

CSE-5368 Neural Networks

Fall 2022 Quiz 05

Time: 12 Minutes

Complete the following function.

Only use numpy.

DO NOT USE Tensorflow, Keras, or any other packages.

```
import numpy as np
```

```
def calculate_confusion_matrix(y_hat, y):  
    """ Given the actual outputs and the desired output index of a neural  
    network, this function calculates the confusion matrix.  
    :param y_hat: Array of actual outputs [num_of samples,num_of classes]  
    :param y: Array of desired (target) outputs [num_of samples]. This  
    array includes the indexes of the desired (true) class.  
    :return confusion_matrix[number_of_classes,number_of_classes].  
    Confusion matrix should be shown as the number of times that an input  
    of class n is classified as class m."""
```

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