

CSE-5368-001 Neural Networks
Spring 2023 Quiz 07

Time: 12 Minutes

Complete the code for the following function.

USE numpy only

DO NOT USE tensorflow or keras

```
import numpy as np

def calculate_svm (yhat, yt):
# This function calculates the SVM error for the entire data set
# yhat: Array of actual outputs [num_of_samples, num_of_classes]
# yt: Array of desired outputs [num_of_samples]
# Each element of yt array is the index of the true class.,
# return: SVM for the entire data set. A single float number.
# Return value is the average of all the SVMs for the samples.
# Use the following equation for SVM loss for one sample.
# Assume delta is equal to 1
```

$$L_i = \sum_{j \neq i} \max(0, y_j - y_i + \Delta)$$