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CSC 411
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Lab 17 Convolutional Neural Networks

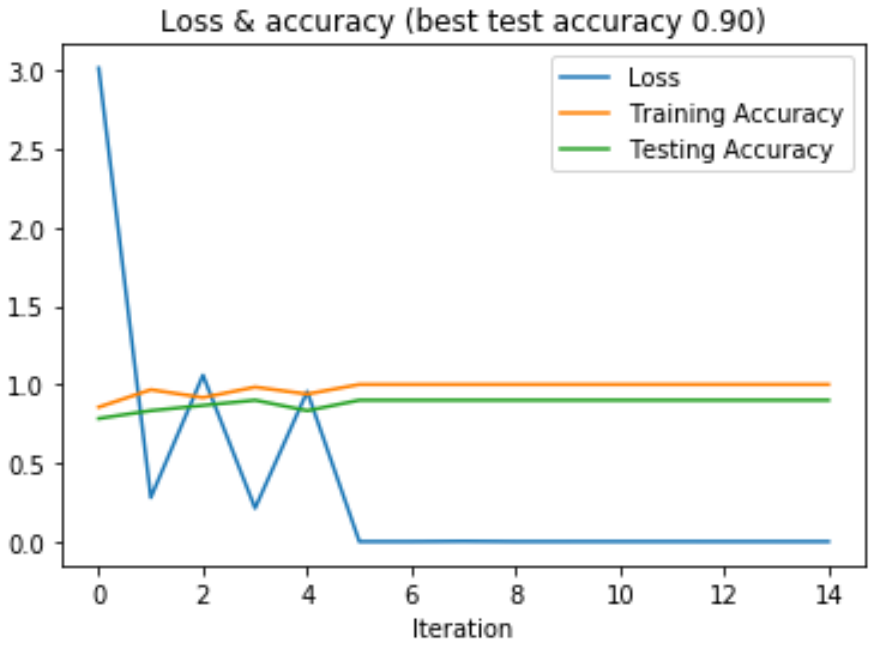
Loss & Accuracy of Flowers Dataset

Loss & Accuracy of Animals Dataset:

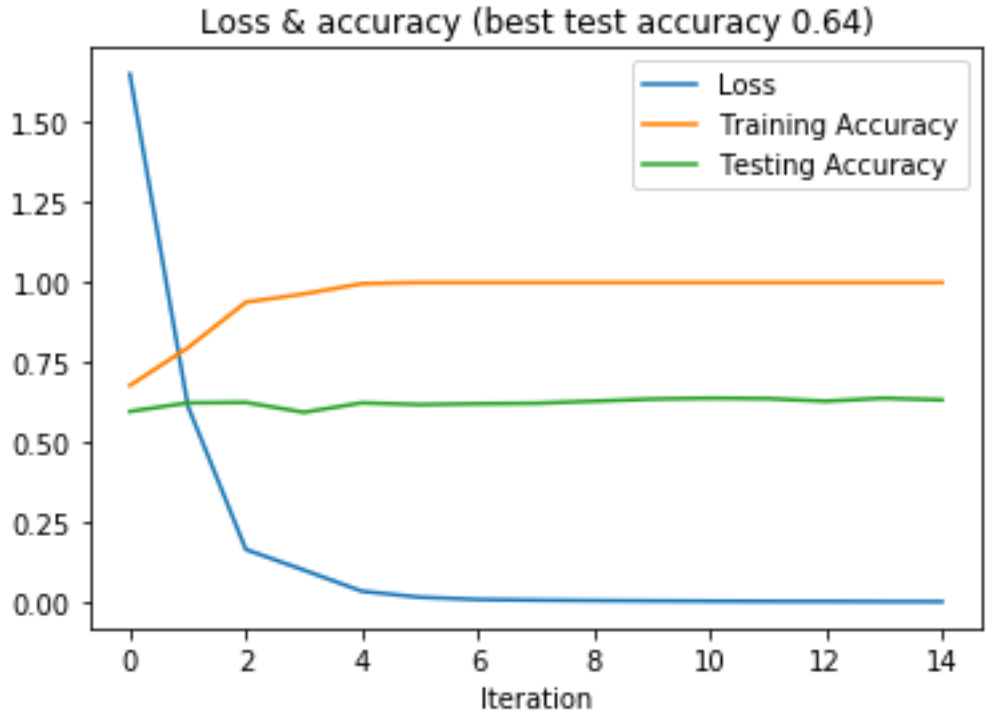
Layers in the CNN model:

Conv 1, pool 1, conv 2, pool 2, dense layer, output layer

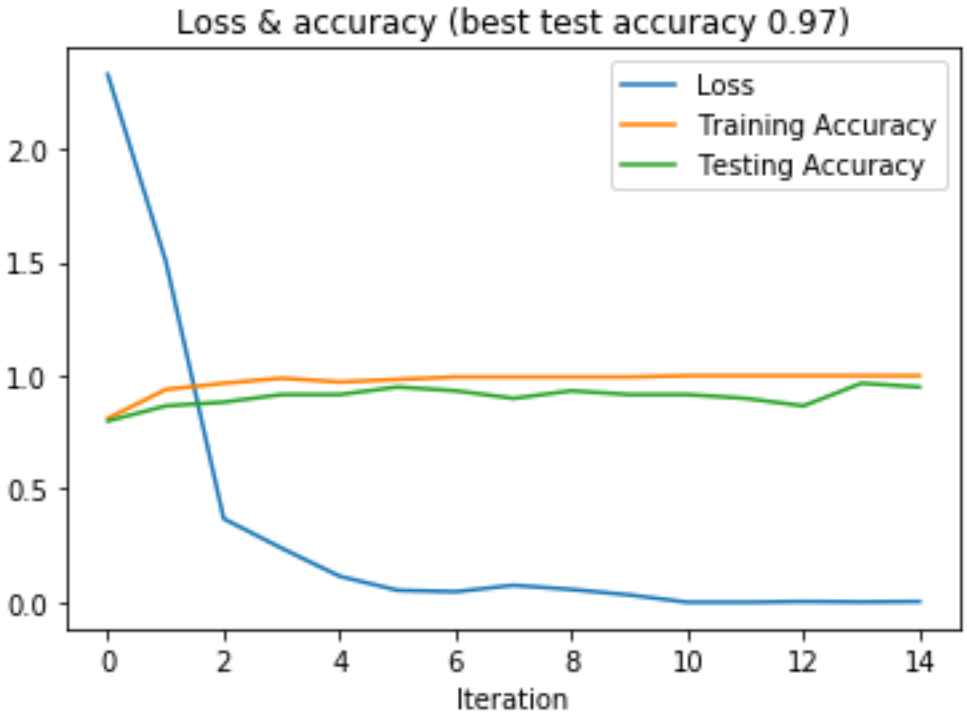
CNN Model Results on Flowers:



CNN Model Results on Animals:



CNN Results of Flowers WITH 0.75 dropout rate:



CNN Results of Animals WITH 0.75 dropout rate:

What is overfitting?

Overfitting is when the data being analyzed is too similar to the other type of data type(s) so a new line must be drawn. The similarities cause some overlap across the regular line that a classifier would output. The overfitting model uses other variables to make a better line that differentiates the points more accurately.

What is a dropout?

A dropout looks at the input values and sets random values to zero to make the analyzation more dependent on a more specified group of features. It does this randomly so each image is not altered too much but just enough to make the feature classification better.

Adding the dropout rate significantly increased the accuracy rates of the flowers and animals datasets.

Flowers yielded the largest accuracy rate of **97%**
Animals yielded a pretty strong accuracy rate of **70%**