

Image Decimation Exercise

Topic: Image decimation is the reverse of image interpolation. It is a very simple routine that takes an $an_1 \times bn_2$ image, where $a, b > 1$ and resizes into a $n_1 \times n_2$ one, thus reducing its dimensions.

Exercise: Create a Python script file and perform the following tasks:

- Import OpenCV and NumPy libraries.
- Create a function that takes as input an image and a decimation factor and performs image decimation. Then, return the resized image. You can add any extra parameters you desire.
- Read an image.
- Apply image decimation to the image.
- Finally, display the resized image.