

Exercise

Computer Vision (CSCI 4220U)

Please hand in this paper to the instructor before the end of the lecture.

Name: _____

Student number: _____ Date: _____

Q. Write down the number of parameters for an MLP network that takes in an image of size 640×480 and classifies it into one of three classes. The MLP comprises 2 hidden layers. The size of each hidden layer is 5.

Q. Say, we are solving a *regression* problem. The model makes the following predictions: $\hat{y}_i$ where $i \in [1, N]$. The corresponding ground truth labels are y_i where $i \in [1, N]$. Compute the MSE loss.

Q. Now let's change the previous problem to a *classification* problem: how should we compute the loss for this example?