

ITA06 - Machine Learning

List of Lab Exercises

| SESSION NO. | SESSION TOPICS |
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| 1 | Implement and demonstrate the FIND-S algorithm for finding the most specific hypothesis based on a given set of training data samples. |
| 2 | For a given set of training data examples stored in a .CSV file, implement and demonstrate the Candidate-Elimination algorithm in python to output a description of the set of all hypotheses consistent with the training examples |
| 3 | Demonstrate the working of the decision tree based ID3 algorithm. Use an appropriate data set for building the decision tree and apply this knowledge to classify a new sample. |
| 4 | Build an Artificial Neural Network by implementing the Backpropagation algorithm and test the same using appropriate data sets. |
| 5 | Write a program for Implementation of K-Nearest Neighbours (K-NN) in Python |
| 6 | Write a program to implement Naïve Bayes algorithm in python and to display the results using confusion matrix and accuracy. |
| 7 | Write a program to implement Logistic Regression (LR) algorithm in python |
| 8 | Write a program to implement Linear Regression (LR) algorithm in python |
| 9 | Compare Linear and Polynomial Regression using Python |
| 10 | Write a Python Program to Implement Expectation & Maximization Algorithm |
| 11 | Write a program for the task of Credit Score Classification |
| 12 | Implement Iris Flower Classification using KNN |
| 13 | Implement the Car Price Prediction Model using Python |
| 14 | Implement House price Prediction using appropriate machine learning algorithm |
| 15 | Implement Iris Flower Classification using Naive Bayes classifier |
| 16 | Compare different types Classification Algorithms and evaluate their performance. |
| 17 | Implement Mobile Price Prediction using appropriate machine learning algorithm |
| 18 | Implement Perceptron based IRIS classification |
| 19 | Implementation of Naive Bayes classification for Bank Loan prediction |
| 20 | Implement Future Sales Prediction using a suitable machine learning algorithm |