**Hough Transform for Line Detection**

clc

clear

im1=imread('C:\Users\Ruk\Desktop\pic\10.png');

im=imfinfo('C:\Users\Ruk\Desktop\pic\10.png');

imshow(im1)

imG=rgb2gray(im1);

imB=im2bw(imG);

H=im.Height;

W=im.Width;

n=sum(sum(imB));

m=[-2:2];

c=zeros(n,5);

%pick up data

n=1;

for i = 1:H

for j = 1:W

if imB(i,j)==1

c(n,:)=(-i\*m)+j;

n=n+1;

end

end

end

figure,plot(m,c)

xlabel('m or Slope')

ylabel('C')

title('Hough Transform')



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