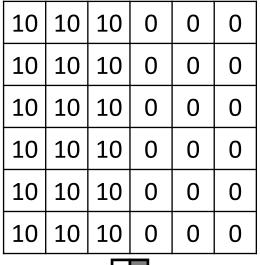
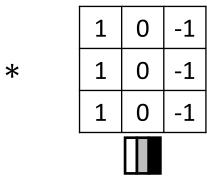


Convolutional Neural Networks

More edge detection

Vertical edge detection examples

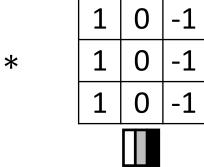




0	30	30	0		
0	30	30	0		
0	30	30	0		
0	30	30	0		

|--|

0	0	0	10	10	10
0	0	0	10	10	10
0	0	0	10	10	10
0	0	0	10	10	10
0	0	0	10	10	10
0	0	0	10	10	10

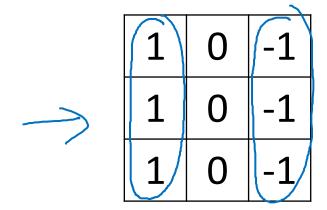


	0	-30	-30	0
_	0	-30	-30	0
=	0	-30	-30	0
	0	-30	-30	0

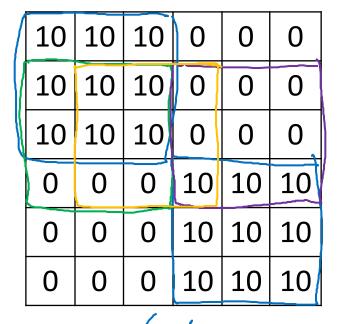


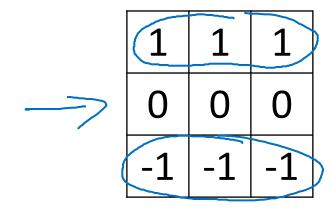
Andrew Ng

Vertical and Horizontal Edge Detection



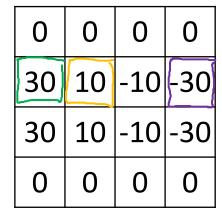






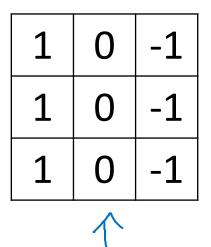
Horizontal

	1	1	1
	0	0	0
	-1	-1	-1
•			

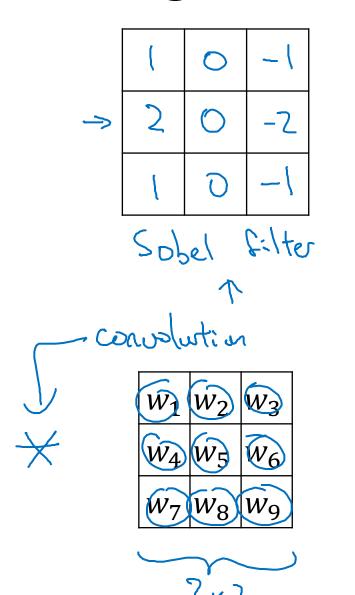




Learning to detect edges

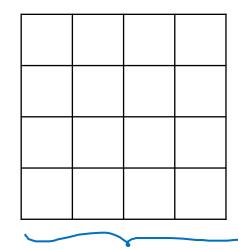


					\sim	
5	თ	0	1	2	7	4
	1	5	8	9	3	1
	2	7	2	5	1	3
	0	1	3	1	7	8
	4	2	1	6	2	8
	2	4	5	2	3	9



7	0	-3
0	0	0
3	7	-3





Andrew Ng