

## Assignment 2 Summary

This assignment was very interesting. I learned how to make more complicated neural nets, more specifically, convolutional neural networks. I also learned how to do regularization, create deeper neural nets, and how to use different activation functions other than ReLU. I feel like I better understand the structure of neural nets and how to create them– You have to create a class for the neural net you’re making, creating your desired number of layers, linear functions, activation function, dropout layers, etc., and also create a function called forward that utilizes the layers/functions you created before it, passing in x and returning x after passing it through all the layers/functions.

```
✓ [21] # Evaluation  
2s evaluate_model(model_step_3, testloader, is_test=True)  
  
Test set: Average loss: 2.0954, Accuracy: 3635/10000 (36%)
```

```
✓ [23] # Evaluation  
2s evaluate_model(model_step_5, testloader, is_test=True)  
  
Test set: Average loss: 2.0932, Accuracy: 3654/10000 (37%)
```

✓  
3s

```
[25] # Evaluation  
evaluate_model(model_step_6, testloader, is_test=True)
```

Test set: Average loss: 2.1548, Accuracy: 3132/10000 (31%)

✓  
3s

```
# Evaluation  
evaluate_model(model_step_7, testloader, is_test=True)
```

Test set: Average loss: 2.0752, Accuracy: 3832/10000 (38%)