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Subject: Re: How to eliminate smaller blob from label\_region image

Posted by [rogass](#) on Wed, 31 Aug 2011 12:00:20 GMT

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On 22 Aug., 10:13, Wox <s...@nomail.com> wrote:

> On Sun, 21 Aug 2011 22:40:24 -0700 (PDT), vijay s

>

> <vijayans...@gmail.com> wrote:

>> hi all,

>

>> I used label\_region to get individual blob id for each region.

>> But few of my blobs are very small in area wise and

>> i want to eliminate those from my images and retain blobs of larger

>> area (say pixel area gt 10). How can i eliminate unwanted smaller

>> blobs?

>

>> thanks in advance.

>

> By using the HISTOGRAM function:

>

> ; Minimum number of blob pixels

> npix\_threshold=10

>

> ; Get image

> path=FILEPATH('pollens.jpg',SUBDIR=['examples','demo','demo data'])

> READ\_JPEG, path, image

>

> ; Get blob indices

> b = LABEL\_REGION(image gt 150)

>

> ; Get population and members of each blob

> h = HISTOGRAM(b, REVERSE\_INDICES=r)

>

> ; Regions with small number of pixels

> ind = where(h lt npix\_threshold,ct)

>

> ; Remove the small regions

> for i=0l,ct-1 do b[r[r[ind[i]]:r[ind[i]+1]-1]]=0

>

> Obviously, some indices will be missing since you zero'ed them out.

> You might want to fix that. It might not even be necessary to set the

> small blob indices to zero. It all depends on what you will do with

> the blob indices.

Yep, and to put all things together:

```
function cr_remove_regions_fast,mask,small=small,verbose=verbose
small = ~n_elements(small)? 10 : 1>small
```

```

verbose = ~n_elements(verbose)? 0 : 1
t0 = systime(1)
l = label_region(mask,/ulong,/all_neighbors)
h = histogram(temporary(l),reverse_indices=r)
wh = where(h,nl)
for i=1l,nl-1l do $
  mask[(((ind=R[R[wh[l]] : R[wh[i]+1]-1])))] *= $
    total( mask[ind]) It small? 0 : 1
  undefine,r,ind,wh; D. Fannings nice undefine routine
if verbose then print,'Filtered regions: ',nl-1l,' in: ',systime(1)-
t0,' s'
return,mask

```

Cheers

CR  
end

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