



Vivekanand Education Society's Institute of Technology

Department of Artificial Intelligence and Data Science

Machine Learning Lab Journal

Student Name:

Roll No:

Class:

A.Y:

Lab Objectives

	Description
1	To introduce platforms such as Anaconda, COLAB suitable to Machine learning
2	To implement various Regression techniques
3	To develop Neural Network based learning models
4	To implement Clustering techniques

Lab Outcome

LO	Description
LO1	Implement various Machine learning models
LO2	Apply suitable Machine learning models for a given problem
LO3	Implement Neural Network based models
LO4	Apply Dimensionality Reduction techniques

LO/PO Mapping

LO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
LO 1	3	3	3	2	2	1	1	1	1	2	2	1
LO 2	3	3	3	2	2	1	1	1	1	3	2	2
LO 3	3	3	3	2	2	1	1	1	1	3	1	3



LO 4	1	2	2	1	1	-	1	1	-	1	-	2
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List of Experiments:

Sr. No	List of Experiments	LO's	BL	Date
1.	Introduction to platforms such as Anaconda, COLAB	LO1	BL1,2	
2.	Study of Machine Learning Libraries and tools (Python library, tensorflow, keras,...)	LO1, LO2	BL1,2,3	
3.	Implementation of following algorithms for a given example data set : Linear Regression	LO1, LO2	BL1,2,3	
4.	Implementation of following algorithms for a given example data set : Logistics Regression	LO1, LO2	BL1,2,3	
5.	Implementation of following algorithms for a given example data set : SVM	LO1, LO2	BL1,2,3	
6.	Implementation of following algorithms for a given example data set : Hebbian Learning (Logic Gates)	LO2, LO3	BL1,2,3	
7.	Implementation of following algorithms for a given example data set : McCulloch Pitts Model (Logic Gates)	LO2, LO3	BL1,2,3	
8.	Implementation of following algorithms for a given example data set : Single Layer Perceptron Learning algorithm and Error Backpropagation Perceptron Training Algorithm	LO2, LO3	BL1,2,3	
9.	Principal Component Analysis	LO4	BL1,2,3	
10.	Case Study : Expectation -Maximization algorithm	LO1, LO2	BL1,2,3	
11.	Mini Project in ML	LO1, LO2, LO3, LO4	BL1,2,3	