1. Supervised Learning - Regression (Using R)

Generate a proper 2-D data set of N points. Split the data set into Training Data set and Test Data set.

* + 1. Perform linear regression analysis with Least Squares Method.
    2. Plot the graphs for Training MSE and Test MSE and comment on Curve Fitting and Generalization Error.
    3. Verify the Effect of Data Set Size and Bias-Variance Tradeoff.
    4. Apply Cross Validation and plot the graphs for errors.

1. Write a program in C++ or Java based on number theory such as Chinese remainder
2. Create Association Rules for the Market Basket Analysis for the given Threshold. (Using R)
3. Write a program in C++ or Java to implement RSA algorithm for key generation and cipher verification
4. Implement K-Means algorithm for clustering to create a Cluster on the given data.(Using Python)
5. Write a program in C++ or Java to implement RSA algorithm for key generation and cipher verification
6. Implement SVM for performing classification and find its accuracy on the given data. (Using Python)
7. Write a program in C++ or Java to implement RSA algorithm for key generation and cipher verification
8. Principal Component Analysis-Finding Principal Components, Variance and Standard Deviation calculations of principal components.(Using R)
9. Write a program in C++ or Java based on number theory such as Chinese remainder
10. On the given data perform the performance measurements using Simple Naïve Bayes algorithm such as Accuracy, Error rate, precision, Recall, TPR, FPR,TNR, FPR etc. (Using Weka API through JAVA)
11. Write a program in C++ or java to implement SHA1 algorithm using libraries (API)
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