

1) Nonparametric Classification With Gaussian Kernel

Formulas Used:

1- Nonparametric Classification Discriminant Function

$$g_i(x) = \frac{1}{Nh^d} \sum_{t=1}^N K\left(\frac{x - x^t}{h}\right) r_i^t$$

2- Gaussian Kernel Using Mahalanobis Distance

$$K(u) = \frac{1}{(2\pi)^{d/2} |S|^{1/2}} \exp\left[-\frac{1}{2} u^T S^{-1} u\right]$$

Conclusions

Accuracy Score : 0.9421257651641625

Confusion Matrix:

