

Limitations of a single layer perceptron

Single layer perceptrons can only solve
Linearly separable functions

E.g.

And

	T	F
T	T	F
F	F	F

or

	T	F
T	T	T
F	T	F

these are
Linearly Separable
problems meaning
the Fs and Ts
(results) can be
Separated with a
Line.

XOR

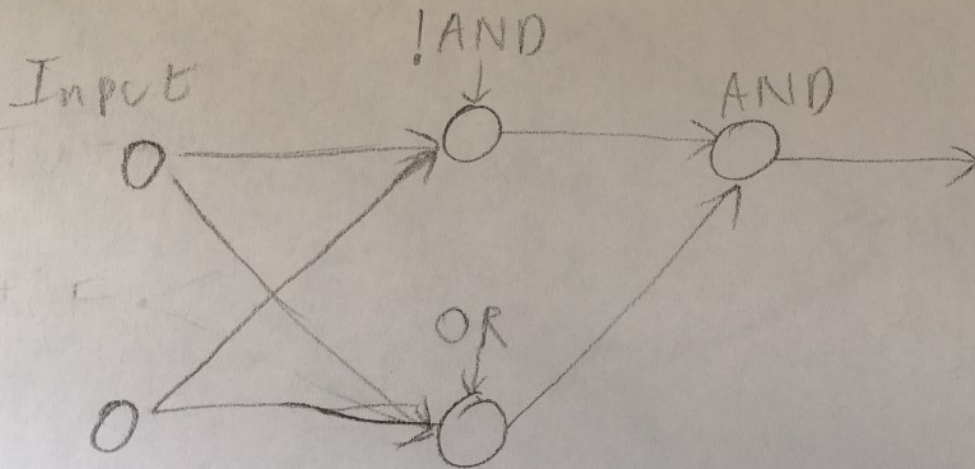
	T	F
T	F	T
F	T	F

Results can't be separated
with one line \therefore XOR is
a non-linearly separable
problem

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XOR is Just OR and !AND

∴



A multilayer format is needed

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