Automatic Data Augmentation

Under guidance of :
Prof Marco Pedersoli

By:
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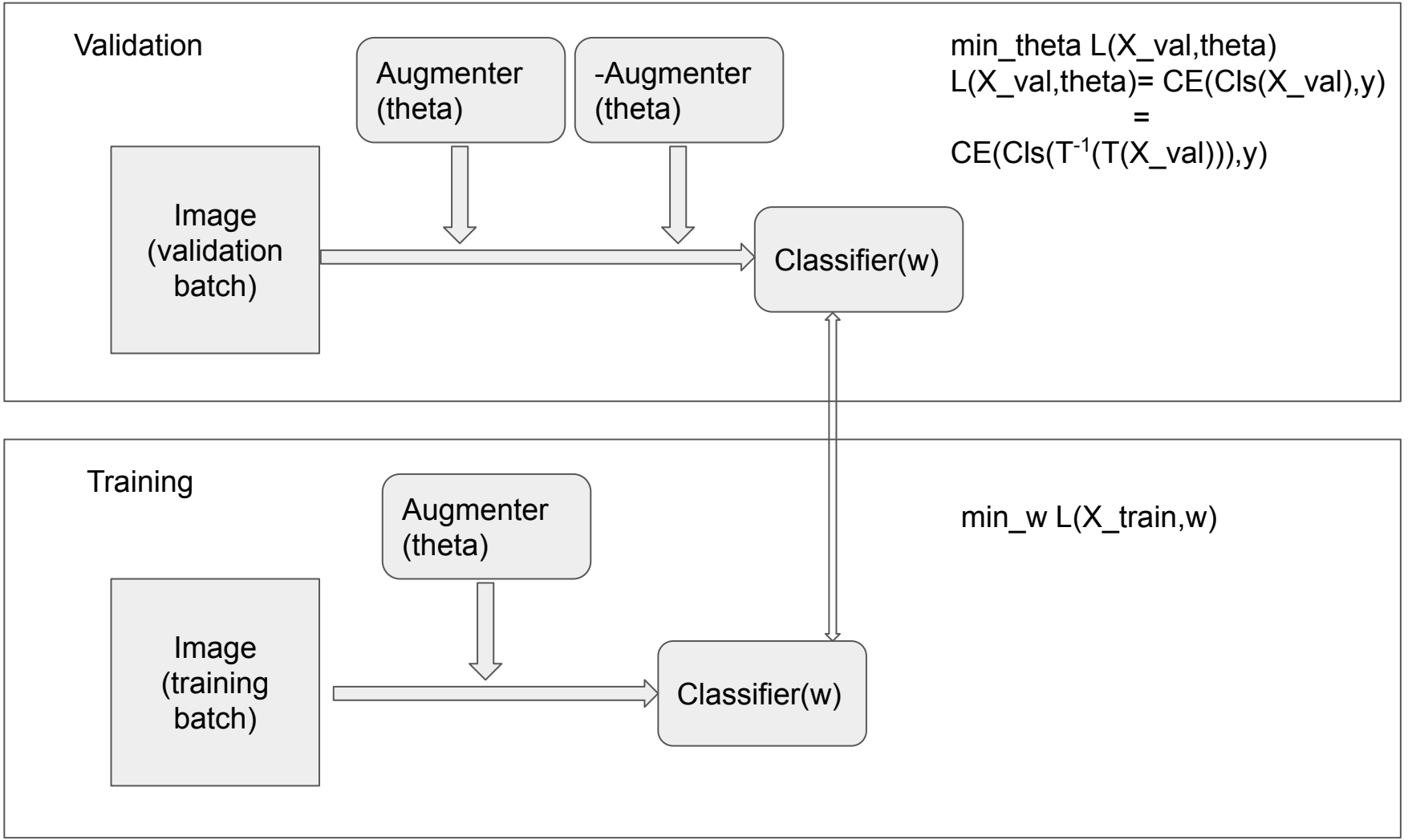
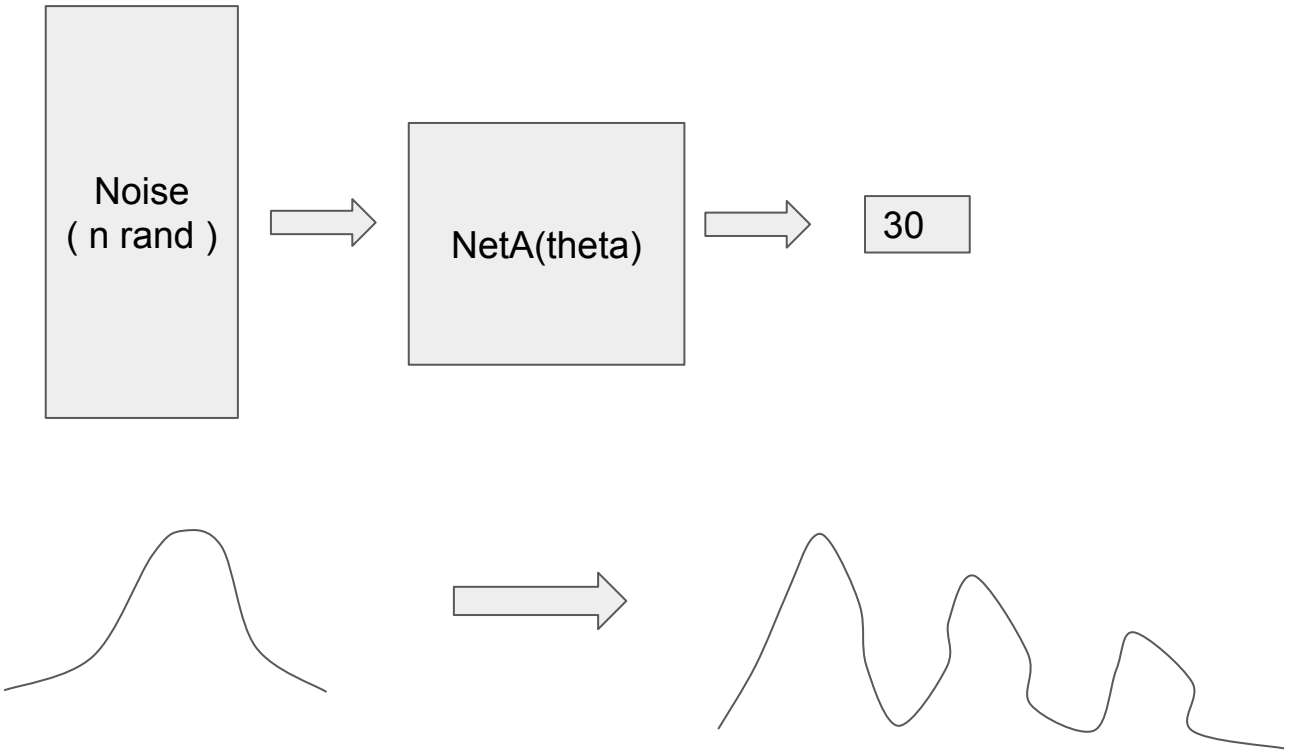
Code Link:

