

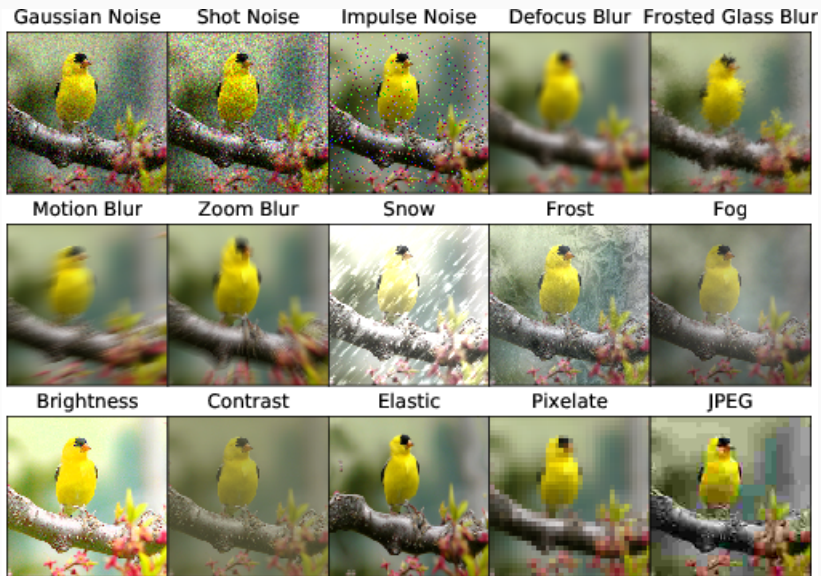
ImageNet-Cartoon and ImageNet-Drawing

Two domain shift datasets for ImageNet

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ImageNet-C



Source: <https://github.com/hendrycks/robustness/blob/master/assets/imagenet-c.png>

ImageNet-Cartoon

Using a GAN framework (Wang & Yu, 2020) we convert ImageNet images into cartoons.



ImageNet-Drawing

Using simple image processing (Lu et al., 2012), we convert ImageNet images into colored pencil drawings.



Robustness pre-trained models

Accuracy of pre-trained ImageNet models on the original ImageNet dataset, ImageNet-Cartoon and ImageNet-Drawing.

Architecture	ImageNet	Cartoon	Drawing
AlexNet	56.52	39.10	15.46
VGG-19-BN	74.22	49.63	20.86
ResNet-50	76.13	53.96	23.74
DenseNet121	74.43	57.09	27.59
ResNeXt-101-32x8d	79.31	62.38	31.78
Wide-ResNet-50-2	78.47	57.90	27.12
ViT-B/16	81.07	69.03	46.89
ConvNeXt-S	83.30	69.02	44.63

Thank You!

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