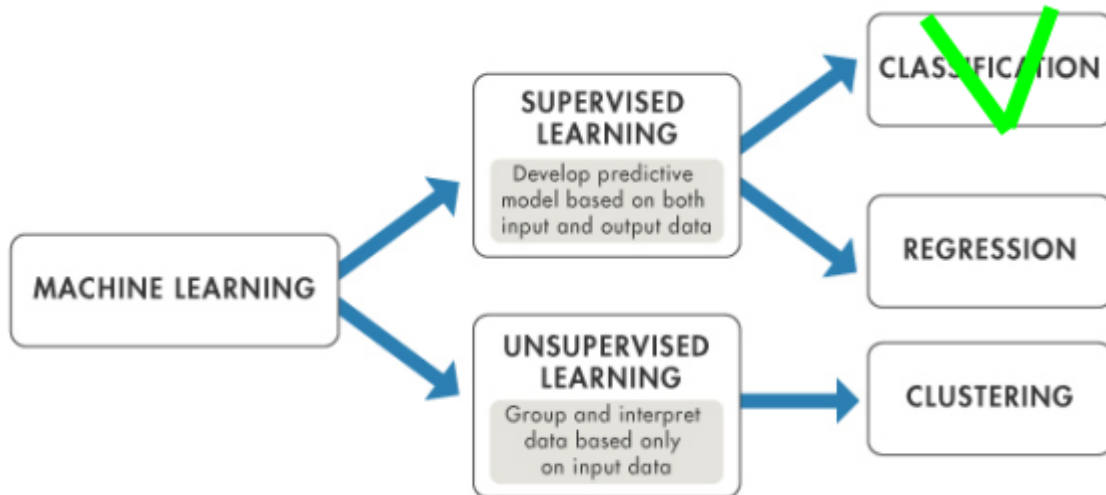


[2021.09] DNN Simulator exercise (Classification) (AND, OR, XOR)



We use the same [tool](#) as in the previous exercise.

[See the improved DNN Simulator video \(12 min\)](#) which demonstrates a NAND gate.

Previous video:
[DNN Simulator Intro](#) 7 min. .

DATA

This is the same data as in the Google Sheet exercise.

Table 6.2 Truth tables for the basic logical operations

Input variables		AND	OR	Exclusive-OR
x_1	x_2	$x_1 \cap x_2$	$x_1 \cup x_2$	$x_1 \oplus x_2$
0	0	0	0	0
0	1	0	1	1
1	0	0	1	1
1	1	1	1	0

Exercise (AND)

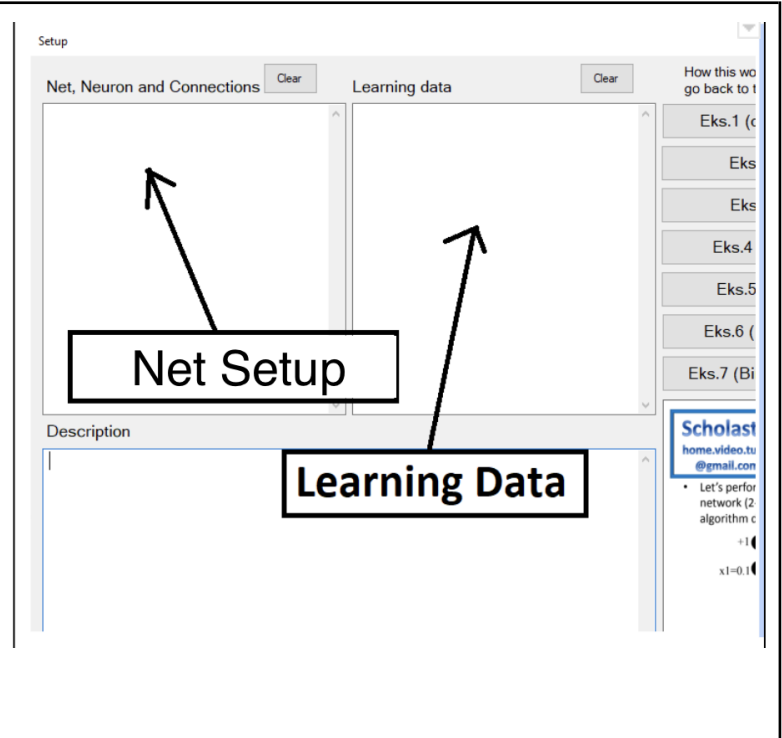
During setup, you can now select Ex.2 (Xor) which is already set up. But instead of running this example (we'll get to that), change it to run AND.

Exercise (OR)

Then try OR when you are done with AND.

Exercise (XOR)

And finally, you can run the Xor example, which does NOT work, for the same reason we've already seen with the Google Sheet XOR example ... the question is, can you get the XOR to work anyway?



Problems with the Simulator

Sometimes the simulator does not work properly, it is as if the numbers get too big. This is due to the number format you use on your Windows. Here is a how to change it ->

The important one here is Decimal characters, it should be a comma and not a period.

Here on the right you see my setup and it works fine

Tilpas format

Tal Valuta Klokkeslæt Dato

Eksempel

Positivt: 123.456.789,00 Negativt: -123.456.789,00

Skal være KOMMA her og ikke Punktum

Decimaltegn: ,

Antal cifre efter decimal: 2

Ciffergruppeseparator: .

Antal cifre i gruppe: 123.456.789

Symbol for negative tal: -

Format for negative tal: -1,1

Visning af foranstillet nul: 0,7

Listeseparator: ;

Målesystem: Metrik

Standardcifre: 0123456789

Brug nationale cifre: Aldrig

Klik på Nulstil for at gendanne computerens standardindstillinger for tal, valuta, klokkeslæt og dato. Nulstil

OK Annuller Anvend

Extra

Good **Video** on the history of Backpropagation [here...](#)



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DEL

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