

Problem-1

Image Deblurring:

1. Download sharp images from here:
<https://drive.usercontent.google.com/download?id=1YLksKtMhd2mWyVSkvhDaDLWSc1qYNCz-&export=download&authuser=0>
2. Downscale the images to (256,448). (Set A)
3. Create a set of images by applying different gaussian filters to each image: (Set B)
 - a. Kernel size = 3x3 , sigma = 0.3
 - b. Kernel size = 7x7 , sigma = 1
 - c. Kernel size = 11x11 , sigma = 1.6
4. Design a network to deblur images (Set B -> Set A) Upper Limit is 15 M parameters.
5. Test set will be provided along with ground truth later. We will also providing an evaluation script. Please report PSNR score according to this score.
6. Please use numpy==1.24.4, PIL==10.2, scikit-image==0.21 for preprocessing and running evaluation script.
7. You need to submit:
 - a. Codes
 - b. Final checkpoint
 - c. Report (contains model architecture, training details, training curves, qualitative and quantitative results)

Problem-2

Please train the model discussed in this paper: <https://arxiv.org/pdf/2204.01678.pdf>
You are free to use a smaller version of the model and/or dataset mentioned in paper.

Please post in moodle forum or mail to gnr638@googlegroups.com for queries.