20MCA241 – Data Science Lab

Lab Report Submitted By

ALFIYA P.S

AJC22MCA-2011

In Partial Fulfilment for the Award of the Degree Of

MASTER OF COMPUTER APPLICATIONS
(MCA TWO YEAR)
[Accredited by NBA]

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

AMAL JYOTHI COLLEGE OF ENGINEERING

KANJIRAPPALLY

[Affiliated to APJ Abdul Kalam Technological University, Kerala. Approved by AICTE, Accredited by NAAC. Koovappally, Kanjirappally, Kottayam, Kerala – 686518]

2023-2024

DEPARTMENT OF COMPUTER APPLICATIONS

AMAL JYOTHI COLLEGE OF ENGINEERING

KANJIRAPPALLY

CERTIFICATE

This is to certify that the lab report, "**20MCA241 DATA SCIENCE LAB"** is the bonafide work of **ALFIYA P.S (AJC22MCA-2011)** in partial fulfilment of the requirements for the award of the Degree of Master of Computer Applications under APJ Abdul Kalam Technological University during the year **2023-24.**

Ms. Jetty Benjamin
Lab In- Charge

Rev. Fr. Dr. Rubin Thottupurathu Jose
Head of the Department

Internal Examiner

External Examiner

Course Code	Course Name	Syllabus Year	L-T-P-C
20MCA241	Data Science Lab	2020	0-1-3-2

VISION

To promote an academic and research environment conducive for innovation centric technical education.

MISSION

MS1 - Provide foundations and advanced technical education in both theoretical and applied Computer Applications in-line with Industry demands.
MS2 - Create highly skilled computer professionals capable of designing and innovating real life solutions.
MS3 - Sustain an academic environment conducive to research and teaching focused to generate up-skilled professionals with ethical values.
MS4 - Promote entrepreneurial initiatives and innovations capable of bridging and contributing with sustainable, socially relevant technology solutions.

COURSE OUTCOME

CO	Outcome	Target
CO1	Use different python packages to perform numerical calculations, statistical computations and data visualization.	60.2
CO2	Use different packages and frameworks to implement regression and classification algorithms.	60.2
CO3	Use different packages and frameworks to implement text classification using SVM and clustering using K-means.	60.2
CO4	Implement convolutional neural network algorithm using Keras framework.	60.2
CO5	Implement programs for web data mining and natural language processing using NLTK.	60.2

COURSE END SURVEY

CO	Survey Question	Answer Format
CO1	To what extend you are able to use different python packages to perform numerical calculations, statistical computations and data visualization?	Excellent/Very Good/Good/Satisfactory/Poor
CO2	To what extend you are able to use different packages and frameworks to implement regression and classification algorithms?	Excellent/Very Good/Good/Satisfactory/Poor
CO3	To what extend you are able to use different packages and frameworks to implement text classification using SVM and clustering using K-means?	Excellent/Very Good/Good/Satisfactory/Poor
CO4	To what extend you are able to implement convolutional neural network algorithm using Keras framework?	Excellent/Very Good/Good/Satisfactory/Poor
CO5	To what extend you are able to implement programs for web data mining and natural language processing using NLTK?	Excellent/Very Good/Good/Satisfactory/Poor

CONTENT

18	Program to implement a simple web crawler and parse the content using BeautifulSoup.	06-12-23	CO5	30
19	Implement problems on natural language processing – Part of Speech tagging, N-gram & smoothening and Chunking using NLTK	07-12-23	CO5	32