

input

0	1	1	0	1
0	1	1	0	1
0	1	1	0	1
0	1	1	0	1
0	1	1	0	1

Filter 1

1	0	1
1	1	1
0	0	1

stride = 1
Max Pooling = (2,2)
Padding = 1

Step 1: stride = 1 Convolutional operation

Padding →

0	0	0	0	0	0	0
0	0	1	1	0	1	0
0	0	1	1	0	1	0
0	0	1	1	0	1	0
0	0	1	1	0	1	0
0	0	0	0	0	0	0

Padding * Filter

$$(1 \times 0) + (0 \times 0) + (1 \times 0) = 2$$

2	3	2	3	1
3	4	3	5	1
3	4	3	5	1
3	4	3	5	1
2	3	3	4	1

Filter 2 (2*2) padding row: 2942

0	0	1					
1	0	0					
0	1	1					

Padding * Filter

1	2	2	2	1
2	3	2	3	1
2	3	2	3	1
2	3	2	3	1
1	1	1	2	0

(Padding * Filter 1) + (Padding * Filter 2)

3	5	4	5	2
5	7	5	8	2
5	7	5	8	2
5	7	5	8	2
3	4	4	6	1

Step 2: Max Pooling (2*2)

3	5
5	7

5	4
7	5

4	5
5	8

5	2
8	2

7 7

8 8

7 7

8 8

7 7

8 8

7 7

8 8

8	1	2	2	1
8	2	2	8	2
8	2	2	2	2
1	2	2	2	2

(4 output * 2x2) + (2 output * 2x2)

2	2	2	2	2
2	2	2	2	2
2	2	2	2	2
2	2	2	2	2