

شفوی مقرر خاص 4 احصاء وحاسب

Consider 3-D four bipolar training patterns and outputs given by

Input			Target
x_1	x_2	x_3	t
-1	-1	1	1
1	-1	-1	-1
1	-1	1	-1
-1	1	1	-1

Assume vanishing initial conditions $w_1 = w_2 = w_3 = b = 0$.

- Show that the final set of weights using the Hebb net provides the decision boundary $-2x_1 - 2 = 0$.
- Does this plane correctly classify all the patterns?
- Does a linear separator exist for this problem?