

Training a Neural Network by changing the input

Test Task

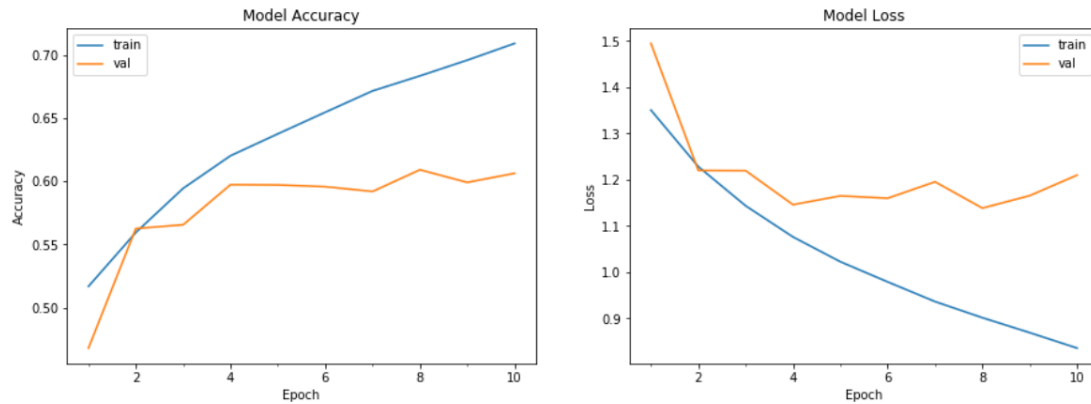
By:

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The Code implementation:

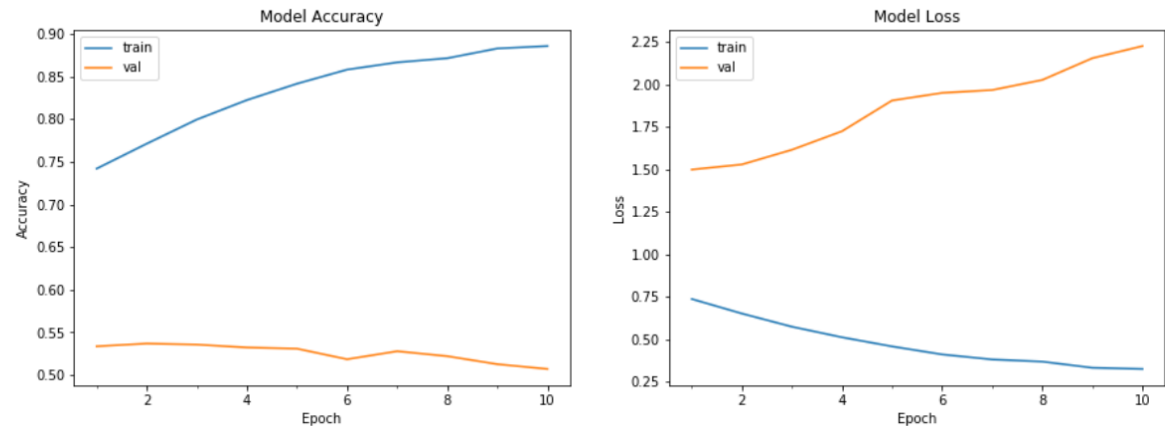
<https://github.com/marhkandil/DLTestTask>

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):

In [36]: `plot_model_history(hist)`



I used the Adam Optimizer with a learning rate of 0.001. The first network yielded a better accuracy than the second one. The first one got an approximate accuracy of 0.63 while the second one achieved only around 0.53.

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:

