

Deep Learning
Assignment 2
IIIT SriCity
Full marks 30, Deadline 15/04/2019, 5 PM

Instructions:

- The deadline is strict and no further extension will be made
- The experiments should be carried out in own laptops
- The GPU server should not be used for the assignments
- Keep all your codes and auxiliary files in a single zip file along with a pdf file showing the results.
- Name of the zip file should be [full roll number]_A2.zip
- The required dataset can be obtained from the given link
- The zip files should be submitted within the deadline in the same drive.
- All questions carry equal marks
- The submitted codes will be checked for plagiarism. Plagiarised codes will be rejected and given 0 marks without review.
- **DO NOT UPLOAD THE DATASET; UPLOAD ONLY CODE AND REPORT**

1. Implement the basic GAN model for Generating the images in the given dataset. The input noise may be approximated by any suitable distribution.
2. Find a good latent representation of length 100 using autoencoder for the given dataset of images. Write the latent vector in a csv file with corresponding class label.
3. Implement another GAN to reproduce images of the same dataset, where the previous autoencoder is used as generator.

Link to dataset: <https://cswww.essex.ac.uk/mv/allfaces/faces94.html>