

End
 End

Figure 12: RGB Content removal Compression

4. Result and Outcomes

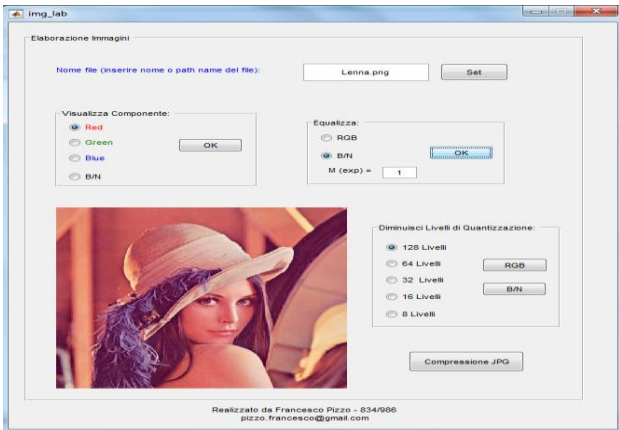


Figure 9: Compression window with RGB Content

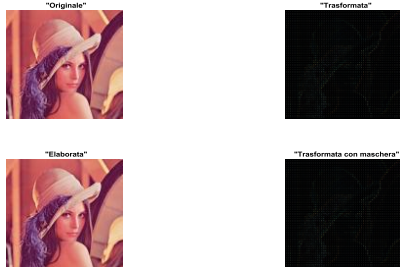


Figure 10: DCT compression with color image



Figure 13: Input Image



Figure 14: Compress Image



Figure 15: Decompress Image

5. Conclusion and Future Scope

In this work we proposed a new image encryption and compression method based on Embedding and Discrete Cosine Transform (DCT) using RGB content. For encryption, DCT blocks of transmitted images are rotated and mixed with a random image to hide them.

In the decryption stage, the covered images can be extracted from the mixtures by applying extraction algorithm. Finally using rotation keys and inverse discrete cosine transform, the original images can be reconstructed.

Therefore we can achieve a fast and secure image transmission. As a result of several computer simulations, the behavior of the proposed approach is confirmed. In this paper color images e used as original images, but grey color images can be applied in the same way.

Our future works include a more secure encryption method with an alternative rotation method and a reconstruction key. More complex rotation manner makes it harder for unauthorized people to reconstruct images without keys

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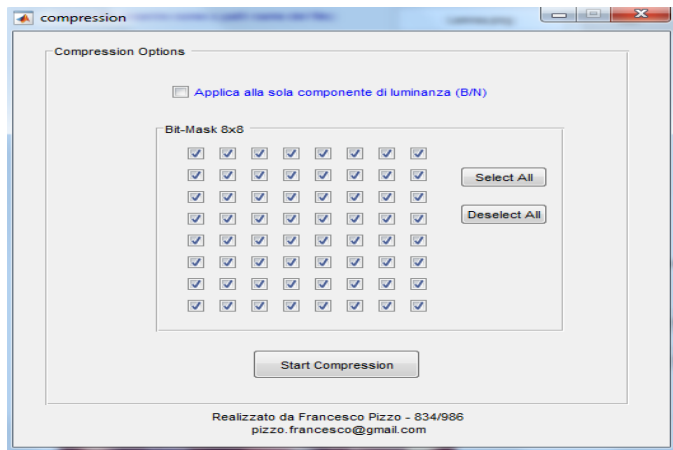
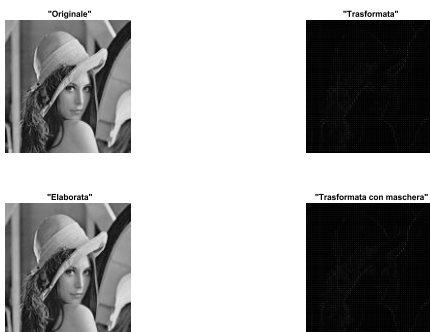


Figure 11: Compression of image with Black & White image and RGB Content Image



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