EE456 | HOMEWORK 1

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Question: Create XOR network for 3 inputs

Solution.

x1	x2	x3	y
0	0	0	0
0	0	1	1
0	1	0	1
0	1	1	0
1	0	0	1
1	0	1	0
1	1	0	0
1	1	1	1

x_1

1

0.5

1

1

1.5

-2

1

0.5

1

0.5

1

1

1

0.5

1

1.5

-2

y

1

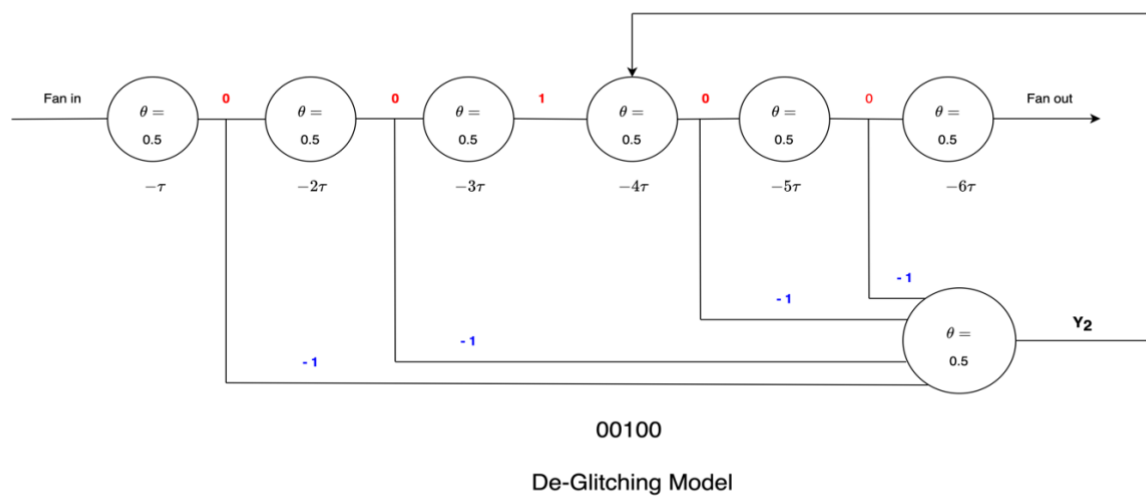1

1

x_2

1

x_3

1

0.5
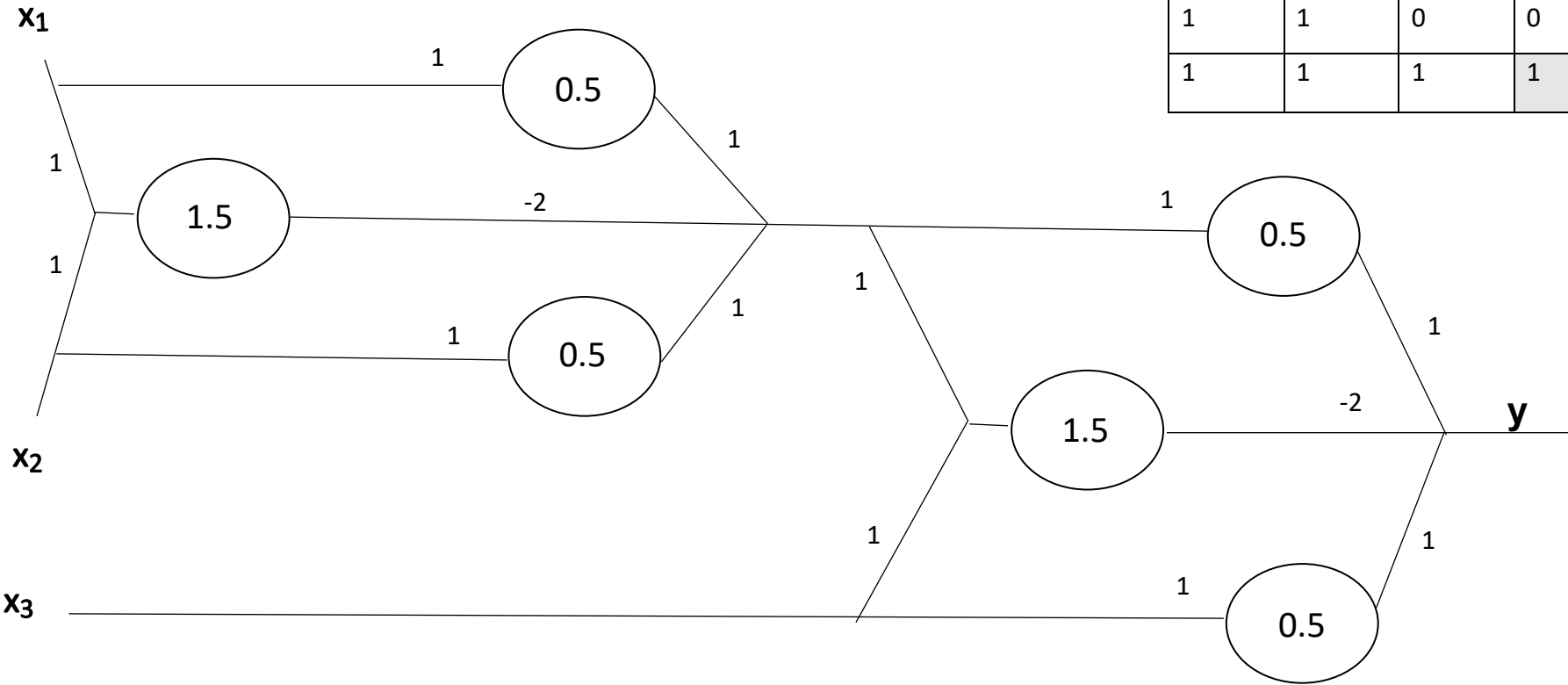
EE 456 - Introduction to Neural Networks

Name: Aishwarye Omer

Question – Design a de-glitching module for the following input.

Input bits: 0 0 1 0 0

00100

De-Glitching Model

If Input is 0 0 1 0 0, then total input = (0*-1) + (0*-1) + (0*-1) + (0*-1) = 0, which is less than 0.5

So, Y_2 = 0

Therefore the error will be fixed since we create a feedback loop to the respective input.