Subject: Re: distribution of colors for an image
Posted by R.Bauer on Wed, 27 Oct 2004 13:57:00 GMT
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David Fanning wrote:
> Reimar Bauer writes:
>
>
>> fine, I have seen a lot of instruction on your marvellous web page.
>>
>> But I don't understand the result I got. Lets show an example.
>>
>> a=dist(20)
>> h=histogram(a)
>> print,max(a),max(h)
>>   14.1421   56
>>
>>
>> u=uniq(a,sort(a))
>> help,u,h
>> U   LONG   = Array[61]
>> H   LONG   = Array[15]
>>
>> Why could be h higher as a?
>> Why doesn't I got a vector length of 61 as uniq tells?
>
>
> You asked about color distribution in an image. A histogram
> will tell you (with a byte scaled image, of course) how many
> pixels in the image have a particular color. It will even
> tell you which pixels those are, but that is another story,
> best explained with JD's Histogram Tutorial.
>
> In your case H is fifteen elements long, because your data
> had values between 0 and 15, and you used a bin size of 1,
> by default. The *numbers* returned from histogram, told you
> the pixel distribution of those 15 "colors". In one bin, for
> example, you had 56 pixels values that fell into that bin.
>
> You had 61 unique numbers in your data, but all 61 of them fell
> into one of the 15 bins you set up.
>
> To see your color distribution, you want to plot the histogram
> of your data:
>
>   data = dist(200)
>   Plot, Histogram(data), XStyle=1, $
>   XTitle='Color Distribution', YTitle='Number of Pixels'

>
> Does that help?
>

Yes, this is very good explained.

Now it is clear and I know why I was so irritated of the result I got.

I have used a circular clipping of an image and have missed that's histogram uses always rectangular input. The background color which clips the data to invisible is count highest. If I don't use max_value I see nothing on the plot.

Thanks for all help

Reimar

> Cheers,
>
> David
>

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