

Machine Learning

Neural Networks

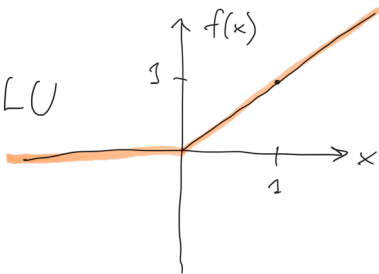
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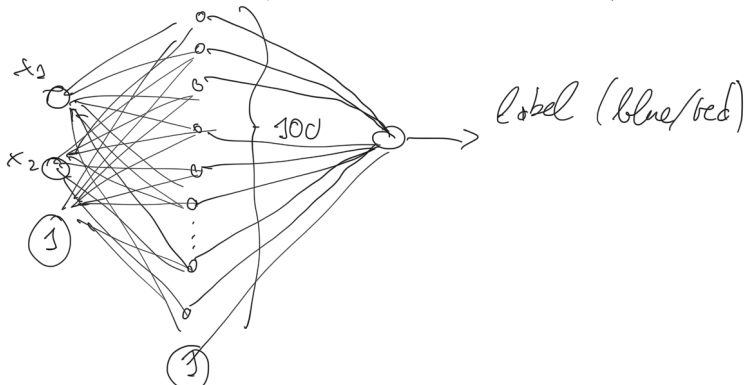
Part 1 :

activation function: ReLU

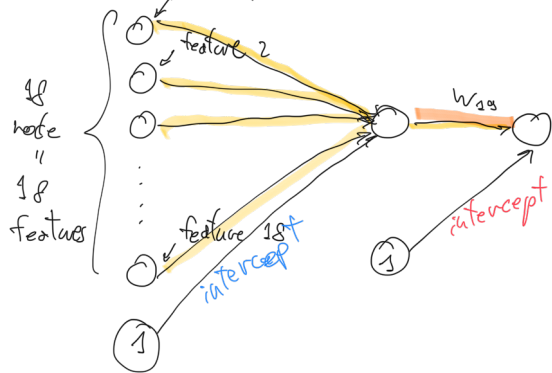
$$f(x) = \max\{0, x\}$$



nn (with default parameters in Scikit-Learn):



Part 2:



linear model? activation = identity

$$\text{linear: } w_1 \cdot x_1 + w_2 \cdot x_2 + w_3 \cdot x_3 + \dots + w_{18} \cdot x_{18} + w_0$$

$$w_0 = \text{intercept} + \text{intercept} \cdot w_{19}$$

$$367.29 + (-883.44) \cdot (-607.24) \approx 936702.60$$

with exact values and "no" regularization: 536832.280449