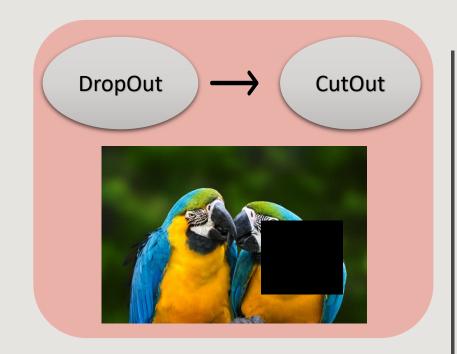
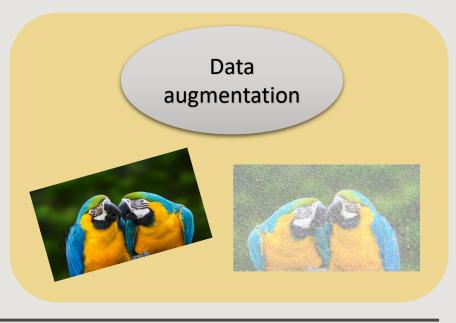
Comparative Analysis of Cutout & Augmentation Techniques Using ResNet

Racheli Eliyahu | Sapir Nachum

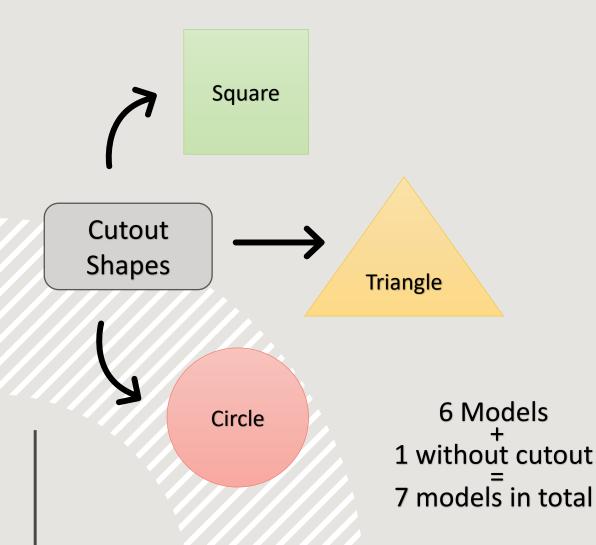
Vanishing Problem

Deep Residual Learning for Image Recognition





Method First step



Transparency
Added 0-50%
randomly
volume of
transparency to
the cutout
Shape



Method Second step

Identify the best augmentations for CIFAR-10 dataset

andom Crop

Add padding andom Crop

Random

Random Horizontal Flip

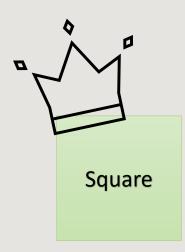
Random Horizontal Flip

Random Vertical Flip

Random Vertical Flip

Color Jitter

results



Model	Max Test	Last Epoch
	Acc	Acc
not cutout	95.28	94.98
Shape triangle	95.33	95.30
Shape square	95.62	95.42
Shape circle	95.25	94.98
Intensity triangle	95.31	94.97
Intensity square	94.54	94.47
Intensity circle	95.08	94.85

Best data augmentation:



Flip horizontally



Questions?