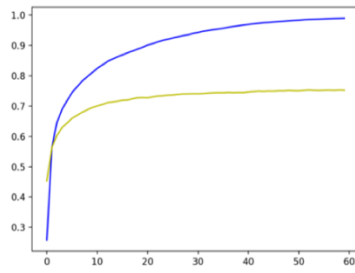


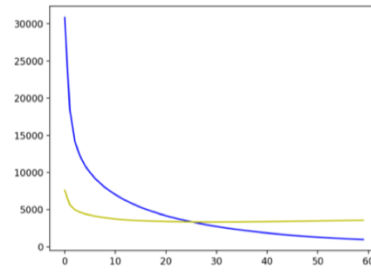
Homework 3: Neural Networks for Recognition

Ruiqi Wang

- Learning rate = 0.008; Accuracy = 76.09%

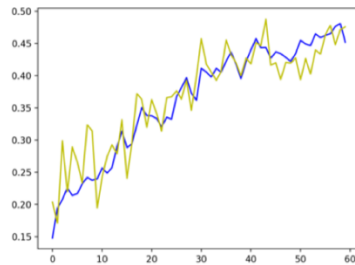


Accuracy
(Training set: blue)
(Validation set: yellow)

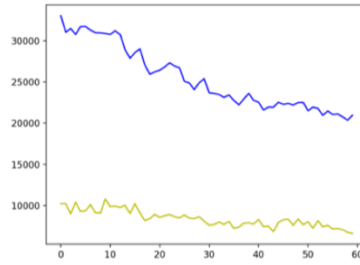


Loss
(Training set: blue)
(Validation set: yellow)

- Learning rate = 0.08

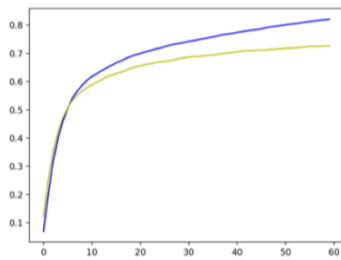


Accuracy

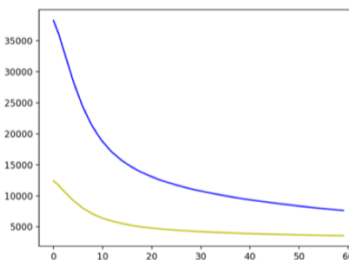


Loss

- Learning rate = 0.0008

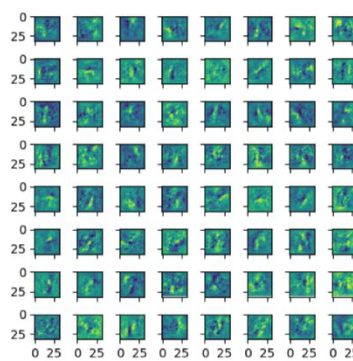
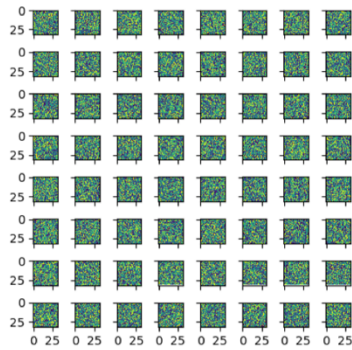


