how to count non-zero pixels inside a contour opency

Asked 3 years, 1 month ago Active 1 year ago Viewed 2k times



I am developing OMR scanner android application using opency library. I have detected my circles inside the sheet as contours and now I want to get filled circle contours from all the obtains contours Since java support for opency is very less I couldnt figure out anything, please suggest some method for the same.







```
//paramview is my image
    Utils.bitmapToMat(paramView, localMat1);
    Mat localMat2 = new Mat();
    double[] lo:
    Imgproc.GaussianBlur(localMat1, localMat2, new Size(5.0D, 5.0D), 7.0D,
6.5D);
    Object localObject = new Mat();
    Imgproc.cvtColor(localMat2, (Mat)localObject, COLOR_RGB2GRAY);
    Mat cloneMat= ((Mat) localObject).clone();
    localMat2 = localMat1.clone();
    bitwise_not(cloneMat,cloneMat);
    Imgproc.threshold(cloneMat, localMat2, 127, 255, Imgproc.THRESH_OTSU);
    Mat thresh=localMat2.clone();
    List<MatOfPoint> contours = new ArrayList<MatOfPoint>();
    List<MatOfPoint> questions = new ArrayList<MatOfPoint>();
    List<MatOfPoint> sorted = new ArrayList<MatOfPoint>();
    //All contours detected
    Mat hierarchy = new Mat();
    Imgproc.findContours(localMat2, contours, hierarchy,
    Imgproc.RETR_EXTERNAL, Imgproc.CHAIN_APPROX_SIMPLE);
```

Image of Detected circles here

java android opency

edited Jul 15 '17 at 5:16

asked Jul 12 '17 at 6:23



Abhishek 41 9

Can you add your code to find the circles' contours. Also, add your current image output and the desired result. Finally, please have a look at the <u>Help Center</u>. – Elouarn Laine Jul 12 '17 at 10:01

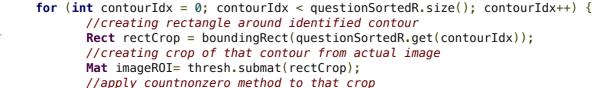
2 Answers





I reworked my own code and found this solution. Hope it might help.







int total = countNonZero(imageR0I);
https://stackoverflow.com/questions/45049896/how-to-count-non-zero-pixels-inside-a-contour-opency



}

```
double pixel =total/contourArea(questionSortedR.get(contourIdx))*100;
//pixel is in percentage of area that is filled
if(pixel>=100 && pixel<=130){
    //counting filled circles
    count++;
}</pre>
```

answered Jul 31 '17 at 9:30

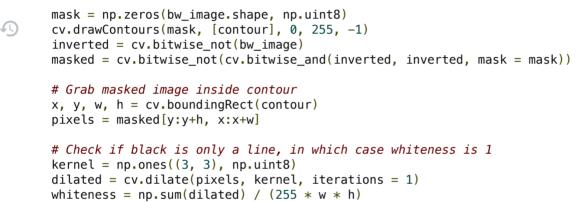


Abhishek 41 9



I propose an alternative to the accepted answer: instead of counting pixels inside a bounding rectangle, paint the contour into a mask, then mask the original image and count the pixels inside it. I was counting black pixels on a white background, where the contour kept several pixels on the edge, so your mileage may vary. Here is my code in Python:





answered Aug 2 '19 at 8:17

