

We have studied various preprocessing and regularization techniques in the class.

① Your task is to apply these techniques in the code of Lab 3.

② Analyze the performance of adding these small techniques individually as well as in combination.

(a) Batch Norm. Only

(b) Data Augmentation Only

(c) Dropout Only

(d) Batch Norm + Data Augmentation.

(e) Batch Norm + Dropout

(f) Data Augmentation + Dropout

(g) Batch Norm + Dropout + Data Augmentation.

③ Make a detailed report on the performance of these in the network.

Reference libraries in Pytorch :-

Drop out → <https://pytorch.org/docs/stable/generated/torch.nn.Dropout.html>

Augmentations → <https://pytorch.org/vision/stable/transforms.html>

Batch Normalization → <https://pytorch.org/docs/stable/generated/torch.nn.BatchNorm2d.html>