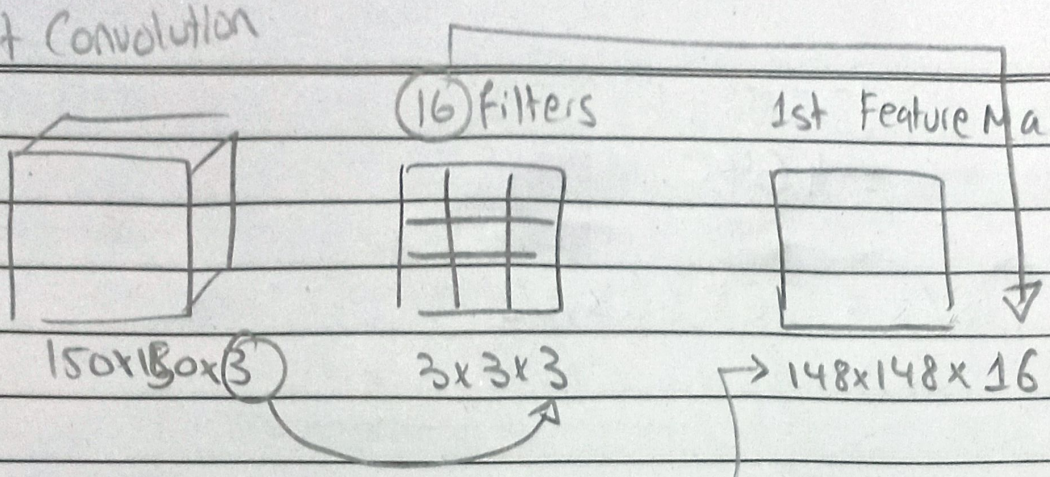
K200353 Mohsin Ali Mirza

Date:

First Convolution




$\frac{(N+2p-f)}{s}+1 \Rightarrow \frac{150-3}{1}+1 = 148$

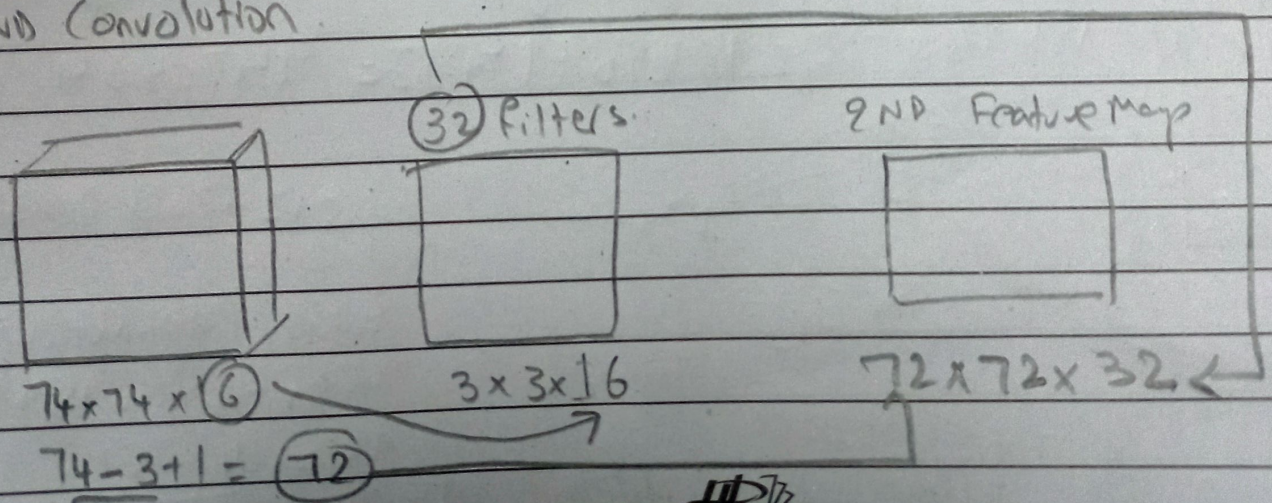
no of parameters = (no of dims of filter + 1)* no of filters
(+1 ↑ bias)

no of parameters = (3x3x3+1) * 16
= 28*16 = 448 → parameters Learned

After Pooling on Feature Map: 148/2 = 74x74x16

no pooling is applied on no of features.

