

Assignment 4

Advanced Machine Learning (CS566)

Department of CSE, IIT Patna

(Read all the instructions carefully and adhere to them.)

Date: 17-April-2021

Deadline:- 01-May-2021

Instructions:

1. Markings will be based on the correctness and soundness of the outputs.
2. Marks will be deducted in case of plagiarism.
3. Proper indentation and appropriate comments (if necessary) are mandatory.
4. You should zip all the required files and name the zip file as:
roll_no_of_all_group_members .zip , eg. 1501cs11_1201cs03_1621cs05.zip.
5. Upload your assignment (the zip file) in the following link:

<https://www.dropbox.com/request/JOSj0PuBNzK48dbQuQNv>

For any queries regarding this assignment contact:

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Question:

1. To perform Auto-Encoder based data clustering on the MNIST dataset. The steps are explained in the shared slide “Data Learning based Clustering_final.pdf”
2. Plot the Clustering accuracy over the number of epochs during training on MNIST.
3. Report the Clustering accuracy (%) performance results in a table on the dataset.

Dataset:

MNIST Dataset. You can download this dataset from [here](#).