Subject: Re: Determing true resolution of an image?
Posted by Martin Downing on Tue, 05 Mar 2002 23:06:35 GMT
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"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?
>

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.

Alternatively, if you just want a "nice" looking image, you can look at
lossy methods of reduction such as JPEG compression as well as reducing the
resulution, and then use volunteers to decide what level is almost as good
as the original.

Martin