Subject: Re: Performance of a loop
Posted by Martin Downing on Fri, 19 Oct 2001 20:29:58 GMT
View Forum Message <> Reply to Message

Paul,
Im curious, can you explain why your modification should run faster?
cheers
Martin

--

Martin Downing,
Clinical Research Physicist,
Grampian Orthopaedic RSA Research Centre,
Woodend Hospital, Aberdeen, AB15 6LS.
Tel. 01224 556055 / 07903901612
Fax. 01224 556662

m.downing@abdn.ac.uk

"Paul van Delst" <paul.vandelst@noaa.gov> wrote in message
news:3BCEF673.6858D2A@noaa.gov...
> azM wrote:
>>
>> How can i speed up this procedure? It steps through a matrix of either
>> 64x64x64, 128x128x128 or in the worst case 256x256x256.
>>
>> <==BEGIN IDL==>
>> FOR i = init, limit, 1 DO BEGIN
>> FOR j = init, limit, 1 DO BEGIN
>> FOR k = init, limit, 1 DO BEGIN
>> X=img_a(i:kernel_dim+i,j:kernel_dim+j,k:kernel_dim+k)
>> Y=img_b(i:kernel_dim+i,j:kernel_dim+j,k:kernel_dim+k)
>> sign_prob_map=TM_TEST(X,Y)
>> spm_plot_statistic(i,j,k)= sign_prob_map(0)
>> spm_plot_significance(i,j,k)= sign_prob_map(1)
>> ENDFOR
>> ENDFOR
>> ENDFOR
>> <== END IDL ==>
>
> The easiest mod for some increase in speed:
>
> <==BEGIN IDL==>
> FOR k = init, limit, 1 DO BEGIN
> FOR j = init, limit, 1 DO BEGIN
> FOR i = init, limit, 1 DO BEGIN
> X=img_a(i:kernel_dim+i,j:kernel_dim+j,k:kernel_dim+k)

```
>      Y=img_b(i:kernel_dim+i,j:kernel_dim+j,k:kernel_dim+k)
>      sign_prob_map=TM_TEST(X,Y)
>      spm_plot_statistic(i,j,k)= sign_prob_map(0)
>      spm_plot_significance(i,j,k)= sign_prob_map(1)
>     ENDFOR
>    ENDFOR
>   ENDFOR
>   <== END IDL ==>
>
>  assuming the guts of the inner loop can't be sped up somehow.
>
>  paulv
>
>  --
>  Paul van Delst            Religious and cultural
>  CIMSS @ NOAA/NCEP         purity is a fundamentalist
>  Ph: (301)763-8000 x7274   fantasy
>  Fax:(301)763-8545          V.S.Naipaul
```