

## Perceptron Classification Tutorial Exercise

Apply PERCEPTRON algorithm in order to find the linear decision functions that can separate the classes  $\Omega_1, \Omega_2, \Omega_3$  having elements:

$$\Omega_1 : \{[0, 0, 1]^T\},$$

$$\Omega_2 : \{[1, 1, 1]^T\},$$

$$\Omega_3 : \{[-1, 1, 1]^T\}.$$

Use  $\mathbf{w}_i(1) = \mathbf{0}$  for  $i = 1, 2, 3$  and  $c = 1$ .