

WORKSHOP ON MACHINE LEARNING FOR DATA SCIENCE & ANALYTICS

DATE : 23rd, 24th, 25th MAY 2019

*Venue : Conference Hall, Room 106, 1st Floor,
NIELIT Bhawan, Plot 3, PSP Pocket, Sector-8,
Dwarka, New Delhi-110077*

About The Machine Learning Workshop

LEARNING = REPRESENTATION + EVALUATION + OPTIMIZATION

Machine learning systems automatically learn programs from data. Machine Learning is a growing field that is used when searching the web, placing ads, credit scoring, stock trading and for many other applications. Machine learning is a type of artificial intelligence (AI) that allows software applications to become more accurate in predicting outcomes without being explicitly programmed. This is often a very attractive alternative to manually constructing them, and in the last decade the use of machine learning has spread rapidly throughout computer science and beyond. Machine learning is used in Web search, spam filters, recommender systems, ad placement, credit scoring, fraud detection, stock trading, drug design, and many other applications. The basic premise of machine learning is to build algorithms that can receive input data and use statistical analysis to predict an output value within an acceptable range. A recent report from the McKinsey Global Institute asserts that machine learning (a.k.a. data mining or predictive analytics) will be the driver of the next big wave of innovation.

Objective of Machine Learning Workshop

To expose the Faculty/ Research Scholars/ Students in emerging technologies in the areas of Data Science & analytics. This workshop provides practical foundation level training that enables immediate and effective participation in Big data And Data Science and other Analytics projects. This data science course is an introduction to machine learning and algorithms. Participants will develop a basic understanding of the principles of machine learning and derive practical solutions using predictive analytics. We will also examine why algorithms play an essential role in Big Data analysis

Outcomes of Machine Learning Workshop

This workshop will cover the basic algorithm that helps us to build and apply prediction functions with an emphasis on practical applications. attendees, at the end of this workshop, will be technically competent in the basics and the fundamental concepts of Machine Learning such as:

- Understand components of a machine learning algorithm.
- Apply machine learning tools to build and evaluate predictors.
- How machine learning uses computer algorithms to search for patterns in data.
- How to uncover hidden themes in large collections of documents using topic modelling.
- How to use data patterns to make decisions and predictions with real-world examples.
- How to prepare data, deal with missing data and create custom data analysis solutions for different industries.
- Basic and frequently used algorithmic techniques including sorting, searching, greedy algorithms and dynamic programming.

FOR MORE DETAILS CONTACT:

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Workshop on Machine Learning for Data Science & Analytics 23rd, 24th & 25th May 2019

Sr. No.	Time	Particulars	Expert / Resource Person
Day 1 : Thursday, 23rd May 2019			
1.	9:30 AM – 10:00 AM	Registration of Participants	
2.	10:00 AM – 10:20 AM	<ul style="list-style-type: none"> Welcome Address – Shri Shameem Khan, Director In-Charge, NIELIT Centre Delhi Key note – Dr. Jaideep Kumar Mishra, JS(HRD) & DG, NIELIT Vote of Thanks – Shri Partha P. Adhikari, JD(S), NIELIT Delhi 	
10:20 AM – 10:45 AM Tea Break			
3.	10:45 AM – 1:15 PM	<ul style="list-style-type: none"> Introduction to Machine Learning Types of Machine Learning Unsupervised Machine Learning Supervised Machine Learning Reinforced Machine Learning 	Dr. M.M. Tripathi, Professor, DTU, Delhi
1:15 PM – 2:00 PM Lunch Break			
4.	2:00 PM – 5:30 PM	<ul style="list-style-type: none"> Preparing Data for Machine Learning Introduction to Mathematical Algorithm How to choose the right Algorithm Forecasting University Enrolments using Fuzzy Sets 	Dr. Devendra Tayal, Professor, IGOTUW
3:30 PM – 3:45 PM Tea Break			
Day 2 : Friday, 24th May 2019			
1.	9:30 AM – 5:00 PM	<ul style="list-style-type: none"> Introduction to Regression Unsupervised Machine Learning & Case Studies Supervised Machine Learning Case Studies Machine Learning Tools & Framework 	Shri Rahul Pathak, ML Instructor, Cetpa Technologies
11:00 AM – 11:30 AM Tea Break			
1:15 PM – 2:00 PM Lunch Break			
3:30 PM – 3:45 PM Tea Break			
Day 3: Saturday, 25th May 2019			
1.	9:30 AM – 4:45 PM	<ul style="list-style-type: none"> Deep diving with Numpy for Vectorized Computing and Linear Algebra. In-depth visualization with Matplotlib and Seaborn. Data manipulation and Time Series Analysis with Pandas. 	Shri Kuldeep Singh, Data Scientist, Cetpa Technologies
11:00 AM – 11:30 AM Tea Break			
1:15 PM – 2:00 PM Lunch Break			
3:30 PM – 3:45 PM Tea Break			
2.	4:45 PM – 5:15 PM	<ul style="list-style-type: none"> Valedictory session Wrap up 	

Note: All participants are requested to carry their laptops for hands-on sessions.