**Spring 2024: CS5720 Neural Networks & Deep Learning - ICP- 8**

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Git-Hub Link:

Python program:

1. Add one more hidden layer to autoencoder

A screenshot of a computer program

Description automatically generated

A computer screen shot of a program code

Description automatically generated

Output:

A screenshot of a computer program

Description automatically generated

2. Do the prediction on the test data and then visualize one of the reconstructed version of that test data. Also, visualize the same test data before reconstruction using Matplotlib

A computer screen shot of a program

Description automatically generated

A screen shot of a computer program

Description automatically generated

A screen shot of a computer program

Description automatically generated

A screen shot of a computer program

Description automatically generated

Output:

A screenshot of a computer

Description automatically generated

A screen shot of a graph

Description automatically generated

A screenshot of a computer

Description automatically generated

1. Repeat the question 2 on the denoisening autoencoder

A computer screen shot of a program code

Description automatically generated

A computer screen with many colorful text

Description automatically generated

Output:

A screenshot of a computer program

Description automatically generated

1. plot loss and accuracy using the history object

A screen shot of a computer program

Description automatically generated

A computer screen shot of a program

Description automatically generated

A computer screen shot of a program code

Description automatically generated

A computer screen shot of a program

Description automatically generated

Output:

A screenshot of a computer screen

Description automatically generated

A graph on a computer screen

Description automatically generated

A graph on a black background

Description automatically generated