

CSCE 633: Machine Learning Homework-4

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1 Convolution Operation

a. Convolution with stride of 1

-1	6	4
0	3	3
-5	1	5

b. Zero padding of 1 + convolution with stride of 1

-3	-2	2	4	1
-7	-1	6	4	1
-5	0	3	3	2
-5	-5	1	5	4
-1	-6	-3	5	4

c. **Zero padding of 2 + convolution with stride of 2**

0	-4	4	0
-5	-1	4	2
-4	-5	5	4
0	-3	2	1

d. **Convolution with stride of 1 + max pooling of 3 with stride of 1**

-1	6	4
0	3	3
-5	1	5

Max pooling of 3

6

e. Zero padding of 2 + convolution with stride of 1

0	-2	-4	1	4	1	0
-3	-3	-2	2	4	1	1
-5	-7	-1	6	4	1	2
-7	-5	0	3	3	2	4
-4	-5	-5	1	5	4	4
-2	-1	-6	-3	5	4	3
0	-1	-3	-1	2	2	1

Zero padding of 2 + convolution with stride of 1 + max pooling of 3 with stride of 1

0	6	6	6	4
0	6	6	6	4
0	6	6	6	5
0	3	5	5	5
0	1	5	5	5