

COL 341 Assignment 3 Report

Part A (Image Identification)

- Came up with a custom designed model which is just a modification in LeNet5 architecture.
- Got a score ranging from 98.3% to 98.5%. Best score on the data provided was 98.48%.
- Used 3 convolution layers and 2 dense layers.
- Increasing the dense layers decreased the accuracy to 96%.
- Increasing the convolution layers didn't seem to cause much effect and henceforth gave random results i.e. accuracy either increased or decreased randomly with increasing convolution layers. Score ranged from 97.4%-98.5%.
- Used LeakyRelu instead of Relu or Linear. Linear gave a score of about 95%. Relu increased it to about 97%. But online recommendations and the score suggested to use LeakyRelu. It increased the score to about 98%.
- Dropout didn't seem to work for me. It decreased the accuracy, so I removed it from the model.