https://github.com/sumukhasrivatsa/ADA-Automatic-Data-Augmentation

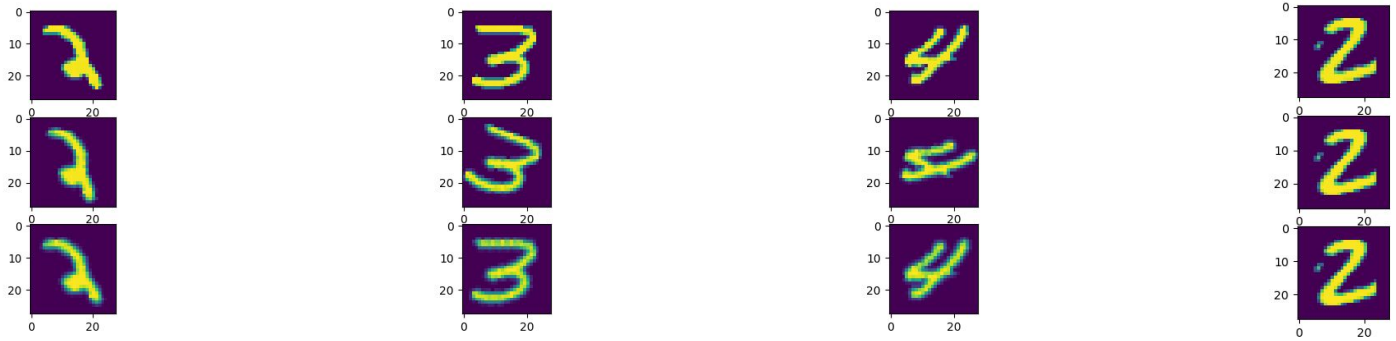

Validation
Augmenter (theta)
-Augmenter (theta)
Image (validation batch)
Classifier(w)
min_theta L(X_val,theta)
L(X_val,theta)= CE(Cls(X_val),y)
=
CE(Cls(T^-1(T(X_val))),y)
Training
Augmenter (theta)
Image (training batch)
Classifier(w)
min_w L(X_train,w)