2ND Convolution




74-3+1 = 72
1

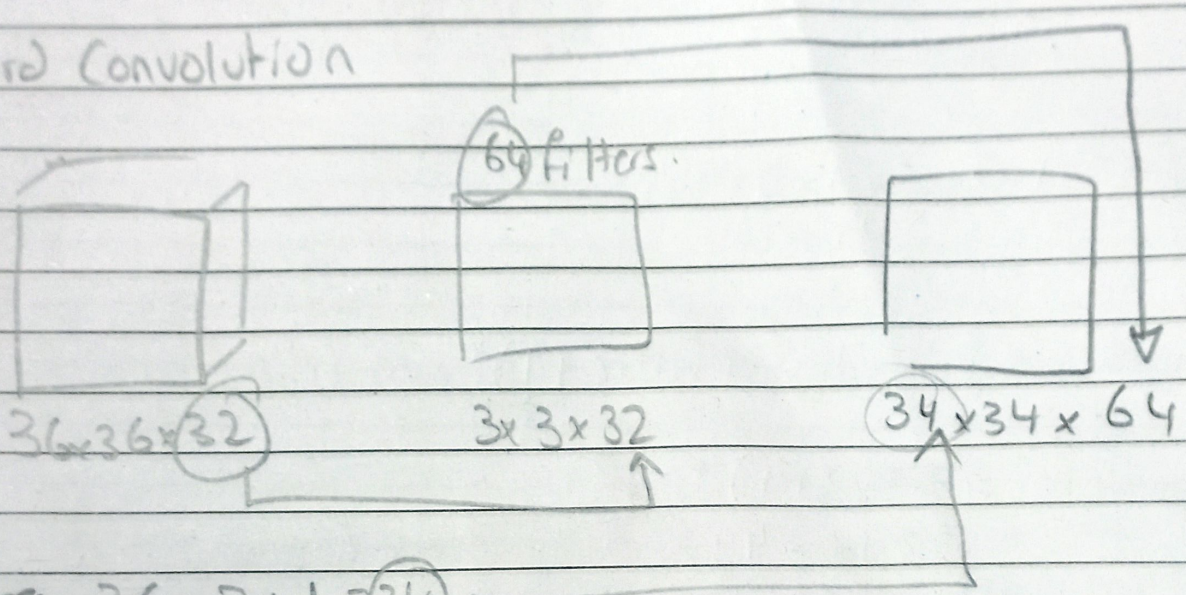
Date:

no of parameters learned = $(3 \times 3 \times 16 + 1) * 32$

$= 4640$

After Pooling :- $72/2 = 36 \times 36 \times 32$

3rd Convolution




36 - 3 + 1 = 34

No of parameters $(3 \times 3 \times 32 + 1) * 64$

$= 18496$

After Pooling = $34/2 = 17 \times 17 \times 64$.

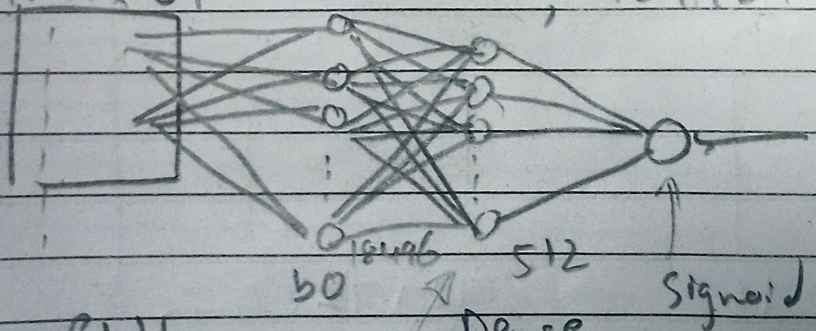
Flatten.

$17 \times 17 \times 64 = 18496$

Bias

1st Dense

$18496 + 1 * 512 = 9470464$.




Flatten

512 → 2nd Dense

total Parameters =

$448 + 4640 + 18496 + 9470464 + 513$

$= 9494561$

~~$18496 \times 512$~~