Lab3 Report

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1 Introduction

This is a lab report for classification of flowers based on 4 parameters: Sepal length, sepal width, petal length and petal width. A simple classifier is trained that can classify three different species of flowers (Iris setosa, Iris versicolor and Iris virginica) based on the four training inputs.

2 Results

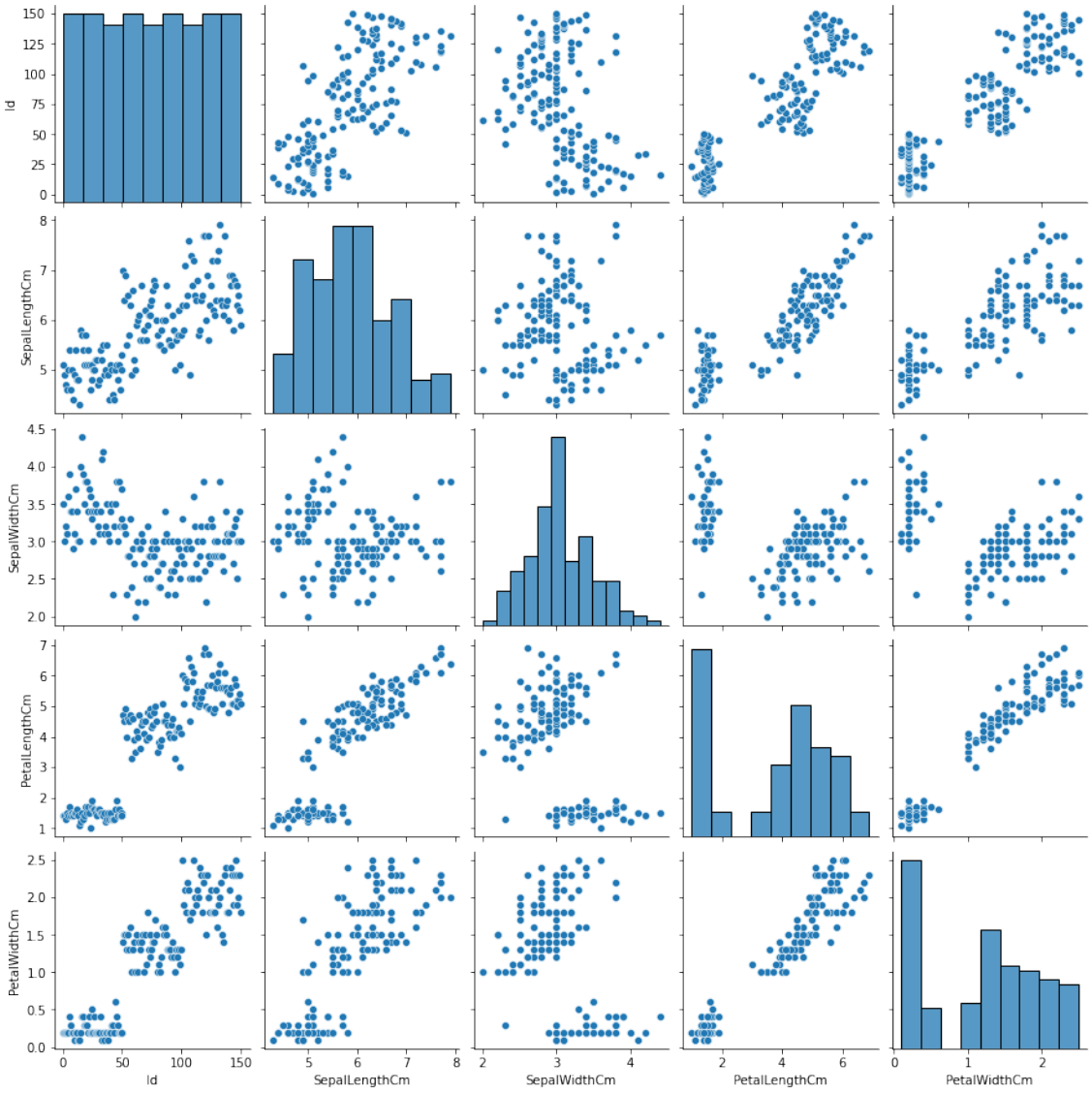

Figure 1: Figure shows pairsplot of the data, the represents how different parameters covary/correlated with one another

