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Contrast Enhancement of Gray Image Using Discrete Cosine Transform

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Abstract: In this paper a new method for contrast enhancement based on the discrete cosine transform is discussed and implemented. The technique converts the image into DCT domain and the DCT coefficients are modified using proposed mask then the enhanced image is reconstructed using inverse DCT. The discrete cosine transform outperforms with better image quality and with highest PSNR value.

Keywords: Contrast, PSNR, Discrete Cosine Transform, etc.

REFERENCES

- [1] "Enhancement Techniques for Gray Scale Image in Spatial Domain", International Journal of Emerging Technology and Advanced Engineering, ISSN: 2250-2459. [9] A. K. Jain, Fundamentals of Digital Image Processing.
- [2] Englewood Cliffs, NJ: Prentice Hall, 1989. [10] Foisal Hossain, "Image Enhancement Based on Lograthmic Transform Co-efficient and Adaptive Histogram Equalization", International Conference on Convergence Information Technology.
- [3] W. K. Pratt, Digital image processing, Prentice Hall, 1989. [12] Bedi, Rati Khandelwal, "Various Image Enhancement Techniques: A Critical Review", International Journal of Advanced Research in Computer and Communication Engineering, ISSN: 2278-1021.
- [4] Gyu-Hee Park, Haw- Hyan Cho, "A Contrast Enhancement Method using Dynamic Range Separate Histogram Equalization", IEEE Transactions on Communication, Networking and Broadcasting, Page: 1981-1987, Publication year: 2008.

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