steganography is one in all them. In this paper, we work on two techniques for hiding information in the image. First, we do analysis on LSB for storing information bit. As the technique is known to all, the attacker will be able to easily reveal the information, this makes image steganography unsecured. Secondly, R-Color Channel encoding with RSA set of rules for offering extra protection to information in addition to our information hiding approach. The proposed approach makes use of a red color channel for hiding information bits and the following bits for RGB pixel values of the original image. This paper present the performance analysis of two most popular algorithms, LSB and RSA along with image steganography

Keywords: Steganography, stego image, LSB, R-Color channel, RSA, cipher text



