

Supplementary Material: High Frequency Residual Learning for Multi-Scale Image Classification

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1 Detailed Experiment Results

Table 1: Experiment results between our MS-ResNet-18 and ResNet-18.

Method	Million FLOPs	Top-1 Accuracy
ResNet-18 (224)	1827	69.8%
MS-ResNet-18 (128/256), thresh=0.48	1413	69.9%
MS-ResNet-18 (128/256), thresh=0.66	1811	71.3%
ResNet-18 (256)	2386	70.7%
MS-ResNet-18 (128/256), thresh=0.57	1625	70.7%
ResNet-18 (multi-scale test)	2983	71.2%
MS-ResNet-18 (128/256), thresh=0.90	2358	71.9%

Table 2: Experiment results between our MS-MobileNet and MobileNet.

Method	Million FLOPs	Top-1 Accuracy	Accuracy Gain
1.0 MobileNet (128)	186	64.4%	
1.0 MS-MobileNet (128/256), thresh=0.06	186	64.5%	+0.1%
1.0 MobileNet (192)	418	69.1%	
1.0 MS-MobileNet (128/256), thresh=0.46	417	69.8%	+0.7%
1.0 MobileNet (224)	569	70.9%	
1.0 MS-MobileNet (128/256), thresh=0.67	566	71.9%	+1.0%
1.0 MobileNet (256)	743	71.2%	
1.0 MS-MobileNet (128/256), thresh=0.90	739	72.7%	+1.5%
0.75 MobileNet (224)	325	68.4%	
0.75 MS-MobileNet (128/256), thresh=0.57	321	69.3%	+0.9%
0.75 MobileNet (256)	425	69.1%	
0.75 MS-MobileNet (128/256), thresh=0.83	425	70.8%	+1.7%
0.5 MobileNet (224)	149	63.7%	
0.5 MS-MobileNet (128/256), thresh=0.47	148	64.6%	+0.9%
0.5 MobileNet (256)	195	64.2%	
0.5 MS-MobileNet (128/256), thresh=0.71	195	67.0%	+2.8%
0.25 MobileNet (224)	41	50.6%	
0.25 MS-MobileNet (128/256), thresh=0.28	41	52.5%	+1.9%
0.25 MobileNet (256)	54	52.6%	
0.25 MS-MobileNet (128/256), thresh=0.46	54	56.4%	+3.8%