

This document explains the overfitting and underfitting using the images in this folder:

1. A1, L1 and Img3
 - a. These images represent good trained model
 - b. Good fitting model
 - c. We notice the loss learning curves are decreasing smoothly
 - d. The same for the training curves, for both training and validation are increasing smoothly

2. A2 and L2
 - a. The fact that training loss increases while the validation loss continues to decrease suggests that the model is starting to memorize the training data instead of learning general patterns.
 - b. Overfitting happens when the model fits the training data too closely, capturing noise and small fluctuations rather than general trends. This results in poor performance on new, unseen data.
 - c. The increasing training loss could indicate that the model is starting to struggle with the training data itself, potentially due to complexity or instability in learning.

3. A3 , and L3
 - a. In figure A3, the model stops learning at epoch 15.
 - b. We can see this since the validation line does not increase anymore
 - c. We notice similar behavior for the loss curve of the validation dataset