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Subject: Re: Image processing question  
Posted by [btupper](#) on Tue, 21 May 2002 00:11:48 GMT  
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On 18 May 2002 10:51:31 -0500, Craig Markwardt  
<craigmnet@cow.physics.wisc.edu> wrote:

> rkj@dukebar.crml.uab.edu (R. Kyle Justice) writes:  
>  
>> How do I convert a color image(.jpg) to grayscale?  
>>  
>> I am using PV-Wave's Image\_Read function to read the image,  
>> which stores all the image info in an associative array.  
>> Do I simply take the maximum RGB intensity value at each  
>> pixel in the 'pixels' array (xdim,ydim,3)? This gives me  
>> a grayscale image, but I'm not sure this is the "correct"  
>> one.  
>  
> There is no one "correct" conversion from RGB to grayscale, since it  
> depends on the sensitivity response curve of your detector to light as  
> a function of wavelength. A common one in use is:  
>  
>  $Y = 0.3 \cdot R + 0.59 \cdot G + 0.11 \cdot B$   
>

If you are converting to the Hue, Saturation and Value (HSV) color  
system, then the MAX of the RGB triplet will give you the Value image  
(I have also seen this referred to as the Intensity image.)

Ben

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