How can I determine the angle a line found by HoughLines function using OpenCV?

Ask Question

1

Using the HoughLines function in OpenCV, is it possible to determine the angle of a resulting line relative to the base of the image?

2

opencv computer-vision hough-transform

asked Jun 4 '14 at 7:41

user1371414
75 1 10

1 look at HoughLinesP – berak Jun 4 '14 at 7:52

1 Answer

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If you use HoughLines function, it will provide you lines already defined by two parameters: theta and rho, as

```
vector<Vec2f> lines;
// detect lines
```

```
HoughLines(image, line

// get lines
for( size_t i = 0; i <
{
    float rho = lines[
   ....
}
```

Or if you apply HoughLinesP function, you will get lines defined by two points, you just need to calculate the angle of line between two points with regard to the image, as:

```
vector<Vec4i> lines;
// detect the lines
HoughLinesP(image, lin
for( size_t i = 0; i <
{
    Vec4i l = lines[i]
    // draw the lines

    Point p1, p2;
    p1=Point(l[0], l[1
    p2=Point(l[2], l[3
    //calculate angle
    float angle = atan
  .......
}
```

answered Jun 4 '14 at 8:01

Y.AL

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For PI OpenCV defines CV_PI in the global namespace. – Nikola Obreshkov Dec 20 '16 at 21:04