Accuracy

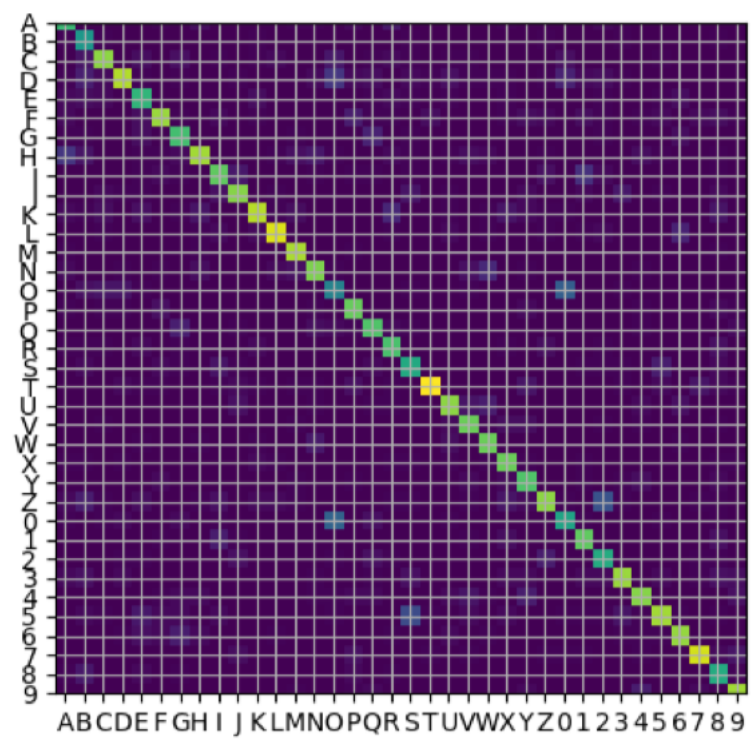


Loss

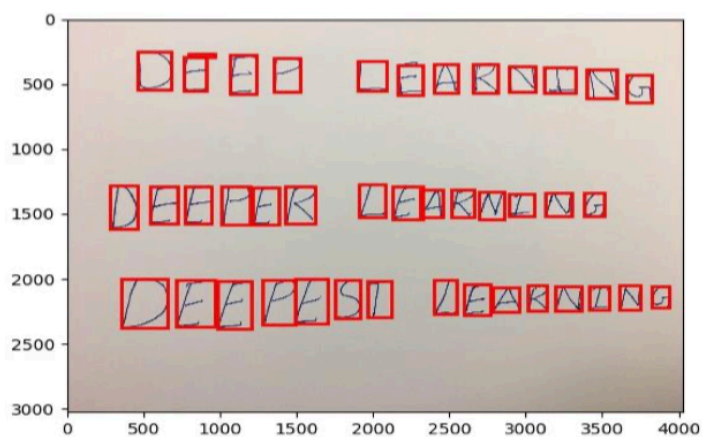
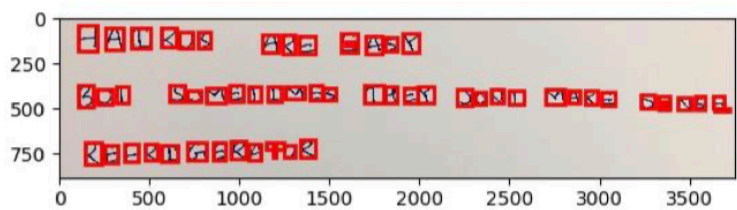
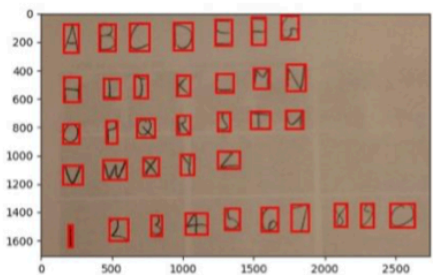
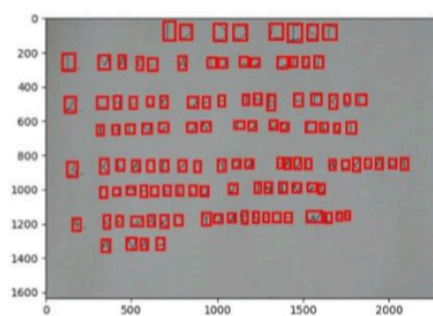
- Image before training and after 20 iterations:

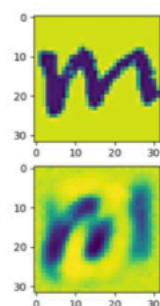
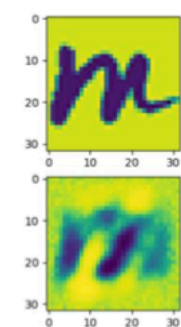
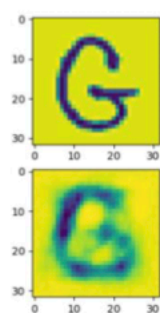
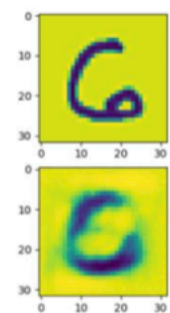
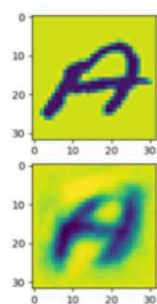
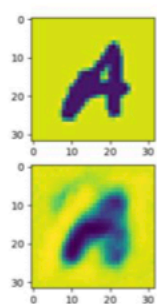


- Confusion Matrix:



- Letter Detection:





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