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Assignment 2

This is a report on the CNN model developed to classify images using the CIFAR-10 dataset. This model was built using PyTorch and tuning included multiple stages

Comparing 2 optimizers: Adam and SGD



The best result from tuning the optimizer came from Adam optimizer with a learning rate of 0.001.   
  
Layer Tuning



Testing 6 combinations of layer parameter inputs, the best result came from set up 5 with a 69% accuracy using 3 input parameters and 22 output parameters in the first layer, 22 and 38 in the second, and 38 and 75 in the third respectively. The number of parameters in this set up was 292,129. This was a 2% increase from the previous accuracy.

Kernel Tuning



Initially, the kernel size decreased between layers. However, the best result came from adjusting all kernel sizes to 3x3 which increased the overall accuracy from 69% to 71%.