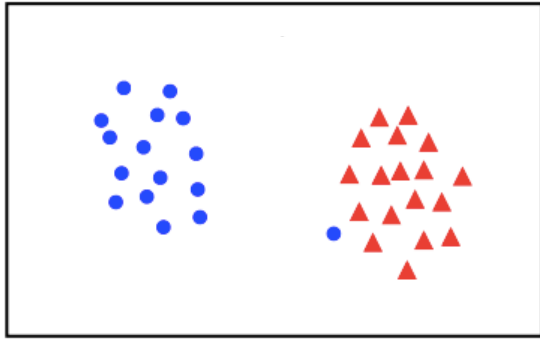


Potential Exam questions



(a)

$$y(\mathbf{x}; \tilde{\mathbf{w}}) = \begin{cases} 1 & \text{if } \tilde{\mathbf{w}}^T \tilde{\mathbf{x}} \geq 0, \\ -1 & \text{otherwise.} \end{cases}$$
$$\tilde{\mathbf{x}} = [1, x_1, \dots, x_n]$$

(b)

- Would the perceptron work in the case of Fig(a)? Why or why not? What other algorithm could you use? What would be the advantage?
- What's the meaning of the first 1 in the definition of $\tilde{\mathbf{x}}$ in (b)? Why is it needed?