Abstract

Converting color images to grayscale is used for various reasons, like for reproducing on monochrome devices, subsequent processing. Each pixel in color image is described by a triple (R, G, B) of intensities like red, green, and blue. But how do you map that to a single value i.e. grayscale value. There are three methods to convert it. Average, Luminosity, Lightness. Different color models are used for different applications such as computer graphics, image processing, TV broadcasting, and computer vision. But still now there is no particular method for converting of grayscale to color image. In this paper a new approach was introduce to convert the grayscale image to color by using an YCbCr color space technique. Simulation results are presented to show how this approach is used to convert the grayscale to color image.

References

1. V.Karthikeyani, Dr. K. Duraiswamy, Mr. P. Kamalakkannan, Conversion of Gray-scale image
Grey level to RGB using YCbCr color space Technique

to Color Image with and without Texture Synthesis. IJCSNS,. 2007,7(4), 11-16.
5. P. Ganesan, V. Rajini, B. S. Sathish, V. Kalist and S. K. Khamar BashaSatellite Image Segmentation based on YCbCr Color Space. IJST ,2015,8(1), 35–41,
6. Kaur A, Kranthi BV. Comparison between YCbCr color space and CIELab color space for skin color segmentation. IJAIS. 2012,3(4), 30–33.
9. The OpenCV Library (http://opencv.org)

**Index Terms**

Computer Science  
Image Processing

**Keywords**

Image Processing, Gray level, RGB, YCbCr