Digital Image Processing (ELL715)

Assignment-2

In this assignment, you'll get to play with two special tools: one that finds the edges of things and another that spots shapes. Grab a picture with lots of geometric shapes, like a painting with lines, circles, triangles, ellipse etc. and find these shapes. Actually I want you to implement canny edge algorithm and hough transform once you find edges.

1. Demonstrate the detection of shapes in the image of your choice
2. Numerous built-in functions are at your disposal (check Google) for various geometrical shapes. Your task is to discover a new geometrical figure (you can design your own)* and write the Hough transform for it.
3. Also extend your search in 3-dimension.

*Two groups cannot think alike

Instructions:

1. Submit a PDF with your code (with comments), results and conclusion/discussion.
2. Plagiarism would be heavily penalized.
3. The assignment has to be submitted in pre-made groups. Since one assignment is already done, no changes to the groups at any point of the semester would be entertained.