Deep Image Prior

PyTorch implementation of the CVPR 2018 paper Deep Image Prior by Dmitry Ulyanov et. al. This codebase is a part of final project for **CS 663: Fundamentals of Digital Image Processing** at IITB. The team members are:

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We use the method described in the paper for image inpainting. We randomly delete some pixels of a 512*512 RGB image and then try to fill them using the said technique.
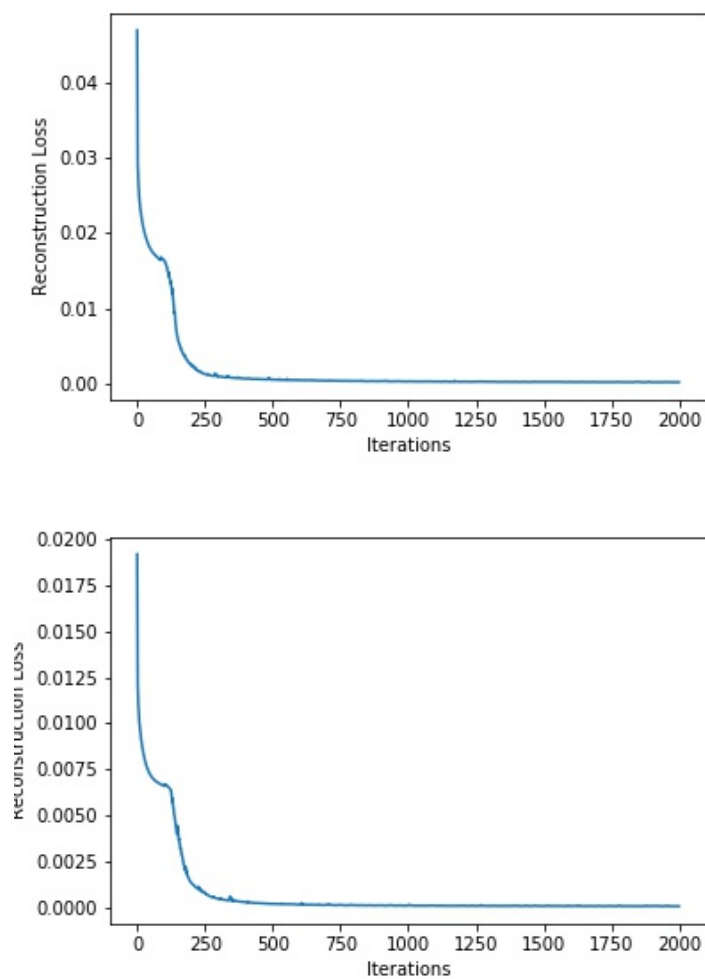
Results

50% pixels removed

The images used are the standard **Lena** and **Barbara** test images. The input and resultant images are as shown.The progress in the initial iterations is shown on the rightmost column.

80% pixels removed

Training

This are the loss curves we obtained during the training on 50% and 80% images respectively. We can observe that the reconstruction loss decreases to negligible value within very few iterations.

References

1. **Dmitry Ulyanov et. al** *Deep Image Prior* [arxiv]
2. Test Images Public-Domain Test Images for Homeworks and Projects