

Model		
STL10	CIFAR-10	MNIST
Input: 96×96 RGB	Input: 32×32 RGB	Input: 28×28 monochrome
5×5 conv. 64 BN ReLU	3×3 conv. 96 BN LeakyReLU	5×5 conv. 32 ReLU
1×1 conv. 160 BN ReLU	3×3 conv. 96 BN LeakyReLU	
1×1 conv. 96 BN ReLU	3×3 conv. 96 BN LeakyReLU	
3×3 max-pooling, stride 2	2×2 max-pooling, stride 2 BN	2×2 max-pooling, stride 2 BN
5×5 conv. 192 BN ReLU	3×3 conv. 192 BN LeakyReLU	3×3 conv. 64 BN ReLU
1×1 conv. 192 BN ReLU	3×3 conv. 192 BN LeakyReLU	3×3 conv. 64 BN ReLU
1×1 conv. 192 BN ReLU	3×3 conv. 192 BN LeakyReLU	
3×3 max-pooling, stride 2	2×2 max-pooling, stride 2 BN	2×2 max-pooling, stride 2 BN
3×3 conv. 192 BN ReLU		
1×1 conv. 192 BN ReLU		
1×1 conv. 192 BN ReLU		
Spatial contrasting criterion		
3×3 conv. 256 ReLU	3×3 conv. 192 BN LeakyReLU	3×3 conv. 128 BN ReLU
3×3 max-pooling, stride 2	1×1 conv. 192 BN LeakyReLU	1×1 conv. 10 BN ReLU
dropout, $p = 0.5$	1×1 conv. 10 BN LeakyReLU	global average pooling
3×3 conv. 128 ReLU	global average pooling	
dropout, $p = 0.5$		
fully-connected 10		
10-way softmax		