

Deep Learning Ex 5

Q1) a) - Rotation

- Shifts (shift images in any direction)
- Random Scaling
- Add Noise
- Stretching

b) Rotation doesn't make sense because

if we 6 and 9 are very similar can be achieved by rotating the other one.

So it's risky to rotate them, since it can result false labels in training.

Q2) a) Looking at the validation set loss, we can decide when to stop (early stopping). If we only look at training loss it will continue decreasing but at the same time validation loss starts increasing after some time. Therefore, we should look at validation loss and stop the training early where the validation loss is minimum.

b) Because it helps the model to prevent overfitting to the training data by stopping the training where the validation loss is minimum. Therefore the model can't fit to the complex patterns such as noise.