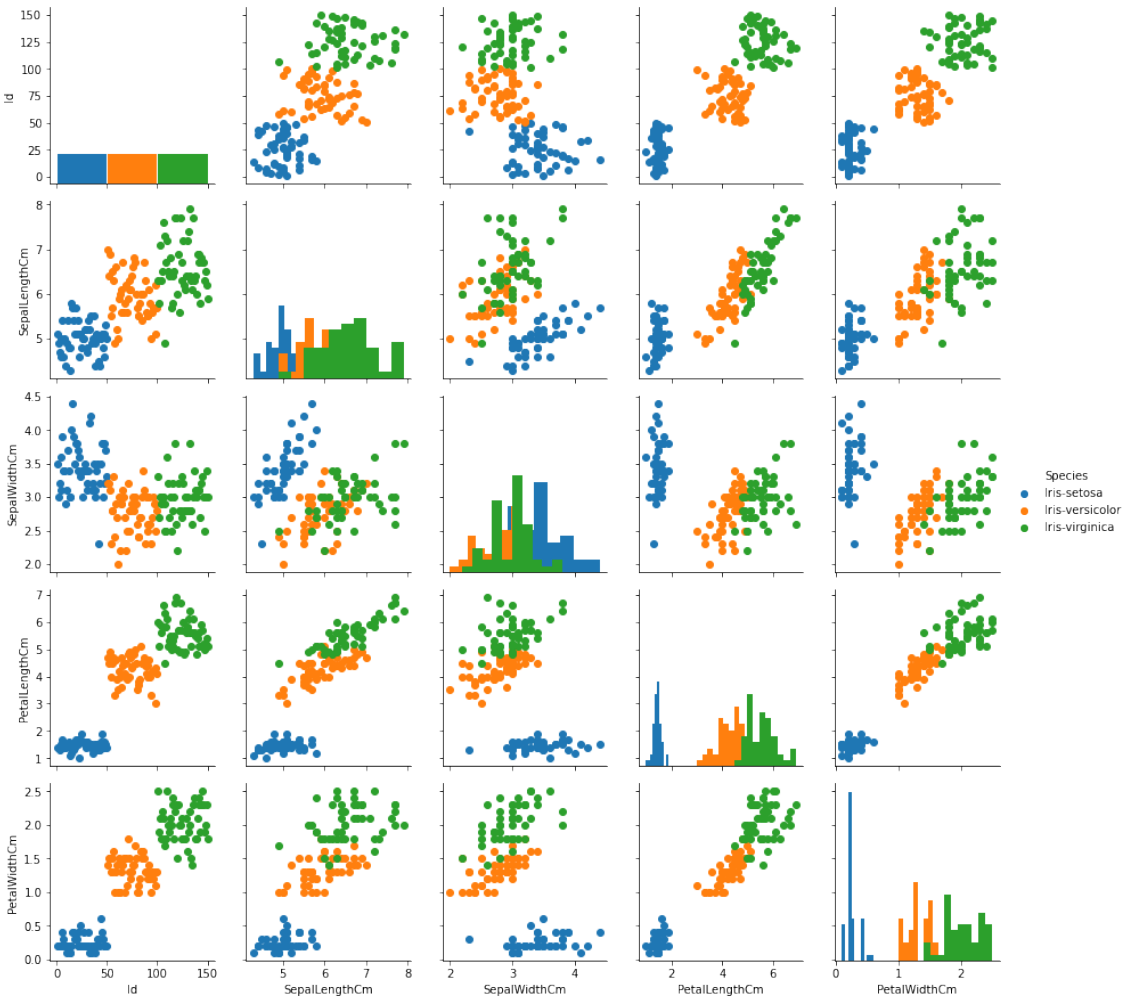

Figure 2: Figure shows pairs plot, and how values of the parameters are distributed by species. This is a nice way to for us to visualize the classification of parameters across species

```
[74] acc(model(X,w),Y) #accuracy of the classifier  on training data

     0.65

[75] acc(model(X_test,w),Y_test) #accuracy of the classifier on test data

     0.7333333333333333
```

