

Machine Learning is a branch of artificial intelligence that focuses on using data and algorithms. It is also an important component in the field of data science.

Data is important in machine learning because the availability of high-quality data is critical to creating an accurate model. Without accurate data, the model would have no value since the data would be inaccurate. Also, there has to be enough data to create an accurate model so that it is clear the model is not just memorizing the data it is being given. Pattern recognition is important because it enables machine learning. Seeing the trends in data allows the model to be able to predict future values and make predictions. Accuracy is important because if the model is not accurate, then the results would not have any significant value. If they are accurate, then the results can be used to predict future data and have real world applications.

ML is a branch of artificial intelligence. Artificial intelligence is an overarching subject which means intelligence demonstrated by machines and machine learning is computers gaining intelligence through learning patterns in data.

Two modern machine learning applications would be facial recognition and speech recognition. These could not be built with traditional programming because they require the machine to understand human concepts, which is only possible with artificial intelligence and machine learning.

Observations can be data containing a feature and a target. A feature is a number of properties which describe the target. It is important in machine learning because the machine can use the features and their occurrences with a certain target and predict what the target would be for a set of features. Quantitative data is data containing numbers. It is important in machine learning because it can be used in algorithms like linear regression. Qualitative data is data containing non-numeric data. It can be used for algorithms like binary classification.

I am personally very interested in ML. I think that it will be very useful in my professional career and I am looking to improve my skills in it. I want to build personal projects in ML. I think that building a chatbot using deep learning or building a bot to predict stock prices could be fun and interesting projects.