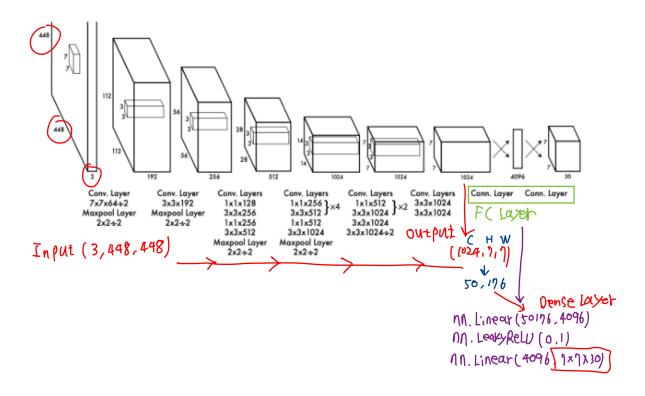
YOLOv1



YOLOv1 1

Layer Index	Layer Type	Params	Output Shape (C, H, W)	계산 설명
Input	-	-	(3, 224, 224)	초기 입력
1	Conv	(7, 64, 2, 3)	(64, 112, 112)	$(224-7+2\times3)/2+1=$ 112
2	MaxPool	-	(64, 56, 56)	112 / 2 = 56
3	Conv	(3, 192, 1, 1)	(192, 56, 56)	padding=1, stride=1이므로 크기 유지
4	MaxPool	-	(192, 28, 28)	56 / 2 = 28
5	Conv	(1, 128, 1, 0)	(128, 28, 28)	kernel=1, padding=0
6	Conv	(3, 256, 1, 1)	(256, 28, 28)	padding=1 유지
7	Conv	(1, 256, 1, 0)	(256, 28, 28)	padding=0
8	Conv	(3, 512, 1, 1)	(512, 28, 28)	padding=1
9	MaxPool	-	(512, 14, 14)	28 / 2 = 14
10-13	반복 블록 (4회)	[(1,256,1,0), (3,512,1,1)]	(512, 14, 14)	블록 1회마다 shape 동일
14	Conv	(1, 512, 1, 0)	(512, 14, 14)	padding=0
15	Conv	(3, 1024, 1, 1)	(1024, 14, 14)	padding=1
16	MaxPool	-	(1024, 7, 7)	14 / 2 = 7
17-18	반복 블록 (2회)	[(1,512,1,0), (3,1024,1,1)]	(1024, 7, 7)	shape 유지
19	Conv	(3, 1024, 1, 1)	(1024, 7, 7)	padding=1
20	Conv	(3, 1024, 2, 1)	(1024, 4, 4)	(7-3+2)/2+1=4
21	Conv	(3, 1024, 1, 1)	(1024, 4, 4)	유지
22	Conv	(3, 1024, 1, 1)	(1024, 4, 4)	유지

YOLOv1 2