
Subject: Re: efficient kernel or masking algorithm ? UPDATE
Posted by [Martin Downing](#) on Mon, 26 Feb 2001 10:21:54 GMT
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>> interested in this method which is very fast. It is based on the crafty
>> formula for variance:
>> $\text{variance} = (\text{sum of the squares})/n + (\text{square of the sums})/n*n$
>
> Righto. I knew I was fishing for something like this. Except I think you
mean:
>
> $(\text{population}) \text{ variance} = (\text{sum of the squares})/n - (\text{square of the sums})/n*n$
>
> Luckily, that's how you've coded it too. Sample variance (=population
> $\text{variance} * n / (n-1)$) is of course the more common case in science (as opposed
to
> gambling).

>> ; POPULATION_ESTIMATE: return the population estimate of variance, not the
>> sample variance

Sigh - you are right of course, but this was just a misunderstanding.
Setting the Keyword above returns an *estimate* of the population from which
the input sample is assumed to have some from, is more commonly referred to
as SAMPLE variance. The default is the variance of the array, which is
usually coined population variance. I agree that until I take up gambling
the former should be the default!! Although I know what I'm doing,
personally I find these single name terms very ambiguous, as you can see!!!
Shame I never read my comments.....

Martin