Augmenter



netA1 —> **Number of parameters = 26**

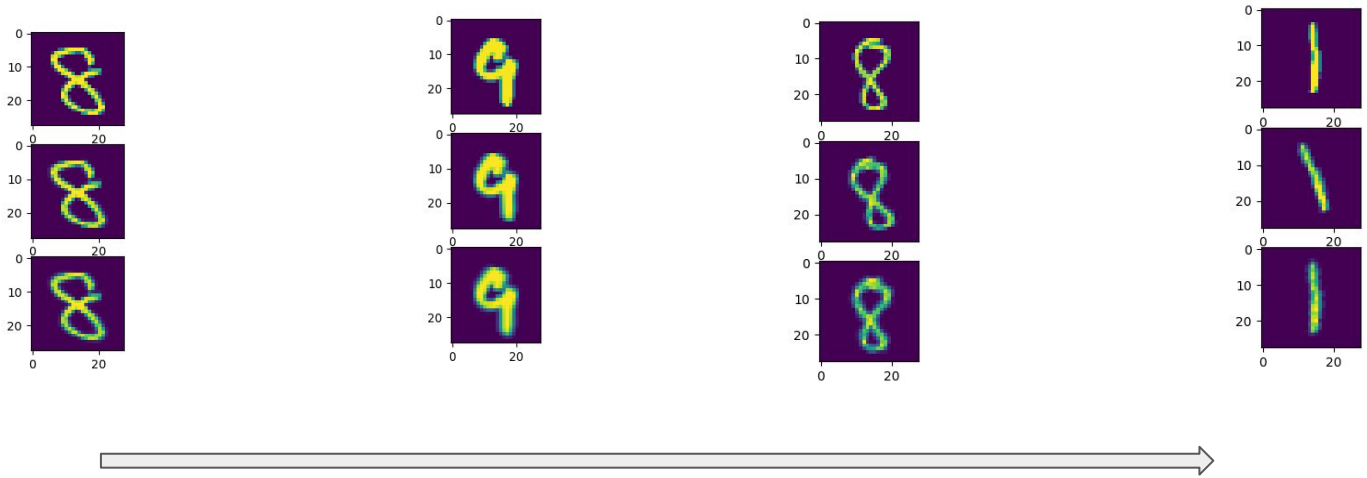
Case 2: learning rate 1e-3



Increasing epochs

netA1 —> **Number of parameters = 26**

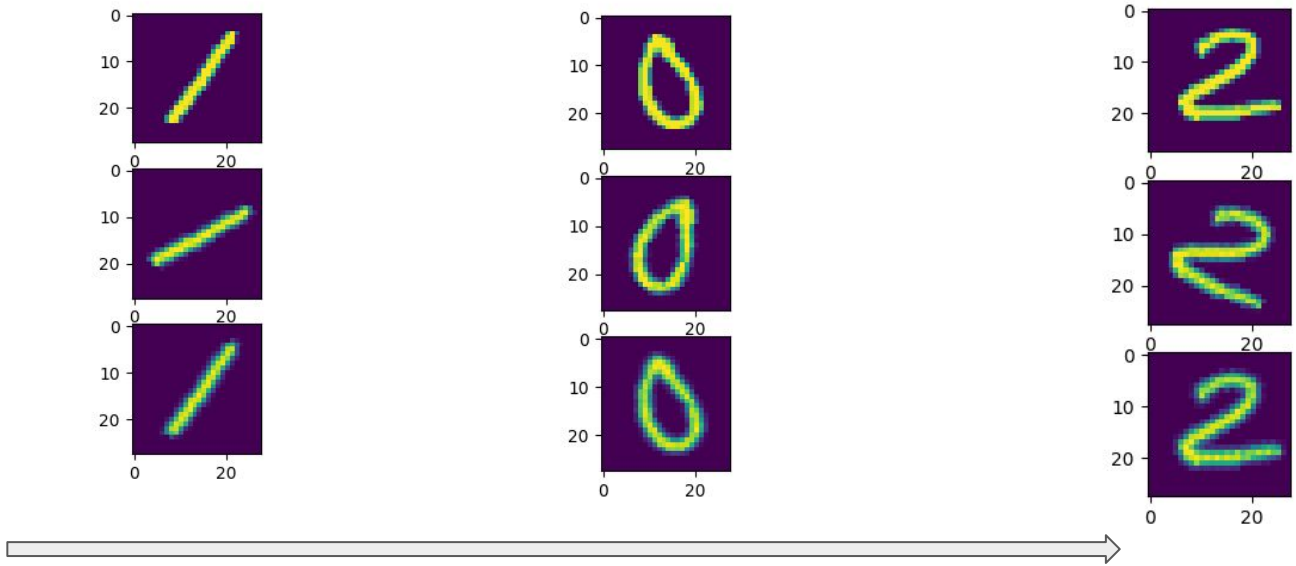
Case 1: learning rate 1e-2



