

Figure S1. The framework of RetinaNet

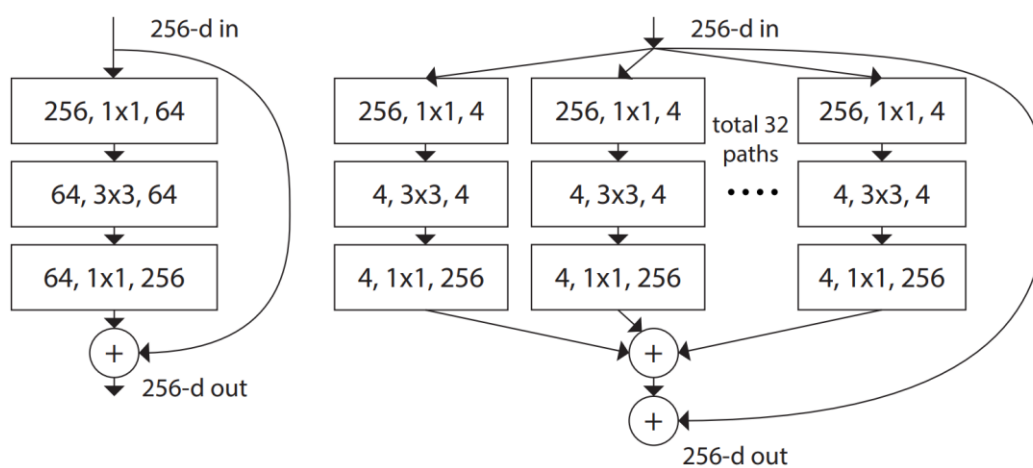


Figure S2. Left: ResNet block. Right: ResNeXt block

stage	output	ResNet-50	ResNeXt-50 (32×4d)
conv1	112×112	7×7, 64, stride 2	7×7, 64, stride 2
conv2	56×56	3×3 max pool, stride 2	3×3 max pool, stride 2
		$\begin{bmatrix} 1\times 1, 64 \\ 3\times 3, 64 \\ 1\times 1, 256 \end{bmatrix} \times 3$	$\begin{bmatrix} 1\times 1, 128 \\ 3\times 3, 128, C=32 \\ 1\times 1, 256 \end{bmatrix} \times 3$
conv3	28×28	$\begin{bmatrix} 1\times 1, 128 \\ 3\times 3, 128 \\ 1\times 1, 512 \end{bmatrix} \times 4$	$\begin{bmatrix} 1\times 1, 256 \\ 3\times 3, 256, C=32 \\ 1\times 1, 512 \end{bmatrix} \times 4$
conv4	14×14	$\begin{bmatrix} 1\times 1, 256 \\ 3\times 3, 256 \\ 1\times 1, 1024 \end{bmatrix} \times 6$	$\begin{bmatrix} 1\times 1, 512 \\ 3\times 3, 512, C=32 \\ 1\times 1, 1024 \end{bmatrix} \times 6$
conv5	7×7	$\begin{bmatrix} 1\times 1, 512 \\ 3\times 3, 512 \\ 1\times 1, 2048 \end{bmatrix} \times 3$	$\begin{bmatrix} 1\times 1, 1024 \\ 3\times 3, 1024, C=32 \\ 1\times 1, 2048 \end{bmatrix} \times 3$
	1×1	global average pool 1000-d fc, softmax	global average pool 1000-d fc, softmax

Figure S3. ResNet 50 and ResNeXt50(32x4d)