

Image Processing Assignment #2
Marks: 50

Assign Date: September 29, 2015

Submit by: 23:55, October 13, 2015

The Assignment:

A production house has an automated system to produce same size colorful spherical shaped candy. Due to some bug in the automated system, the shape and size is not being maintained nowadays. Therefore, they installed one camera that will take 24-bit true color images of each packet for manual analysis.

Your job is to automate the analysis process to save the man-hour. Develop and implement one image processing software that will take the image generated by camera as input and will raise a flag if the packet contains something other than the same size spherical shaped candy.

Note 1: You can assume that the 2D projection of spherical candy is the colored filled circles.

Note 2: Due to the projection of 3D to 2D, there will be some overlapping among the candies.

Upload the zip file containing your program file named as ass2_<roll> (with proper extension based on your programming language) and your test image file as test1_<roll>.

1. Use of Library Functions is not allowed except input/output.

2. Zero tolerance for plagiarism. All plagiarism cases will be penalized by -50.

Credits:

1. Remove everything else except candies: 15
2. Separate the candies: 20
3. Count the number of candies: 15
4. Bonus (List the number of candies of each specific color): 10