

Modelli di Keras

MobileNet				
Guess T1	2676	Model Size	16 MB	
Guess T5	3480			
Total	3923			
TOP 1	68.21%	Expected TOP 1	70.40%	-2.19%
TOP 5	88.71%	Expected TOP 5	89.50%	-0.79%

Inception V3				
Guess T1	2983	Model Size	92 MB	
Guess T5	3643			
Total	3923			
TOP 1	76.04%	Expected TOP 1	77.90%	-1.86%
TOP 5	92.86%	Expected TOP 5	93.70%	-0.84%

ResNet152 V2				
Guess T1	2699	Model Size	232 MB	
Guess T5	3496			
Total	3923			
TOP 1	68.80%	Expected TOP 1	78.00%	-9.20%
TOP 5	89.12%	Expected TOP 5	94.21%	-5.09%

ResNet50 V2				
Guess T1	2567	Model Size	98 MB	
Guess T5	3422			
Total	3923			
TOP 1	65.43%	Expected TOP 1	76.01%	-10.58%
TOP 5	87.23%	Expected TOP 5	92.82%	-5.59%

Modelli di PyTorch

MobileNetV2				
Guess T1	2657	Model Size	14 MB	
Guess T5	3487			
Total	3923			
TOP 1	67.73%	Expected TOP 1	71.88%	-4.15%
TOP 5	88.89%	Expected TOP 5	90.27%	-1.38%

Inception V3				
Guess T1	2978	Model Size	104 MB	
Guess T5	3646			
Total	3923			
TOP 1	75.91%	Expected TOP 1	77.29%	-1.38%
TOP 5	92.94%	Expected TOP 5	93.45%	-0.51%

ResNet152				
Guess T1	2950	Model Size	231 MB	
Guess T5	3656			
Total	3923			
TOP 1	75.20%	Expected TOP 1	78.31%	-3.11%
TOP 5	93.19%	Expected TOP 5	94.05%	-0.85%

AlexNet				
Guess T1	2073	Model Size	234 MB	
Guess T5	3024			
Total	3923			
TOP 1	52.84%	Expected TOP 1	56.52%	-3.68%
TOP 5	77.08%	Expected TOP 5	79.07%	-1.98%

Keras VS PyTorch

Normal *	GrayScale
0.48%	
-0.18%	

Normal	GrayScale
0.13%	
-0.08%	

Normal *	GrayScale
-6.40%	
-4.08%	

ResNet50				
Guess T1	2661	Model Size	98 MB	
Guess T5	3466			
Total	3923			
TOP 1	67.83%	Expected TOP 1	74.90%	-7.07%
TOP 5	88.35%	Expected TOP 5	91.20%	-2.85%

VGG16				
Guess T1	2502	Model Size	528 MB	
Guess T5	3369			
Total	3923			
TOP 1	63.78%	Expected TOP 1	71.30%	-7.52%
TOP 5	85.88%	Expected TOP 5	90.01%	-4.13%

VGG19				
Guess T1	2516	Model Size	549 MB	
Guess T5	3365			
Total	3923			
TOP 1	64.13%	Expected TOP 1	71.30%	-7.17%
TOP 5	85.78%	Expected TOP 5	90.00%	-4.22%

ResNet50				
Guess T1	2853	Model Size	98 MB	
Guess T5	3608			
Total	3923			
TOP 1	72.72%	Expected TOP 1	76.13%	-3.41%
TOP 5	91.97%	Expected TOP 5	92.86%	-0.89%

VGG16				
Guess T1	2663	Model Size	528 MB	
Guess T5	3500			
Total	3923			
TOP 1	67.88%	Expected TOP 1	71.59%	-3.71%
TOP 5	89.22%	Expected TOP 5	90.38%	-1.16%

VGG19				
Guess T1	2723	Model Size	549 MB	
Guess T5	3502			
Total	3923			
TOP 1	69.41%	Expected TOP 1	72.38%	-2.96%
TOP 5	89.27%	Expected TOP 5	90.88%	-1.61%

SqueezeNet 1.1				
Guess T1	2040	Model Size	5 MB	
Guess T5	3026			
Total	3923			
TOP 1	52.00%	Expected TOP 1	58.18%	-6.18%
TOP 5	77.13%	Expected TOP 5	80.62%	-3.49%

VGG19 BN				
Guess T1	2773	Model Size	549 MB	
Guess T5	3581			
Total	3923			
TOP 1	70.69%	Expected TOP 1	74.22%	-3.53%
TOP 5	91.28%	Expected TOP 5	91.84%	-0.56%

Normal	GrayScale
-4.89%	
-3.62%	

Normal	GrayScale
-4.10%	
-3.34%	

Normal	GrayScale
-5.28%	
-3.49%	

MX Resnet152			
Guess T1	2844	Classification T	< 6s
Guess T5	3596	Model Size	215 MB
Total	3923	Resources	Medium
TOP 1	72.50%	Expected TOP 1	77.42%
TOP 5	91.66%	Expected TOP 5	94.21%

VCC19 BN			
Guess T1	30	Classification T	~ 10s
Guess T5	106	Model Size	507 MB
Total	3923	Resources	High
TOP 1	0.76%	Expected TOP 1	73.83%
TOP 5	2.70%	Expected TOP 5	91.79%

GrayScale			
Guess T1		2610	-234
Guess T5		3451	-145
Total		3923	0
TOP 1		66.53%	-5.96%
TOP 5		87.97%	-3.70%

TOP 1 AVG	TOP 5 AVG
-10.61%	-8.81%

MobileNet

ImageNet Mini				
Normal		Vs	GrayScale	
Guess T1	2676		2284	Guess T1
Guess T5	3480		3220	Guess T5
Total	3923		3923	Total
TOP 1	68.21%	-9.99%	58.22%	TOP 1
TOP 5	88.71%	-6.63%	82.08%	TOP 5

Inception V3

ImageNet Mini				
Normal		Vs	GrayScale	
Guess T1	2983		2702	Guess T1
Guess T5	3643		3486	Guess T5
Total	3923		3923	Total
TOP 1	76.04%	-7.16%	68.88%	TOP 1
TOP 5	92.86%	-4.00%	88.86%	TOP 5

ResNet50

ImageNet Mini				
Normal		Vs	GrayScale	
Guess T1	2661		2116	Guess T1
Guess T5	3466		3089	Guess T5
Total	3923		3923	Total
TOP 1	67.83%	-13.89%	53.94%	TOP 1
TOP 5	88.35%	-9.61%	78.74%	TOP 5

ResNet152 V2

ImageNet Mini				
Normal		Vs	GrayScale	
Guess T1	2699		2369	Guess T1
Guess T5	3496		3264	Guess T5

Total	3923		3923	Total
TOP 1	68.80%	-8.41%	60.39%	TOP 1
TOP 5	89.12%	-5.91%	83.20%	TOP 5

VGG19				
ImageNet Mini				
Normal		Vs	GrayScale	
Guess T1	2516	-13.61%	1982	Guess T1
Guess T5	3365		2934	Guess T5
Total	3923		3923	Total
TOP 1	64.13%		50.52%	TOP 1
TOP 5	85.78%	-10.99%	74.79%	TOP 5