Training a Neural Network by changing the input

Test Task
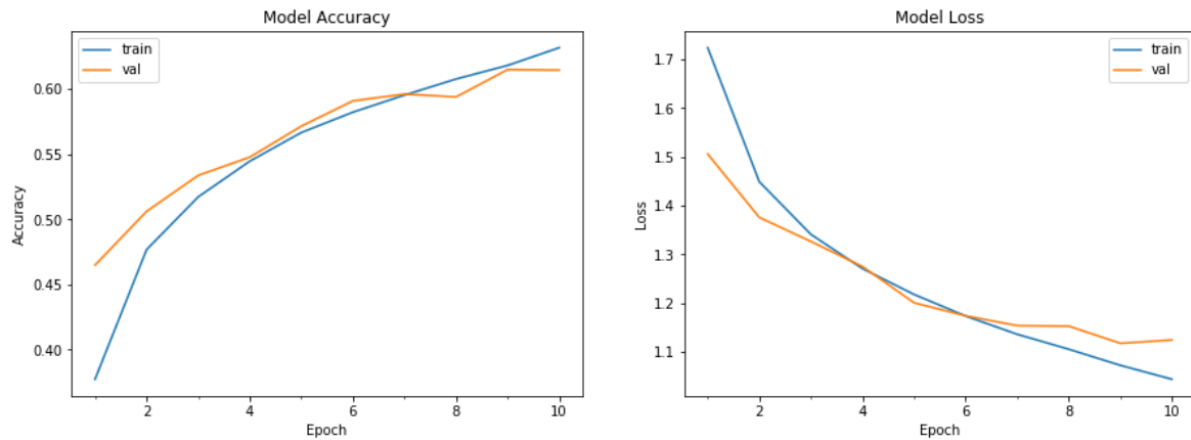
By:

Mariem Kandil
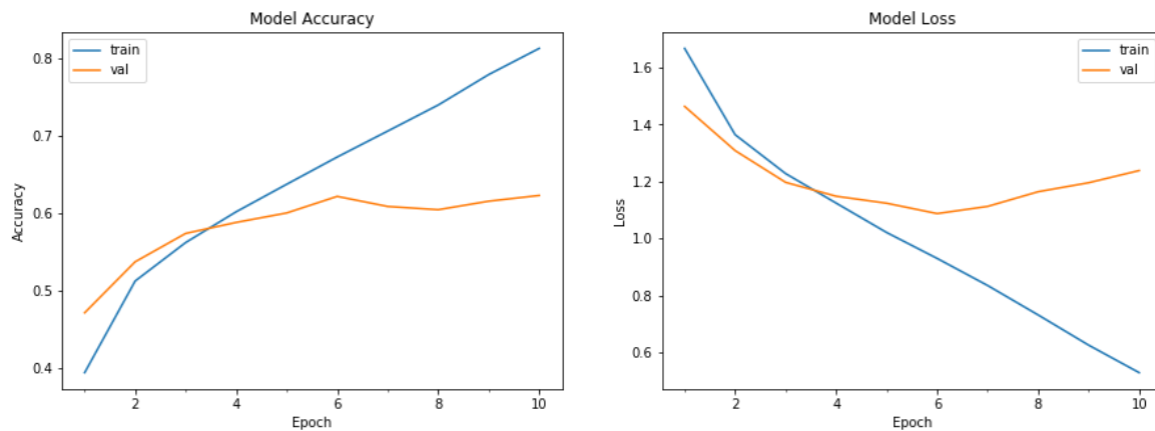
The Code implementation:
https://github.com/marhkandil/DLTestTask

The training and validation curves for all 10 epochs for 1st Network (5x5 receptive fields):
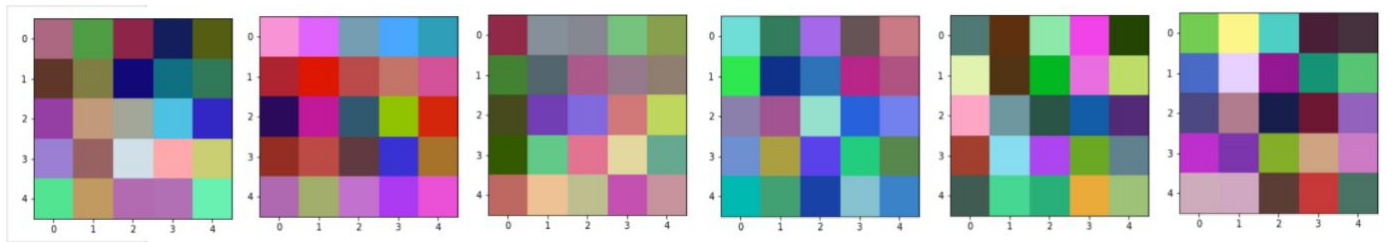

The training and validation curves for all 10 epochs for 2nd Network (11x11 receptive fields):

I used the Adam Optimizer with a learning rate of 0.0003. The first one got an approximate accuracy of 0.6037 while the second one reached an accuracy of 0.6141.

Visualizing the 6 filters of the first convolution layer in the first network:

Visualizing the 6 filters of the first convolution layer of the second network: