

<u>Detailed Report on Webinar on Machine Learning and Data</u> <u>Analytics Held on 15.01.2022</u>

Date of Event	15.01.2022
Name and Type of Event	Webinar on Machine Learning and Data Analytics
Conducted by	Sneha Kashyap, Mr. Arvind Kumar Pandey
No. Of Participant	136

An Online *Webinar on Machine Learning and Data Analytics* was organized on 15.01.2022 via Google Meet which was being coordinated by Sneha Kashyap, Prof. Arvind Kumar Pandey, Head of CS and IT Department.

The Aim of this Webinar was to introduce the various methods used in Machine Learning in order to analyse the given Data.

Machine learning is the science of designing algorithms that learn on their own from data and adapt without human correction. As we feed data to these algorithms, they build their own logic and, as a result, create solutions relevant to aspects of our world as diverse as fraud detection, web searches, tumor classification, and price prediction.

In deep learning, a subset of machine learning, programs discover intricate concepts by building them out of simpler ones. These algorithms work by exposing multilayered (hence "deep") neural networks to vast amounts of data. Applications for machine learning, such as natural language processing, dramatically improve performance through the use of deep learning.

Data analysis involves manipulating, transforming, and visualizing data in order to infer meaningful insights from the results. Individuals, businesses, and even governments often take direction based on these insights.

Data analysts might predict customer behavior, stock prices, or insurance claims by using basic linear regression. They might create homogeneous clusters using classification and regression trees (CART), or they might gain some impact insight by using graphs to visualize a financial technology company's portfolio.

Until the final decades of the 20th century, human analysts were irreplaceable when it came to finding patterns in data. Today, they're still essential when it comes to feeding the right kind of data to learning algorithms and inferring meaning from algorithmic output, but machines can and do perform much of the analytical work itself.

Machine learning constitutes model-building automation for data analysis. When we assign machines tasks like classification, clustering, and anomaly detection — tasks at the core of data analysis — we are employing machine learning.

We can design self-improving learning algorithms that take data as input and offer statistical inferences.

First, we can think of most algorithms as either *classification-based*, where machines sort data into classes, or *regression-based*, where machines predict values.

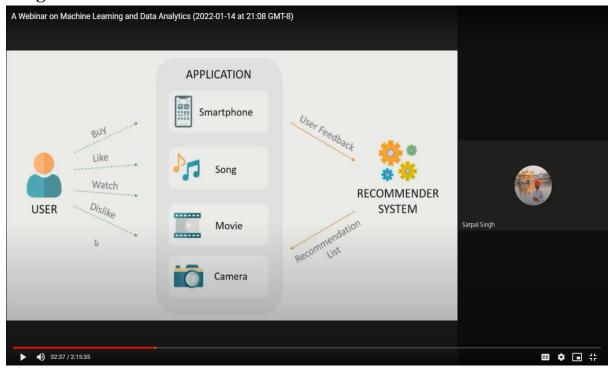
A supervised algorithm provides target values after sufficient training with data. In contrast, the information used to instruct an unsupervised machine-learning algorithm needs no output variable to guide the learning process.

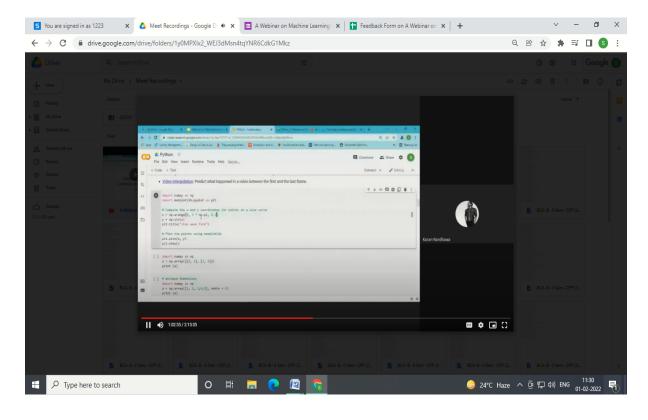
For example, a supervised algorithm might estimate the value of a home after reviewing the price (the output variable) of similar homes, while an unsupervised algorithm might look for hidden patterns in on-the-market housing.

As popular as these machine-learning models are, we still need humans to derive the final implications of data analysis. Making sense of the results or deciding, say, how to clean the data remains up to us humans.

136 participants turned up in the webinar. The Event began at 10:30 pm. The event started with the welcome note followed by the presentation that basically illustrated Analysing of data using machine Learning Algorithms. The session continued for around 2 hours and ended at 12:30 pm. The session was followed by a Vote of Thanks. A short Feedback Session was conducted for the participants after that Participation Certificates were awarded to them.

Image of the Event





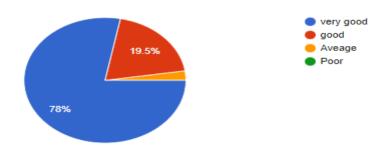
Poster of the event



Feedback Report

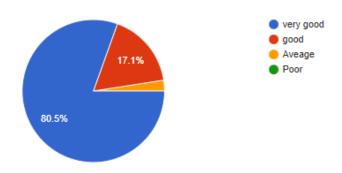
The instructor explained the topic clearly and used relevant example

41 responses



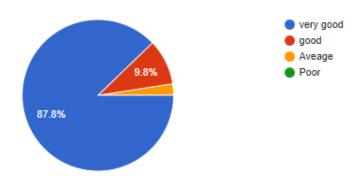
The Lecture was interactive and felt engaged

41 responses



Speaker positively influenced my views towards the topic

41 responses



In future I would like to attend the lecture from the speaker

41 responses

