

Houghtrsf

November 7, 2019

```
[1]: import cv2
import numpy as np
import matplotlib
from matplotlib.pyplot import imshow
from matplotlib import pyplot as plt
from matplotlib.image import imread

[52]: img=imread('road.jpg')
img2=imread('processedimg1_1.jpg')

[53]: lines=cv2.HoughLines(img2,1,np.pi/180,200)
print(len(lines))
for i in range(len(lines)):
    theta=lines[i][0][1]
    rho=lines[i][0][0]
    a=np.cos(theta)
    b=np.sin(theta)
    x0=a*rho
    y0=b*rho
    x1=int(x0+1000*(-b))
    y1=int(y0+1000*(a))
    x2=int(x0-1000*(-b))
    y2=int(y0-1000*(a))
    cv2.line(img,(x1,y1),(x2,y2),(0,0,255),2)
    cv2.imwrite('output1.jpg',img)
```

3

```
[54]: out=imread('output1.jpg')
plt.imshow(out)
plt.show()
```

