Subject: Re: Wiener filter
Posted by jeyadev on Wed, 19 Dec 2001 21:34:01 GMT
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In article <3C20AC39.2080907@gsfc.nasa.gov>,
James Kuyper Jr. <James.R.Kuyper.1@gsfc.nasa.gov> wrote:
> Surendar Jeyadev wrote:
>
>> In article <9vllbg$po7$1@canopus.cc.umanitoba.ca>,
>> Richard Tyc <richt@sbrc.umanitoba.ca> wrote:
>
> Optimal Wiener filtering of a one-dimensional data set is described in
> section 12.6 of "Numerical Recipes in C", by Preuss et.al. It cites
> three books on signal processing as references. The basic result is that
> if you have a corrupted signal with the fourier spectrum S(f),
> containing noise with a fourier specturm N(f), it can be shown
> rigorously that the optimal (in the sense of a least-squares fit)
> frequency filter for removing the noise is:
>
>
> phi(f) = ----------
>

Eeeks! I did not know the name. I have actually used it is some
data analysis in 1-d (not 2-d images). Thanks!
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Surendar Jeyadev jeyadev@wrc.xerox.com