Prasad.V.Potluri Siddhartha Institute of Technology, Kanuru, Vijayawada

AI Tools Lab

(Common to all)

Course Code	19ES1351	Year	II	Semester	I
Course Category	ES	Branch	IT	Course Type	Practical
Credits	1	L-T-P	0-0-2	Prerequisites	-
Continuous Internal Evaluation :	25	Semester End Evaluation:	50	Total Marks:	70

	Course Outcomes	Blooms Taxonomy Level
	Upon successful completion of the course, the student will be able to	
CO1	Apply various preprocessing techniques on different datasets.	L3
CO2	Construct Machine learning programs for Supervised, Unsupervised and Semi supervised learning models.	L3
CO3	Develop Deep learning programs for Supervised & Unsupervised learning models.	L3
CO4	Identify and Apply Artificial Intelligence concepts to solve real world problems.	L3

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (H:High, M: Medium, L:Low)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	2	1	2					1		2	1	2
CO2	3	3	2	1	2					1		2	1	2
CO3	3	3	2	1	2					1		2	1	2
CO4	2	2	3	1	2		1			1		2	1	3

Syllabus		
Expt No	**Contents**	**Mapped CO**
I	Apply Data preprocessing techniques.	CO1
II	Construct a Machine Learning model using supervised learning method.	CO2
III	Construct a Machine Learning model using Unsupervised learning method.	CO2
IV	Construct a Machine Learning model using Semi supervised learning method.	CO2
V	Develop a Deep Learning model using supervised learning method.	CO3
VI	Develop a Deep Learning model using Unsupervised learning method.	CO3
VII	Apply a Convolutional Neural Network for Image Classification.	CO3
VIII	Build an AI application.	CO4

Learning Resources
Text Books
1. Artificial Intelligence: A Modern Approach, Stuart Russell and Norvig, Third Edition, 2015, Pearson Education. 2. Machine Learning: A Probabilistic Perspective, Kevin P. Murphy, 2012, MIT Press 3. Deep Learning (Adaptive Computation and Machine Learning series), Ian Goodfellow , Yoshua Bengio, Aaron Courville, Francis Bach, 2017, MIT Press.
e-Resources & other digital material
1. https://github.com/atinesh-s/Coursera-Machine-Learning-Stanford 2. https://github.com/Kulbear/deep-learning-coursera