Subject: Re: correlation between images
Posted by Brian Larsen on Thu, 02 Apr 2009 20:56:56 GMT
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OK, so I was on much the same telecom three times today and needed to occupy myself...

This is an example "related" to what you are working on.

Run this as I think its pretty fun.
Download this image:
http://technabob.com/blog/wp-content/uploads/2008/03/apple_l ogo_rainbow_fruit.jpg

then run the following code:

```
;    .run image_registration
read_jpeg, 'apple_logo_rainbow_fruit.jpg', img, /true
tv, img[1, *, *]
size = size(img, /dimen)
cut_size = 50
sub = img[*, 140:190,  300:350]
ans = fltarr(size[1:2])
FOR i = 0UL, size[1]-cut_size-1, 10 DO BEGIN
   FOR j = 0UL, size[2]-cut_size-1, 10 DO BEGIN
      ans[i, j] = c_correlate(sub, img[*, i:i+cut_size, j:j+cut_size],
0)
      tv, sub, i, j,  /true
      tv, img[1,i:i+cut_size, j:j+cut_size], i, j
   ENDFOR
ENDFOR
ind=where(ans eq max(ans))
wheretomulti, ans, ind, col, row
tv, img[1, *, *]
tv, sub, col, row, /true
END
```

This is fun as it funds just the right place. To be smart one would iteratively move different numbers of pixels. As I new the answer I was able to take large steps and get the right answer, but this gave the same answer taking 1 pixel steps but takes too long.

Cheers,

Brian

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