

README

To run the code for Image Restoration using Wiener Filter, use jupyter notebook and open the file

> *Image_restoration_Wiener_Filter.ipynb* with *jupyter notebook*
> *Run the file.*

The training wiener filter on Lena image can also be run using terminal

> *python Image_restoration_Wiener_Filter.py*
> *python trainingLena.py*

trainingLena.py prompts the user to train the filter using Lena image. The user can enter a desired value for ***K*** and ***size and sigma for PSF*** to evaluate which ***K*** and ***PSF*** performs best for the Lena image.

While testing the filter on other images the values of ***Point Spread Function*** and ***K*** remain same as that for training Lena image.

The testing of the wiener filter can be done using terminal as follows :

> *python harry.py*
> *python car.py*
> *python streetsign.py*

Note : The images formed by running .py files through terminal have an additional conversion to uint8(not present in .ipynb file) which mediates printing these images. Some of the test images have noise inherently and on introducing a blur factor , white dots can be seen. However, these images appear perfectly fine in the .ipynb file.