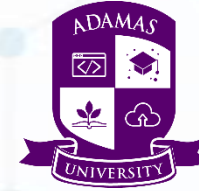


#EngineeringPlus Online Course Series



ADAMAS
SCHOOL OF ENGINEERING AND
TECHNOLOGY

AI & ML

Course Instructor



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Assistant Professor

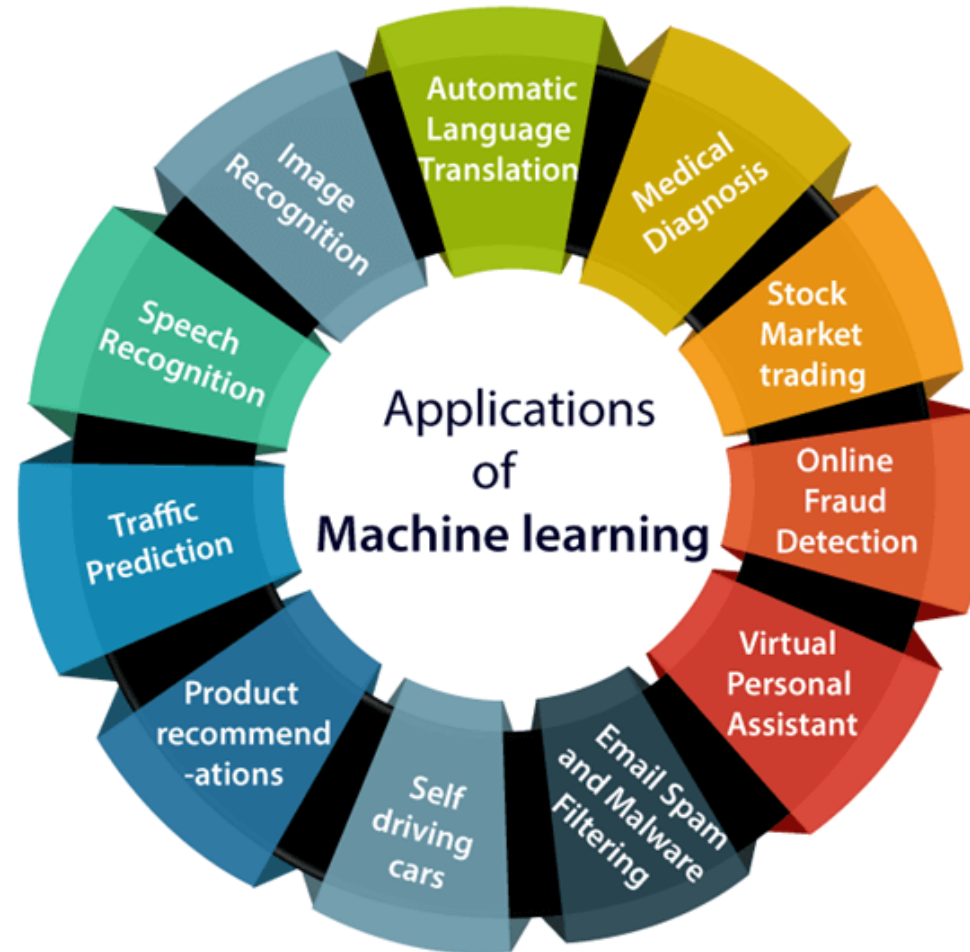
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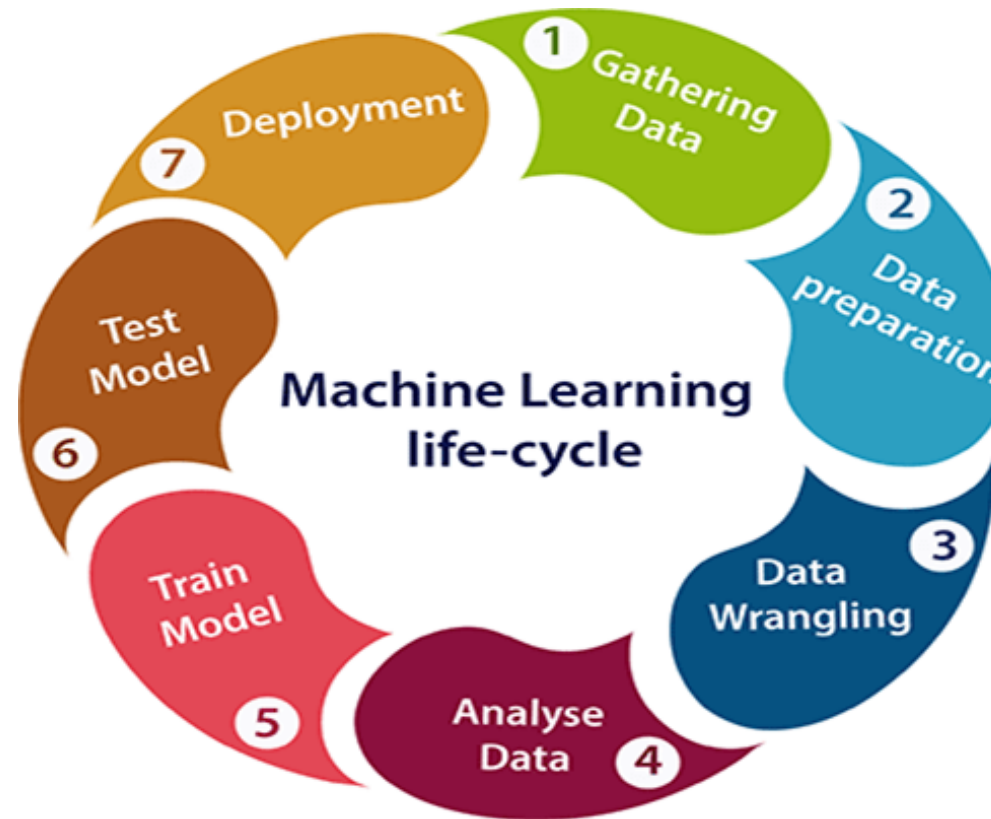
Module: 03
Lecture:

