

Image Content Protection Using Hybrid Approach of Blocking and Embedding Algorithm in the Context of Social Network

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Abstract

The security of an informative data plays a crucial role in current world. The reversible hiding mechanisms for data are able to perform the embedding of secret data in an image in secure way so that the receiver can receive image data without any data loss in secure manner. But, the existing data hiding mechanisms are able to embed the data only after the image encryption. This may cause error during the extraction and recover of image. The security of image content shared on collaborative (social) networks is the de-facto research today to minimize losses. This paper presents a hybrid mechanism of blocking and embedding for image data protection in the context of collaborative network. The outcomes of the system give the improved execution time for optimized transformation (29.3 s) than normal transformation (139.17 s). Also, it is observed that the PSNR value of 53.15 and 53.13 is observed for two set of image data which represents the improved image quality after recovery.

Keywords

Image security, Block operation, Data embedding, PSNR, Execution time.

Citation

Naveen M., Suresh Babu G.N.K. (2019) Image Content Protection Using Hybrid Approach of Blocking and Embedding Algorithm in the Context of Social Network. In: Silhavy R., Silhavy P., Prokopova Z. (eds) Intelligent Systems in Cybernetics and Automation Control Theory. CoMeSySo 2018. Advances in Intelligent Systems and Computing, vol 860. Springer, Cha