

Assignment II

EE604: Image Processing

Q1) Write code for the Hough Transform from scratch to detect coins in the given image. The output should be a binary mask highlighting the regions covered by the coins.

[5 Marks]



Q2) Use a pre-trained network (trained on ImageNet) to develop a classification model that distinguishes between defective and normal track images. In your report, specify the classification accuracy achieved on the test set and display sample test images that were correctly classified, as well as those that were misclassified. Higher accuracy will result in higher marks. You may apply appropriate data augmentation techniques to improve accuracy.

Link for the dataset:

<https://drive.google.com/file/d/1oh9clcMkHTbDUbj2vribmOt7JE4170gm/view?usp=sharing>

[5 Marks]