

Mini-project 2019: Image processing

MARKING SCHEME

We are splitting the students in groups, each TA will be responsible for the marking of their group. Grouping can be done on the day depending on where people are sitting. The students will be assessed during the session. They will have to show to their TA how their code works. The TAs will then assign a mark based on this mark scheme.

For both the rotation and the edge detection, if their code runs and outputs an image, check for any errors listed below and subtract marks as needed. If you spot any other mistake, subtract marks at your own discretion. If their code does not run, then have a look to see if they have some of the basic structure needed (also listed below). Add up the marks for every thing they tried to implement.

1 Rotation

Mistake	Penalty
Image is flipped	-10
Output dimensions are wrong	-10
Rotation is wrong	-10
Image not centred	-10
Hard coded properties	-30
Unclear explanation of the code	-20

If the code does not run:

What they did	Marks
Define the image transform	+10
Have some sort of loop to apply the transform to each pixel	+20
Attempt at assigning new pixel position after applying transform	+10

If it is a simple syntax error, you can subtract 5 marks and refer to first table.

2 Edge detection

Mistake	Penalty
Equation implemented incorrectly	-10
Incorrect handling of edge pixels	-10
Hard coded properties	-10

If the code does not run:

What they did	Marks
Have some sort of loop through each pixel	+10

If it is a simple syntax error, you can subtract 5 marks and refer to first table.

3 Vectorisation

They should get an extra 10 marks if they have successfully completed the vectorisation problem. Note that their score can not exceed 100.