

S.No.	Network	Trainable Parameters	Input Layer Size	Number of Layers	Model Year
1	AlexNet	61 M	227 x 227 x 3	8	2012
2	GoogLeNet	7 M	224 x 224 x 3	22	2014
3	VGG 16	138 M	224 x 224 x 3	16	2014
4	VGG 19	144 M	224 x 224 x 3	19	2014
5	ResNet 18	11.7 M	224 x 224 x 3	18	2015
6	ResNet 50	25.6 M	224 x 224 x 3	50	2015
7	ResNet 101	44.6 M	224 x 224 x 3	101	2015
8	Inception V3	23.8 M	299 x 299 x 3	48	2015
9	Faster R-CNN	>50 M	Varied	Varied	2015
10	FCN (Fully Convolutional Network)	Varied	Varied	Varied	2015
11	U-Net	7.8 M	572 x 572 x 1	Varied	2015
12	SqueezeNet	1.25 M	224 x 224 x 3	26	2016
13	Inception-ResNet-v1	23 M	299 x 299 x 3	100+	2016
14	Inception-ResNet-v2	55.8 M	299 x 299 x 3	100+	2016
15	Wide ResNet-50	68.9 M	224 x 224 x 3	50	2016
16	Wide ResNet-101	126.9 M	224 x 224 x 3	101	2016
17	ShuffleNet V1 0.5x	0.5 M	224 x 224 x 3	50	2017
18	ShuffleNet V1 1x	1.5 M	224 x 224 x 3	50	2017
19	ShuffleNet V1 1.5x	2.4 M	224 x 224 x 3	50	2017

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20	ShuffleNet V1 2x	3.4 M	224 x 224 x 3	50	2017
21	MobileNet V1	4.2 M	224 x 224 x 3	28	2017
22	DenseNet 201	20 M	224 x 224 x 3	201	2017
23	NASNet-A Mobile	5 M	224 x 224 x 3	50+	2017
24	NASNet-A Large	88 M	331 x 331 x 3	50+	2017
25	Xception	22.9 M	299 x 299 x 3	71	2017
26	ResNeXt-50	25 M	224 x 224 x 3	50	2017
27	ResNeXt-101	44 M	224 x 224 x 3	101	2017
28	FPN (Feature Pyramid Net)	Varied	800 x 800 x 3	Varied	2017
29	RetinaNet	36 M	Varied	Varied	2017
30	Mask R-CNN	>50 M	Varied	Varied	2017
31	PSPNet	>50 M	Varied	Varied	2017
32	ShuffleNet V2 0.5x	0.6 M	224 x 224 x 3	50	2018
33	ShuffleNet V2 1x	2.3 M	224 x 224 x 3	50	2018
34	ShuffleNet V2 2x	5.6 M	224 x 224 x 3	50	2018
35	MobileNet V2	3.4 M	224 x 224 x 3	53	2018
36	PeleeNet	2.8 M	224 x 224 x 3	92	2018
37	DarkNet-53	41.6 M	256 x 256 x 3	53	2018
38	YOLOv3	62 M	416 x 416 x 3	106	2018

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39	Cascade R-CNN	>50 M	Varied	Varied	2018
40	BiSeNet	5.8 M	768 x 768 x 3	Varied	2018
41	MobileNet V3 Large	5.4 M	224 x 224 x 3	24	2019
42	MobileNet V3 Small	2.9 M	224 x 224 x 3	16	2019
43	EfficientNet-B0	5.3 M	224 x 224 x 3	40	2019
44	EfficientNet-B1	7.8 M	240 x 240 x 3	40+	2019
45	EfficientNet-B2	9.2 M	260 x 260 x 3	40+	2019
46	EfficientNet-B3	12 M	300 x 300 x 3	40+	2019
47	EfficientNet-B4	19 M	380 x 380 x 3	40+	2019
48	EfficientNet-B5	30 M	456 x 456 x 3	40+	2019
49	EfficientNet-B6	43 M	528 x 528 x 3	40+	2019
50	EfficientNet-B7	66 M	600 x 600 x 3	40+	2019
51	HRNet	Varied	256 x 256 x 3	Varied	2019
52	YOLOv4	64 M	608 x 608 x 3	137	2020
53	YOLOv5	Varied	640 x 640 x 3	Varied	2020
54	RegNetX	Varied (2.7 M to >30 M)	224 x 224 x 3	20 to 100+	2020
55	RegNetY	Varied (similar to X)	224 x 224 x 3	20 to 100+	2020
56	Vision Transformer (ViT)	86 M	224 x 224 x 3	Varied	2020
57	DeiT	86 M	224 x 224 x 3	Varied	2020

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58	Swin Transformer	88 M	224 x 224 x 3	Varied	2021
59	GANs (Various types)	Varied	Varied	Varied	2014+