JK LAKSHMIPAT UNIVERSITY

JKLU

Value Added Course
Academic Year 2019-20

BASICS OF MACHINE LEARNING

Faculty: Dr. Devika Kataria,
Mr. Vijay Shantagiri Analogica

Course Duration: 34 Hrs

Offered to: 2015-20 BTCSEMTECH; 2016-20 B.Tech. ECE; 2016-20 B.Tech. CSE; 2017-21 B.Tech. ECE; 2017-21 B.Tech. CSE, 2018-22 B.Tech. EEE; 2018-22 B.Tech. CSE.

The course involves sessions where concepts on python programming, linear algebra, regression and algorithms for supervised and non-supervised learning were discussed and hands-on activities are conducted.

Course Outcome

On successful completion of this course, students should be able

1. Write python program for implementation of classifier algorithms.
2. Write program for decision trees and implement algorithm for prediction using datasets.
3. Write program for classification using KNN for different datasets
4. Use SVM for data classifiers using supervised learning

Course Content

Module 1
Machine Learning with Python- Supervised/Unsupervised Learning, Testing & Training, Concepts of Probablity/conditional probability, Baysean Theorem, Naïve Bayes, Implementing classifiers.

Module 2
Measuring Entropy, Clustering-Kmean, Decision Trees, Ensemble Learning.

Module 3
Support Vector Machine, Using SVM to cluster people, KNN – Predictions implementation, Reinforcement Leaning, understanding confusion matrix, Measuring classifiers.

Evaluation Scheme:

Components	Weightage
Quizzes	25
Mid Term Theory Exam	25
End Term Theory Exam	50
Total	100

References:

1. Andreas C. Müller, Sarah Guido, "Introduction to Machine Learning with Python", O'Reilly, ISBN-10: 1449369413.

Value Added Course

Course Name	Basics of Machine Learning	Course Code (Optional)	
Course Offered to	2015-20 BTCSEMTECH, 2016-20 B.Tech. ECE, 2016-20 B.Tech. CSE, 2017-21 B.Tech. ECE, 2017-21 B.Tech. CSE, 2018-22 B.Tech. EEE, 2018-22 B.Tech. CSE	Academic Year	2019-20
Course Duration	Apr 20-25, 2020	Contact Hours	34 hours
Course Instructor(s)	Dr Devika Kataria, Associate Professor, EEE. Mr Vijay Shantagiri, Analogica Pvt Ltd, Bangalore		

List of Enrolled Students:

S. No.	Roll Number	Student's Name
1	2016btechcse210	Prajjval Govil
2	2018btecheee010	Naman Sharma
3	2018btechcse006	Madhav
4	2018BtechEEE006	Nikhil Agarwal
5	2018btechcse114	Saksham bairathi
6	2018btechcse101	Aayush Sharma
7	2018BTechCSE121	Yash Goyal
8	2016btechece010	Chandresh Sharma
9	2016btechece002	Gaurang Shukla
10	2017BTECHECE004	Himanshu Baghel
11	2017btechece005	Samarth
12	2016BtechECE001	Anudit Bhatt
13	2018btecheee004	Khushi bhatt
14	2017btechcse016	Mani Agarwal
15	2016btechece004	Kanwardeep Singh Gahlot
16	2015BTCSEMTECH001	Hardik Sharma
17	2018btechcse016	Sushil K Dubey
18	2018btechcse123	Aishwaryaditya Jha
19	2018btechcse106	Harsh Udai
20	2018BtechCSE019	Yash Mishra
21	2016btechcse024	Aditya Sharma
22	2015BTCSEMTECH002	Kartikay Sharma
23	2017btechcse013	Harshaditya Gaur

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24	2018btechcse120	Vanshika Sharma
25	2017btechcse006	Pranav kumar jain
26	2017btechece001	Aman Gupta
27	2018BTECHEEE003	Dhruv Patel
28	2018BTECHEEE003	Anmol Shekhawat
29	2017Btechcse005	Muskaan Jain

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(Name and Signature)
Course Coordinator

Institute of Engineering and Technology
JK Lakshmipat University
JAIPUR (Rajasthan)

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COURSE COMPLETION CERTIFICATE

JK LAKSHMIPAT UNIVERSITY

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JKLU

This is to certify that

Kartikay Sharma

has successfully completed a value-added course of 34 hours on

Basics of Machine Learning

offered during Apr 20-25, 2020 by Electrical & Electronics Engineering Department, Institute of Engineering and Technology, JK Lakshmipat University, Jaipur, India.

Dhataria

DEVIKA KATARIA

Course Instructor