Increasing epochs

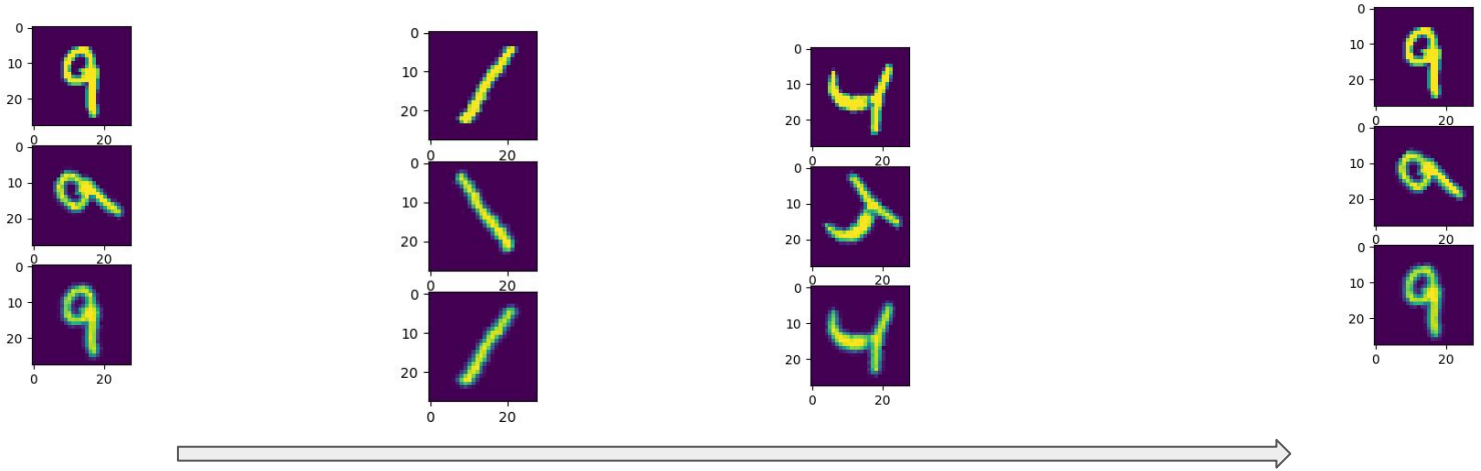
netA2 —> number of parameters : 249

Case 1: learning rate : 1e-3



netA3—> number of parameters: 19

Case 1: lr=1e-2



Increasing epochs

netA3—> number of parameters: 19