EE-608:DIGITAL IMAGE PROCESSING

Lab Assignment 3

(Warning : Don't use chatgpt)

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AIM:

1) For the given images, Apply decimation(downsampling), nearest neighbor interpolation, bilinear interpolation and bicubic interpolation. Analyze results.

2) For the above resulting images, apply edge filter and see how it is for different interpolations and also plot corresponding histograms for interpolated images and verify dimensions.

   Doubts: You can approach us.

   Libraries: Opencv to read or write image

         Matplotlib to display image

          Numpy wherever necessary

         Basic python functions

Deliverables:

Just give a concise report of what you understand in your own words, not too heavy theory taken from the web.

1) Write a python or matlab code to implement above given tasks.
2) Analyze the tasks clearly and the mathematics behind the task.
3) Plot the results and make a report of results and observations.