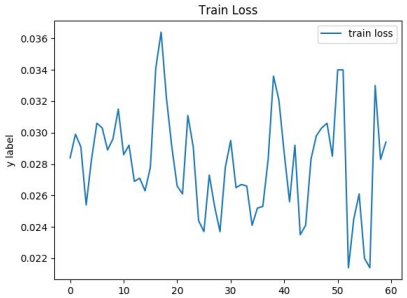
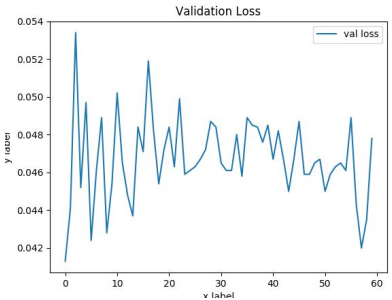
Experiment details:
All trained with
-60 epoch
-image size 128x128
-block size 32x32
-3 channel gray image
Loss details:
1.Distinct loss(Loss_60)
Count Horizontal and Vertical pair with distinct gray level(>0.5)
Loss = (Hcount+Vcount)/Total pair
2.Average 10 pixel Distinct loss(Loss_global_10)
Calculate 10 pixel value in the region that alongside the Horizontal or Vertical axis.Then calculate their average(H_average or V_average).
Loss = (H_average+V_average)/Number of edge
3.Average Distinct loss(Loss_average)
Calculate the absolute value of each pixel pair then calculate their average.
Loss = Abs_Sum/(Total pair*max pixel value)

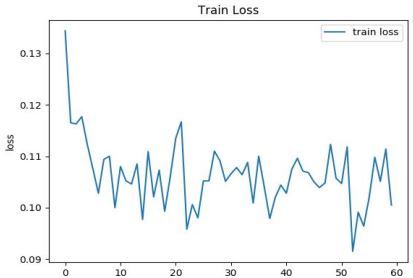
Train and Validation Loss

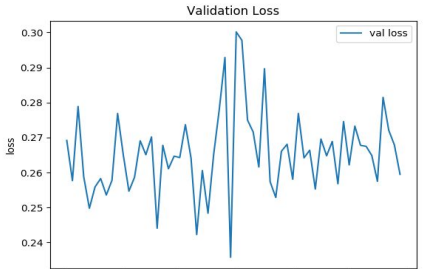
loss_60



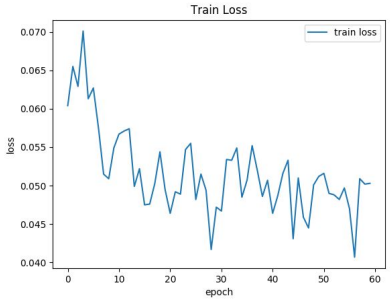


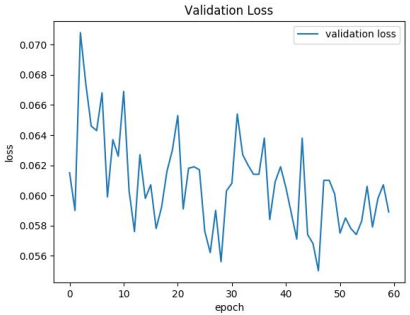
loss_global_10





loss_average





Epoch 1 loss_60
Original image vs Encoded image

Original Image

Encoded Image

Encoded image at epoch 5,54,56

Epoch 1 loss_global_10
Original image vs Encoded image

Original Image

Encoded Image

Encoded image at epoch 31,24,30

Epoch 1 loss_average
Original image vs Encoded image

Original Image

Encoded Image

Encoded image at epoch 3,29,47

Epoch 3

Epoch 29

Epoch 47