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Blog Post#1

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The differences between ResNet 152/101/50/34/18 and AlexNet were investigated.

AlexNet, consists of 5 “Convolutional Layer” and 3 “Fully Connected” layers. Also, AlexNet uses ReLu (Rectified Linear Unit) as activation on nonlinear parts.

ResNet (Residual Learning Convolutional Neural Network), CNN(Convolutional Neural Network) is designed to solve a problem. The problem here is not due to over-fitting. Because over-fitting means good training accuracy, but poor test accuracy. This is called the Optimization or Distortion problem. There are different versions of ResNet. These versions, called ResNet-18, ResNet-34, ResNet-50, ResNet-101, and ResNet-152, specify the number of layers that the network contains. Residual Block is considered the building block for ResNet.

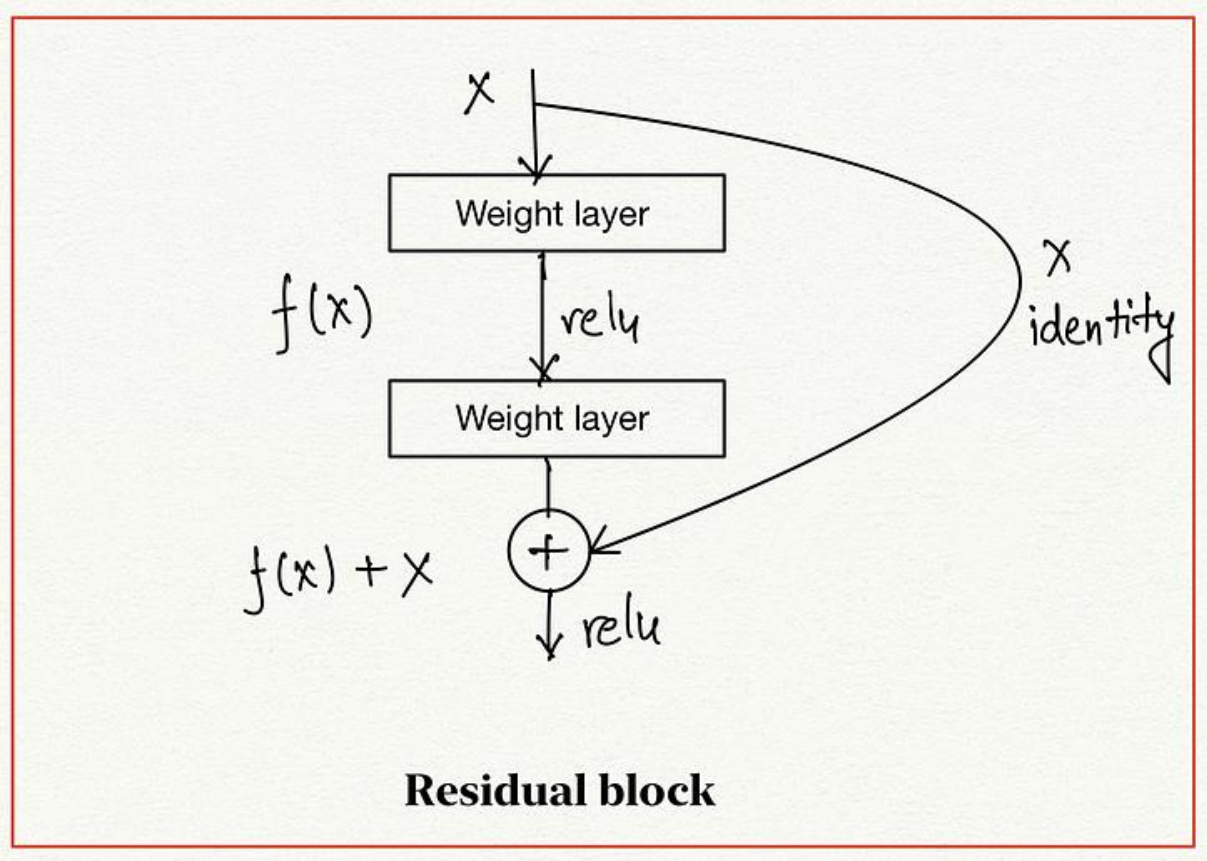

Fig. [1] - Residual Block

Number of Layers	Number of Parameters
ResNet 18	11.174M
ResNet 34	21.282M
ResNet 50	23.521M
ResNet 101	42.513M
ResNet 152	58.157M

Fig. 2 – Number of Parameters

References

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[3] https://frightera.medium.com/alexnet-vggnet-inception-ve-resnet-nedir-bddc7482918b