

Convolution Example

-2	-1	0	1	2	3	4	5	6	7	8	k
		1	2	3	4	3	2	1			x[k]
1	2	3									h[0-k]
	1	2	3								h[1-k]
		1	2	3							h[2-k]
			1	2	3						h[3-k]
				1	2	3					h[4-k]
					1	2	3				h[5-k]
						1	2	3			h[6-k]
							1	2	3		h[7-k]
								1	2	3	h[8-k]
		3	8	14	20	20	16	10	4	1	y[n]

Matrix-Vector Product

3		3						1
8	2	3						2
14	1	2	3					3
20		1	2	3				4
20			1	2	3			3
16				1	2	3		2
10					1	2	3	1
4						1	2	
1							1	

9 x 1 vector 9 x 7 matrix 7 x 1 vector