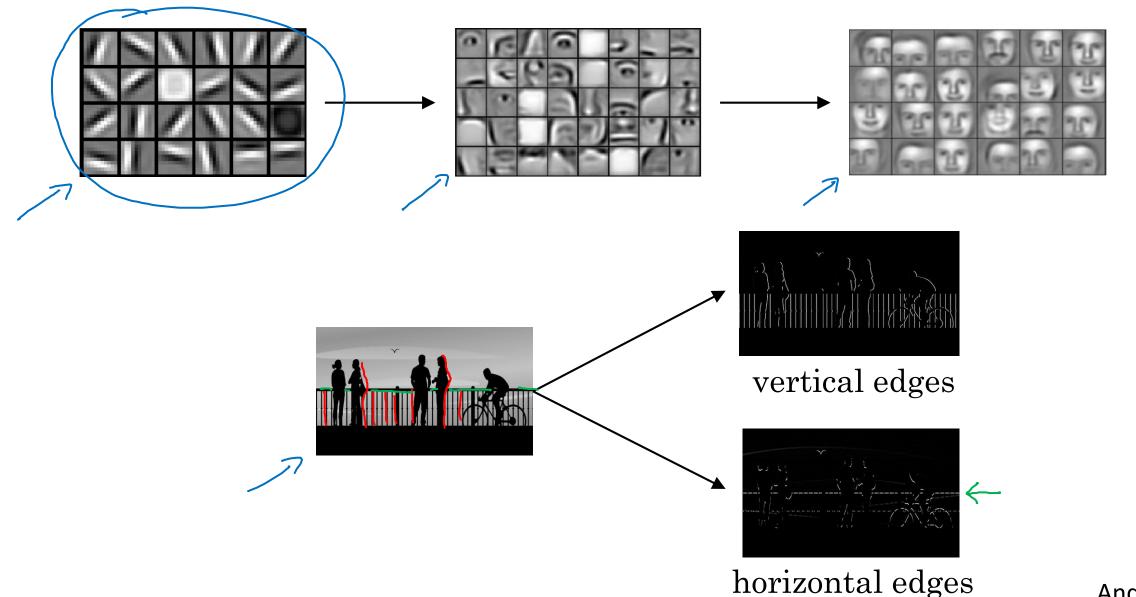


Convolutional Neural Networks

Edge detection example

Computer Vision Problem



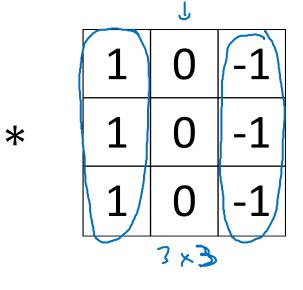
Vertical edge detection

1-5 3x1 + 1x1 +2+1 + 0x0 + 5x0 +7x0+1x + +8x-1+2x-1=-5

3	0	1	2-10	7 ⁻⁰	4-1	Convolution				
1	5	8		3-0	1-1		-5	-4	0	8
2		2	5	1	3	*	-10	-2	2	3
01	1	3	1	7 ⁻⁰	8-1		0	-2	-4	-7
4	2	1	6	2	8	3×3	-3	-2	-3(-16
2	4	5	2	3	9	-> filtor		4x	4	
		6×6				kenel				

Vertical edge detection

1							
10	10	10	0	O	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		
6 x (



<u> </u>	_						
0	30	30	0				
0	30	30	0				
0	30	30	0				
0	30	30	0				
14x4							

