

## Bayesian Classification of Two-class 1D Data Tutorial Exercise

Consider the 1-dimensional populations of two patterns  $\Omega_1, \Omega_2$  with density functions  $p(x/\Omega_1)$  and  $p(x/\Omega_2)$  depicted in Figure 1. Find the Bayes rule considering  $L_{ii} = 0, L_{ij} = L$  and  $p(\Omega_1) = p(\Omega_2)$ .

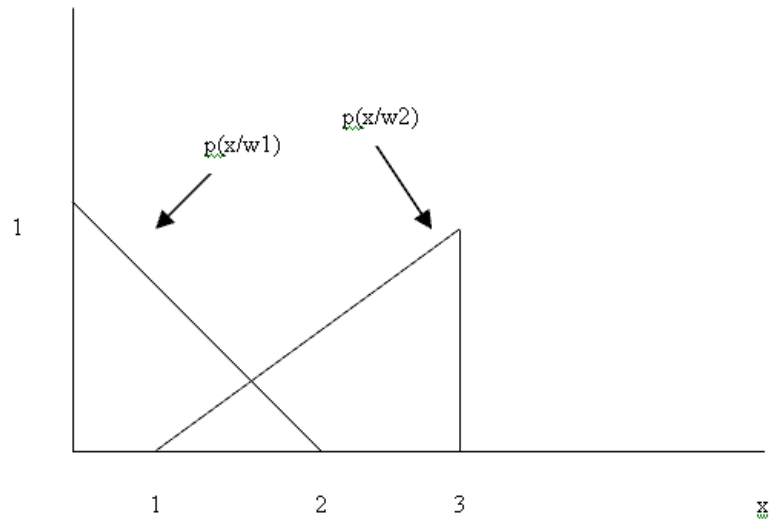


Figure 1: Probability density functions of  $\Omega_1$  and  $\Omega_2$