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CS425

Lab 5 Report

Question 1

These standard deviation and mean values have a very wide range. This is an issue for neural networks because they need the data to be more standardized.

Question 2

This standardized the data; the neural network wouldn't perform correctly otherwise. The range of values is much smaller and easier to compare.

Question 3

500 neurons, 0.1 initial learning rate perform the best

Question 4

The (500, 200, 100) combination performs the best

Question 5

— None —

Question 6

Okay, so I'm not sure which classes these are, but I'm going to number them (x,y) based on the confusion matrix. The classes that are most often confused (5 or more false positive/negative results) for each other are: (2, 0), (5, 0), (7, 2), (8, 3), (7, 4), (1,5), (6, 9).

Note

Random state for MLP = 42