Figure 3: Figure shows classifier accuracy of the trained and test dataset. Although pairsplot indicates a clear distinct distribution of parameters across species our classifier doesn't do a great job in creating a distinction between species given four parameters

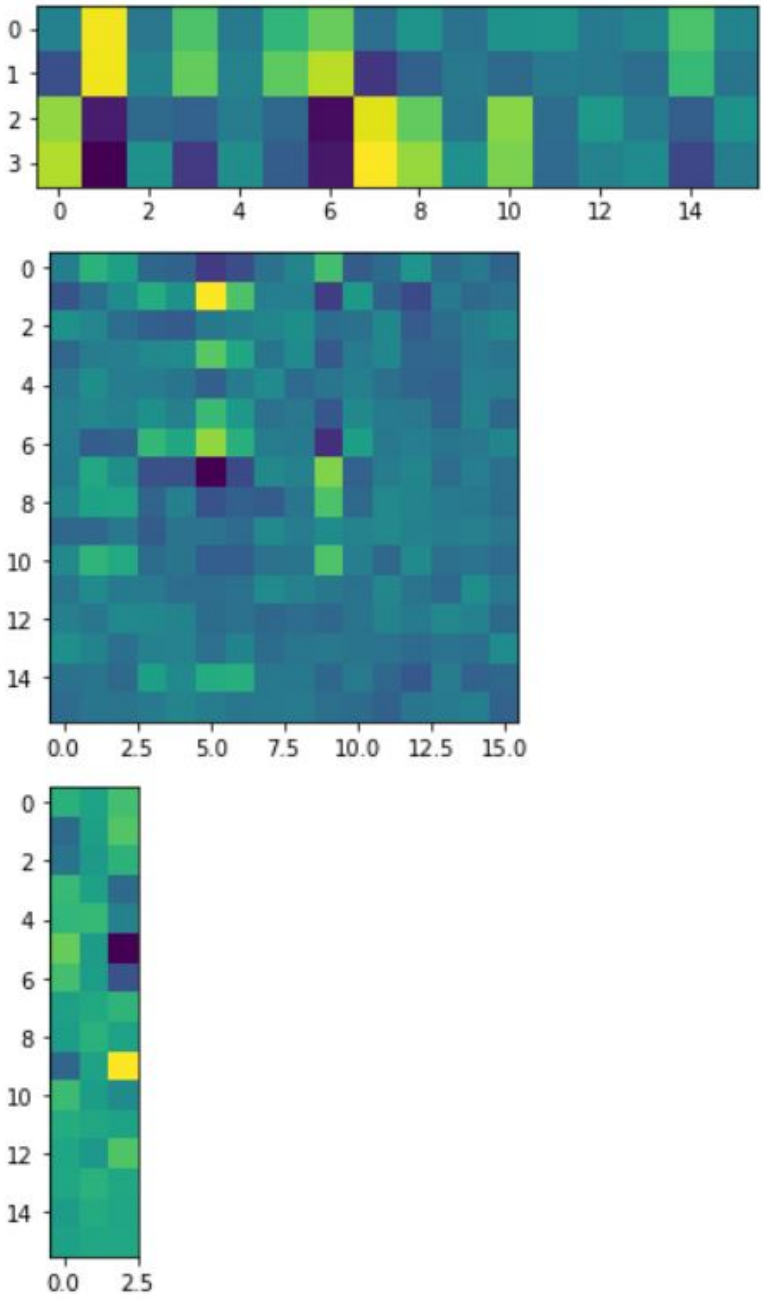

Figure 4: Figure shows a visualization of the parameters of our neural network after it has been trained