- Applications of ML
- ML Life cycle
- Installing Anaconda and Python
- AI vs ML
- Datasets

Applications of Machine learning



Machine learning Life cycle



Installing Anaconda and Python



- Anaconda distribution is a free and open-source platform for Python/R programming languages. It can be easily installed on any OS such as Windows, Linux, and MAC OS.
- Anaconda distribution provides installation of Python with various IDE's such as **Jupyter Notebook**, **Spyder**, **Anaconda prompt**, **etc.**

AI	ML
AI is a technology which enables a machine to simulate human behavior.	ML is a subset of AI which allows a machine to automatically learn from past data without programming explicitly.
In AI, we make intelligent systems to perform any task like a human.	In ML, we teach machines with data to perform a particular task and give an accurate result.
subsets of AI: Machine learning and deep learning	Deep learning is a main subset of machine learning
On the basis of capabilities, AI can be divided into three types, which are, Weak AI , General AI , and Strong AI .	Machine learning can also be divided into mainly three types that are Supervised learning , Unsupervised learning , and Reinforcement learning .
It includes learning, reasoning, and self-correction.	It includes learning and self-correction when introduced with new data.

What is a dataset?

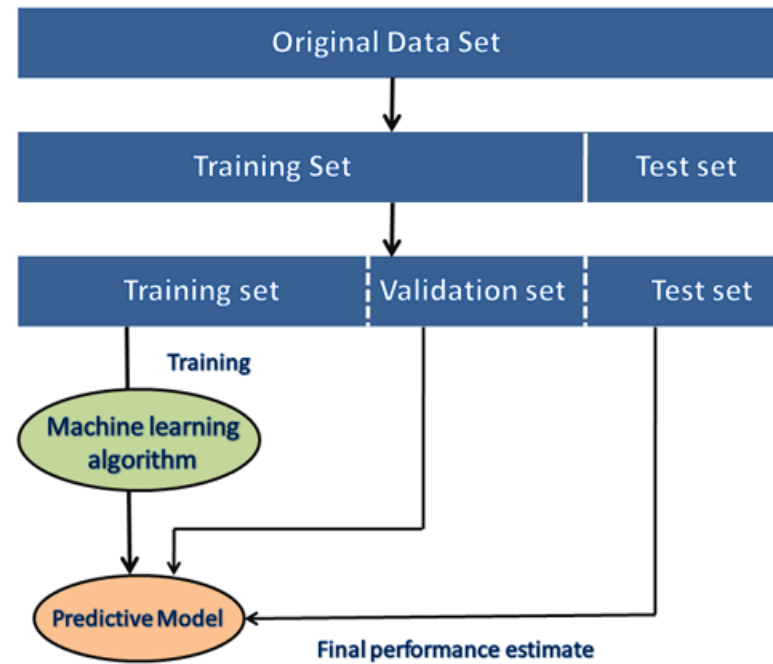
- **A dataset** is a collection of data in which data is arranged in some order.
- Example

Country	Age	Salary	Purchased
India	35	15000	No
France	28	20000	Yes
Germany	40	25000	Yes
Mexico	32	30000	No

Types of data in datasets

- **Numerical data: Example:** house price, temperature, etc.
- **Categorical data: Example:** Yes/No, True/False, Blue/green, etc.
- **Ordinal data: Example:** These data are similar to categorical data but can be measured on the basis of comparison.

Types of dataset



Popular dataset sources

- Kaggle Datasets
- UCI Machine Learning Repository
- Datasets via AWS
- Scikit-learn dataset

- Online resources
- Machine Learning tutorial, <https://www.javatpoint.com/machine-learning>