Subject: Re: Determing true resolution of an image?
Posted by wmconnolley on Thu, 07 Mar 2002 13:51:31 GMT
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Martin Downing <martin.downing@ntlworld.com> wrote:
> "David Fanning" <david@dfanning.com> wrote in message
> news:MPG.16eecdf16f798ad3989831@news.frii.com...
>> William Connolley (wmc@bas.ac.uk) writes:
>>> I'd like a procedure to take a digital image (a photo) and, by in some
>>> way reducing the image and comparing the "inforamtion" left, to
> determine
>>> the "true" resolution. What I have in mind is to scan in an analogue
> photo
>>> at very high res, and to try to determine what res needs to be retained.
>>
>> What does "information" mean in this context?

Well, I'm trying to compare analogue and digital images in a quantitative way. So "information" is the true resolution. Take an analogue image: I can scan it in at increasingly high res, but after some level the amount of info doesn't increase but the noise does.

> I was looking into something like this a while back, where I would interpret
> "information" as representation of the theoretical object input image
> signal. If you measure the FT of the output, you can look for the maximum
> frequency at which there is still significant power above the noise level.
> The resolution of the image could then be set to twice this frequency.

Fourier transform is an interesting idea. I'll look at that, thanks.

-W.

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Climate Modeller, British Antarctic Survey | Disclaimer: I speak for myself
I'm a .signature virus! copy me into your .signature file & help me spread!