

HW assignment #2-1

Problem 1. Using the code “EE488_Week4_reconstruction-HW2.ipynb (2025).ipynb”, answer to the following questions

- A. For 6 possible combinations of $\text{LATENT_DIM} = \{4, 64, 128\}$ and $\text{NORMAL_NUM} = \{[1], [1,2]\}$, plot and compare the histogram.

- B. Discuss why the error distributions of above 6 cases are different.

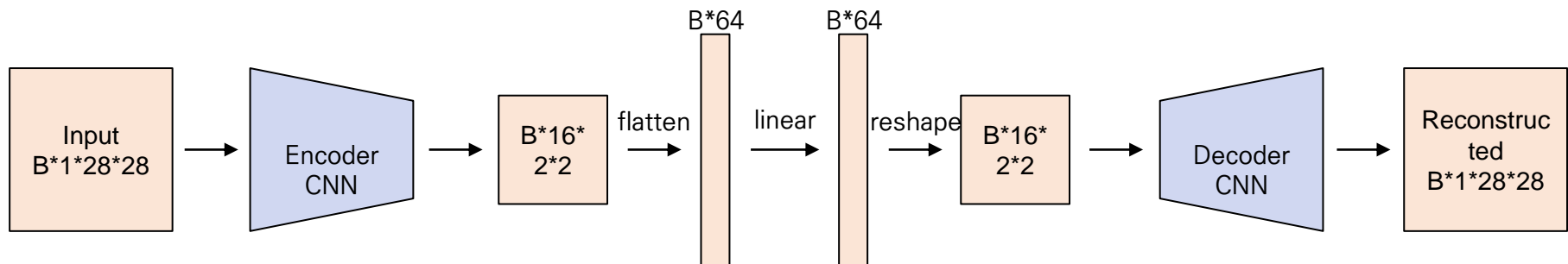
HW assignment #2-2

Problem 2.

- A. Design the convolutional autoencoder described in the following pages and reflect to the code “EE488_Week4_reconstruction-HW2.ipynb (2025).ipynb”
- B. For 6 possible combinations of $\text{LATENT_DIM} = \{4, 64, 128\}$ and $\text{NORMAL_NUM} = \{[1], [1,2]\}$, plot and compare the histogram.
- C. Discuss why the error distributions of above 6 cases are different from those obtained from the fully-connected autoencoder of Problem 1.

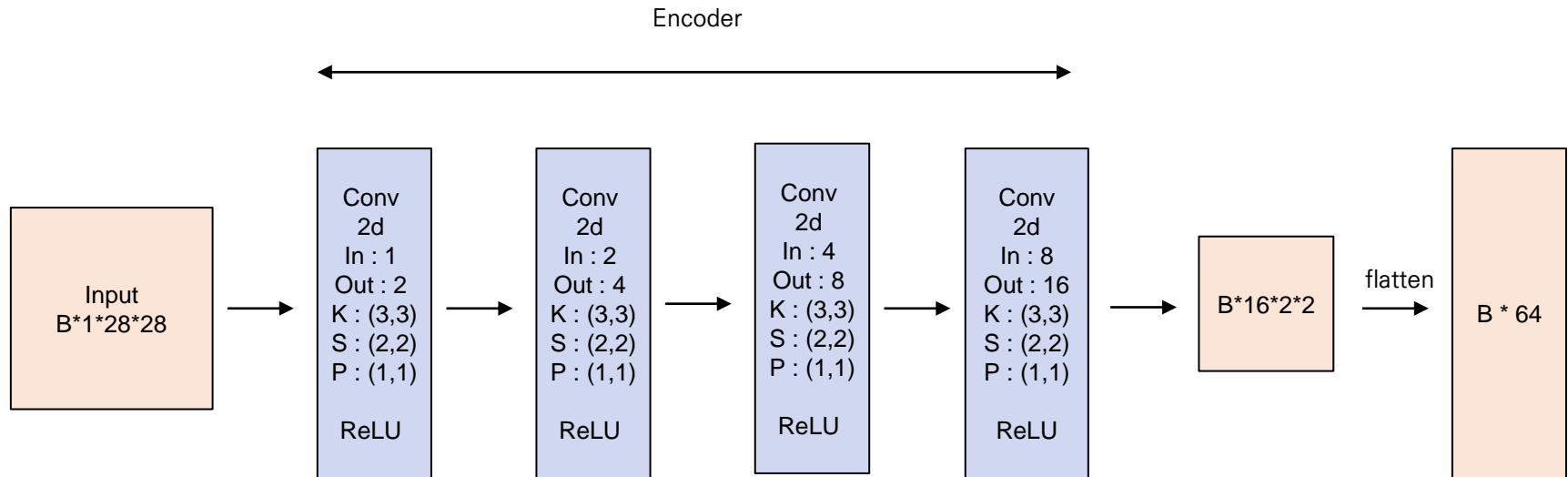
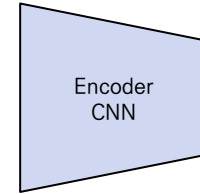
Practice 1 : Reconstruction

