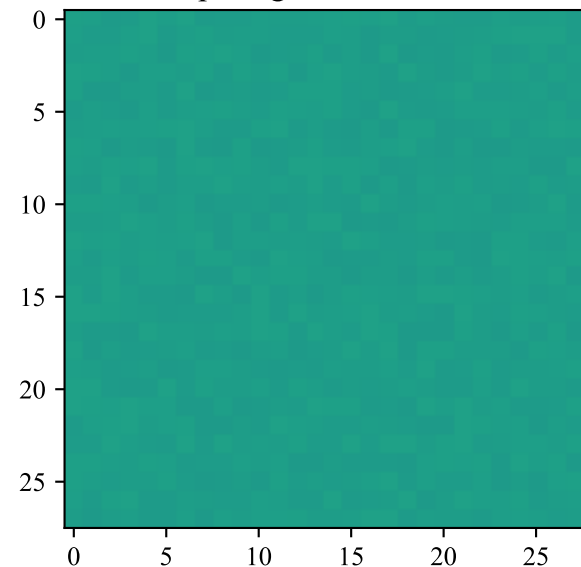


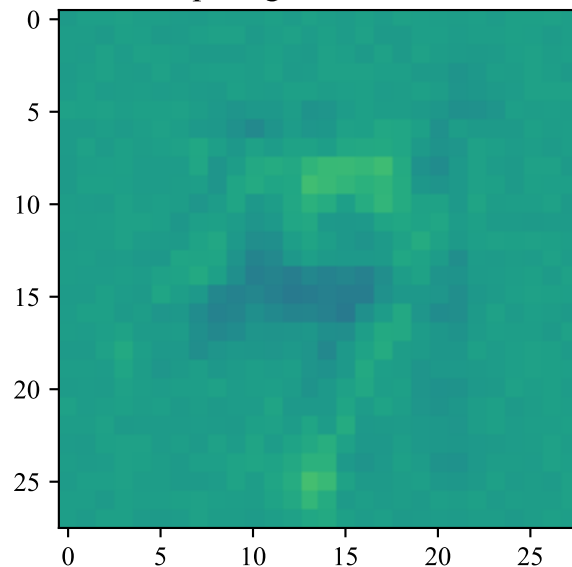
# MNIST Binary Classification by LR for 4 vs. 7

Opt. regression coeff.



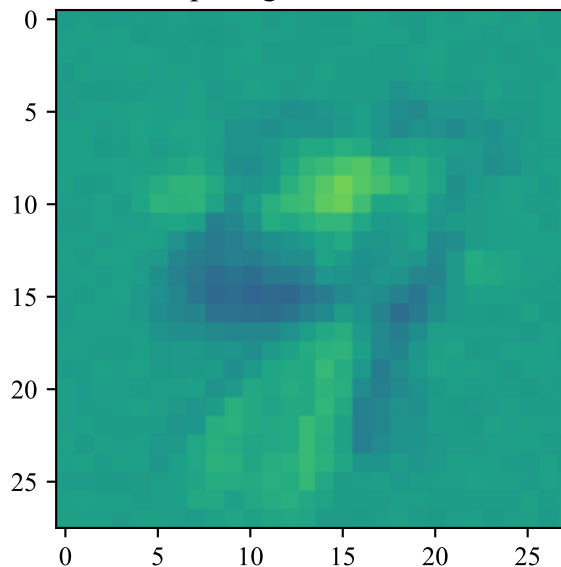
Accuracy = 0.508  
Sensitivity = 0.0  
Specificity = 1.0  
Precision = 0.508  
Fall\_out = 1.0  
Miss\_rate = 0.0  
train size = 1

Opt. regression coeff.



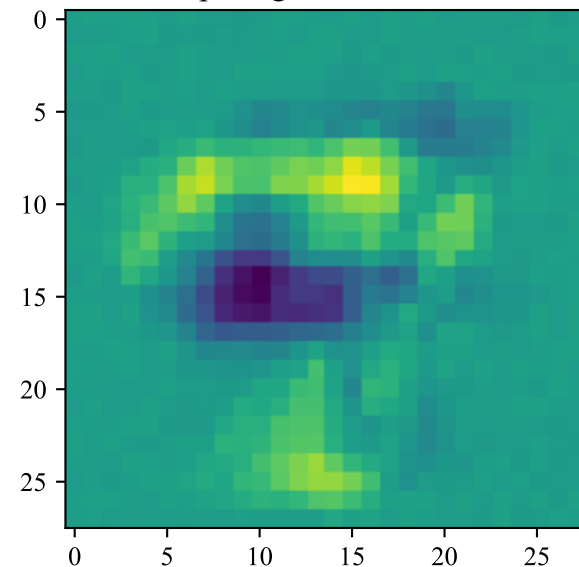
Accuracy = 0.897  
Sensitivity = 0.816  
Specificity = 0.976  
Precision = 0.845  
Fall\_out = 0.184  
Miss\_rate = 0.024  
train size = 10

Opt. regression coeff.



Accuracy = 0.924  
Sensitivity = 0.93  
Specificity = 0.917  
Precision = 0.931  
Fall\_out = 0.07  
Miss\_rate = 0.083  
train size = 30

Opt. regression coeff.



Accuracy = 0.97  
Sensitivity = 0.979  
Specificity = 0.961  
Precision = 0.979  
Fall\_out = 0.021  
Miss\_rate = 0.039  
train size = 100