



N.M.A.M. INSTITUTE OF TECHNOLOGY
(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)
Nitte – 574 110, Karnataka, India

(ISO 9001:2015 Certified)

Accredited with 'A' Grade by NAAC

Department of Artificial Intelligence and Machine Learning

21AM406 Machine Learning and Data Science Lab

Faculty: Disha D N

Part A

1. Handling missing values using different approaches
2. Categorical encoding and text encoding methods
3. Prediction of loan repayment using support vector machine
4. Perform principal component analysis on the dataset to reduce the dimension
5. Textual data preprocessing using Bag of words technique called Tfidfvectorizer
6. Demonstration of sklearn pipelines on the data
7. Prediction of any classification problem using Random Forest
8. Prediction of any classification problem using Adaboost classifier
9. Perform hyperparameter tuning using Gridsearchcv method
10. Perform hyperparameter tuning using Randomsearchcv method

Part B

11. Webscraping using beautifulsoup library to extract elements of webpage
12. Perform webscraping using beautifulsoup to extract the news from hackers.news website and apply unsupervised machine learning technique to form the labels
13. Web scraping program using CrawlSpider to scrape the web elements
14. Write a R program to classify the dataset using Decision Tree
15. Write a R program to classify the dataset using Random Forest

Datasets

1. fetch_california_housing
2. iris
3. loan
4. load_breast_cancer
5. fake_news_train
6. load_iris
7. load_iris
8. load_iris
9. heart_disease
10. heart_disease
11. url link: 'https://www.wikipedia.org'

12. url: <https://news.google.com/rss?hl=en-US&gl=US&ceid=US:en>
13. any link
14. iris
15. iris