- input : (64, 64, 3)

↓

Conv2d (in.chan = 3, out.chan = 16, ker.siz. = (7,7))

$$\frac{64 - 7 + (2 \times 0)}{1} + 1 = 58$$

(padding, kernel size, stride)

(58, 58, 16) ⇒ activation shape = 58 × 58 × 16 = 53824

parameters = [(7 × 7 × 3) + 1] × 16 = 2368

↓

ReLU

↓

(58, 58, 16)

↓

Maxpooling Maxpool (2,2), stride=2

$$\frac{58 - 2}{2} + 1 = 29$$

(stride)

(29, 29, 16) ⇒ activation shape: 29 × 29 × 16 = 13,456

parameters : 0

↓

Conv2d (in.chan = 16, out.chan = 32, ker.siz = (7,7))

$$\frac{29 - 7 + (2 \times 0)}{1} + 1 = 23$$

(23, 23, 32) ⇒ activation shape : 23 × 23 × 32 = 16928

parameters : [(7 × 7 × 16) + 1] × 32 = 25120

↓

ReLU

↓

(23, 23, 32)

↓

Maxpooling Maxpool (2,2), stride=2

$$\frac{23 - 2}{2} + 1 = 11.5 = 11$$

(11, 11, 32) ⇒ activation shape : 11 × 11 × 32 = 3872

parameters : 0

↓

flatten ⇒ (11 × 11 × 32, 1)

(3872, 1)

↓

Linear (in = ___, out = 120) ⇒ parameters : (120 × 3872) + (1 × 120) = 464760

↓

Linear (in = 120, out = 32) ⇒ parameters : (32 × 120) + (1 × 32) = 3872

↓

Linear (in = 32, out = 5) ⇒ parameters : (5 × 32) + (1 × 5) = 165

total parameters : 496 285