

Pracschool: AI Intern Assessment Assignment

1. c) To get an idea about how the changes in model parameters affects the performance, I changed one parameter at a time keeping the others fixed -
 - i) Change the activation functions - ReLU to Sigmoid
Accuracy changed from 0.98 to 0.96, slight decrement may have been observed due to vanishing gradient problem in sigmoid
 - ii) Changed the number of epochs - 4 to 6

While the training accuracy increased from 0.9834 to 0.9858 to 0.9881, the validation accuracy decreased from 0.9815 to 0.9789 to 0.9806, which clearly shows that the model starts to overfit after 4 epochs.

The only major change in the performance could be obtained through changing the architecture of the networks. Convolutional Layers perform better than Fully Connected Layers at identifying features for image classification. We could improve the performance by substituting dense layers with convolutional layers.