- Conv autoencoder (Assignment)



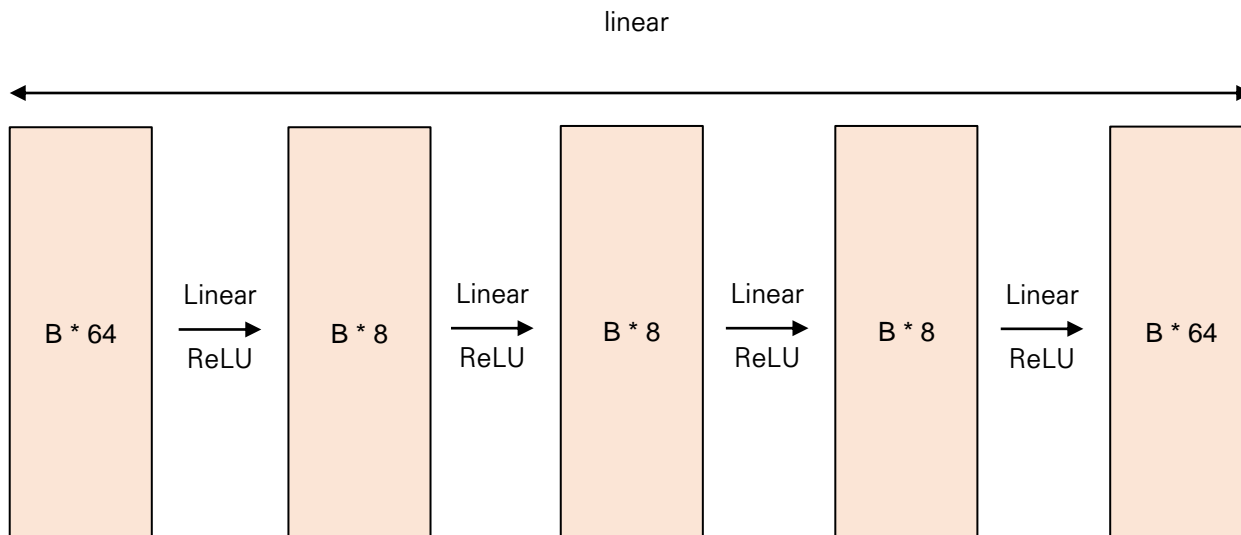
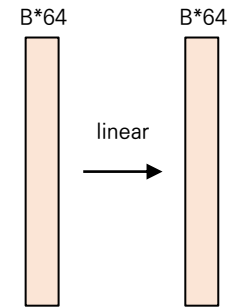
Practice 1 : Reconstruction

- Conv autoencoder : Encoder (Assignment)



Practice 1 : Reconstruction

- Conv autoencoder : Linear (Assignment)



Practice 1 : Reconstruction

- Conv autoencoder : Decoder (Assignment)

