

AI & Pattern Recognition Classwork 06 Autoencoder

ID : _____ Name : _____

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1. (a) Compare the MSE when the coding size is used as 10, 20, and 40 in the stacked autoencoder.
(b) Test whether the reconstruction is improved if an additional hidden layer with 100 neurons was used in the stacked autoencoder.

2. (a) Compare the MSE when the strength (standard deviation) of the Gaussian noise in the denoised autoencoder is set to 0.25 and 0.75 respectively.
(b) Compare the MSE when the percentage of dropout in the denoised autoencoder is set as 0.25 and 0.75.

3. Modify the variational autoencoder that uses σ instead of log variance.