Department of Computer Science & Engineering

Final Year B. Tech. (CSE) – I : 2022-23

5CS462 : PE5 - Data Mining Lab

Assignment No. 5

Use / extend the data analysis tool (menu driven GUI) developed in Assignment No. 1 to perform the following classification task :

1. Design and implement the following classifiers:

   a) Regression classifier.
   b) Naïve Bayesian Classifier.
   c) k-NN classifier (Take k = 1,3,5,7)
   d) Three layer Artificial Neural Network (ANN) classifier (use back propagation). Plot error graph (iteration vs error).

2. Tabulate the results in confusion matrix and evaluate the performance of above classifier using following metrics :

   a) Recognition rate
   b) Misclassification rate
   c) Sensitivity
   d) Specificity
   e) Precision & Recall

3. Use the following data sets from UCI machine learning repository :

   a) IRIS
   b) Breast Cancer

Deadline : 09/09/2022

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