Alan Szuszkiewicz, 155991

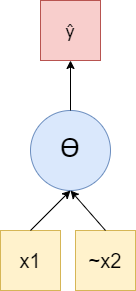
Rafał Olszewski, 156030

Artificial Intelligence, 05/06/2022

**Cw5**

1. Perceptron with two parameters –

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |



AND(x1, ~x2)

ŷ = ϴ(w1\*x1 + w2\*x2 + b)

w1 = 1, w2 = -1, b = 0.5

1. XOR Perceptron, two Parameters -

is the corresponding weight vector to the input vector for the AND and OR node.

The perceptron functions can be defined as:

Which leads to:

And ends in:

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

