





# **XNDL - Lab**

Perceptron and linear separability

# Perceptron

- Single layer
- One weight per input var
- One bias
- One output

### Lab3

- Code for
  - Train a perceptron
  - Plot its learning curve
  - Display its decision boundary
    - $\circ$  ax + by + c = 0
  - Print predictions

## **Bool Gate experiments**

- Try solving different binary operators by changing the labels
  - AND, OR, NAND, NOR, XOR, XNOR

Try different activation functions

Add metrics report

#### **Breast Cancer dataset**

Try solving the task from sklearn.datasets

Use 2 features for simplicity







# The end