Pixiillion Image Convertor

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Abstract- Pixillion Image Convertor would be an application which can edit photos, convert a grayscale image into color. Additional feature will cover filters (like Brightness, Contrast, highlight, Shadow, fill light, etc.) Effect, Sharpness of photo, resize. This application is quite easy and simple so anyone can use its features very easily. User can import grayscale image and convert into colorized image and vice versa. Major purpose of this application is in the field of medical, security check and in GIS(satellite images). Image processing is a method to perform some operations on an image, in order to get an enhanced image or to extract some useful information from it. It is a type of a processing in which input is an image and output may be image or characteristics/features associated with that image.

Keywords- JAVA, Design with NetBeansIDE, Xml

I. INTRODUCTION

I am going to develop application which can edit photos, convert a gray scale image into color. Additional feature will cover filters (like Brightness, Contrast, highlight, Shadow, fill light, etc.) Effect, Sharpness of photo, resize. This application is quite easy and simple so anyone can use its features very easily. Major purpose of this application is in the field of medical, security check and in GIS(satellite images). Image processing is a method to perform some operations on an image, in order to get an enhanced image or to extract some useful information from it. It is a type of signal processing in which input is an image and output may be image or characteristics/features associated with image.

Nowadays, image processing is among rapidly growing technologies. It forms core research area within engineering and computer science disciplines too. Main aim of Image processing project is to extract important data from images. In other words image processing is called as altering and analyzing pictorial information of images. Application basically includes the following three steps-Importing the image to the application. Analyzing and manipulating the image. Output in which result can be altered image or report that is based on image analysis.
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II. LITERATURE REVIEW

1) **Advance Image Processing techniques:** Earlier I studied Image processing basics which includes study of color models like RGB, Hue, Saturation, Brightness etc. In current semester I focused on advanced techniques. PDE Based Enhancement of Color Images in RGB space by S. Bettahar, A.B.Stambouli,P.Lambert and A. Benoit has proposed a novel method for color image enhancement is proposed as an extension of scalar diffusion-shock filter coupling model, where noisy and blurred images denoised and sharpened the proposed model is based on using single vectors of the gradient magnitude and the second derivatives as a technique to relate different color components of the image.

   Keywords-Diffusion, color, noise, blur, enhancement.

2) **Color to gray and back:** color embedding into textured gray images by Ricardo L. de Queiroz, Senior Member, IEEE, and Karen M. Braun is another paper studied in current semester. Author have developed a reversible method to convert color graphics and pictures to gray images. The method is based on mapping colors to low-visibility high- frequency textures that are applied onto the gray image.

   After receiving a monochrome textured image, the decoder can identify the textures and recover the color information. The intent is to print color images with black and white printers and to be able to recover the color information after wards.

   Keywords- color embedding, color-to-gray conversion.

3) **A Comprehensive Review of Image Enhancement Techniques**: By Raman Maini, Himanshu Aggarwal. Principle objective of Image enhancement is to process an image so that result is more suitable than original image for specific application. Digital image enhancement techniques provide a multitude of choices for improving the visual quality of images. choice of such techniques is greatly influenced by the imaging modality, task at hand and viewing conditions. This paper will provide an

overview of underlying concepts, along with algorithms commonly used for image enhancement.

III. STUDY FINDINGS

Existing website for black and white image to colorized image conversion that there is not an application regarding this and the internet must required for using that website. The second reason is we can modify the original image there is only conversion of photo and increasing the size of the image. Once user upload the image on websites we have to wait for buffering process of that image.

The converted image looks like user can not get the result that we want. The website using only conversion of an image and vice versa. That may be happen when you want to see the particular object of an image also segmentation of an image technique are not been used.

In existing websites, you need to upload your data over internet, which may not be secured. Satellite images are also used by army, scientist working with NASA or ISRO, and such data are confidential which is not supposed to be uploaded over internet. Existing system uses same algorithm which I am going to use but I will also compress high sized images.

IV. FUTURE ENHANCEMENT

- Compressing the image after the conversion of an image and also provide Image segmentation process so that the particular object can be captured in the image.
- Shifting the pixel values of the resulting image to map the values into a desired range.
- Better Design: The main challenge that we have identified is related to the design. I am constantly working on design to make this system easy to use.
- Better Working: Constantly working on algorithms to improve the accuracy and performance. Also increase the accuracy of application.

V. CONCLUSION

PIXILLION IMAGE CONVERTOR techniques, user can sharpen the images, contrast to make a graphic display more useful for display, reduce amount of memory requirement for storing image information, etc., due to such techniques, image processing is applied in recognition of images as in factory floor quality assurance systems; image enhancement as in satellite reconnaissance systems; image synthesis as in law enforcement suspect identification systems,

and image construction as in plastic surgery design systems. And Morphological Processing allowed effective pre processing. Conversion of black and white image include processing of colored image and different color spaces that are used like RGB color model. The processing of images are faster and more cost- effective. One needs less time for processing. A digital image of a certain size can not be enlarged, that is easy to make an image smaller.

VI. ACKNOWLEDGMENT

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