



Agenda



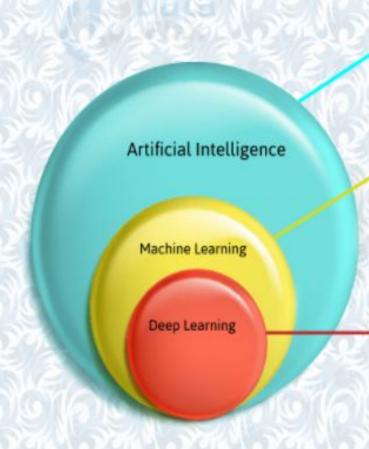


- A recap- Machine Learning
 - ML case studies
 - Python project ideas
 - ML project ideas
- Deep Learning
 - Diff between ML/AI/DL
 - Artificial Neural Network (ANN)
 - Deep Learning working details
 - Implementing DL
- Resources- Deep Learning

Recap - Machine Learning



What is Machine Learning?



Artificial Intelligence

The science and engineering of making intelligent machines, especially intelligent computer programs.

Machine Learning

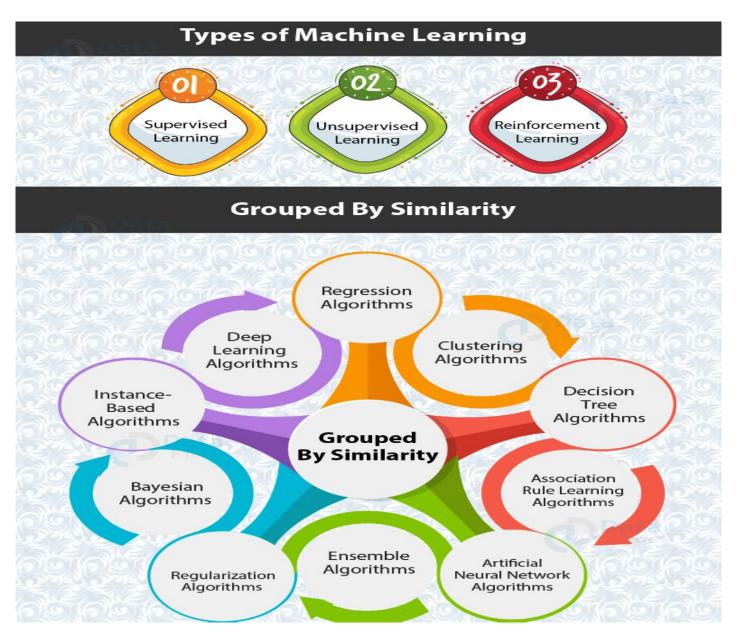
A subset of Al that provides systems the ability to learn and improve from experience without being explicitly programmed. It deals with algorithms that can look at data to learn from it and make predictions.

Deep Learning

A method of Machine Learning that is based on learning data representations (or feature learning) instead of task-specific algorithms.

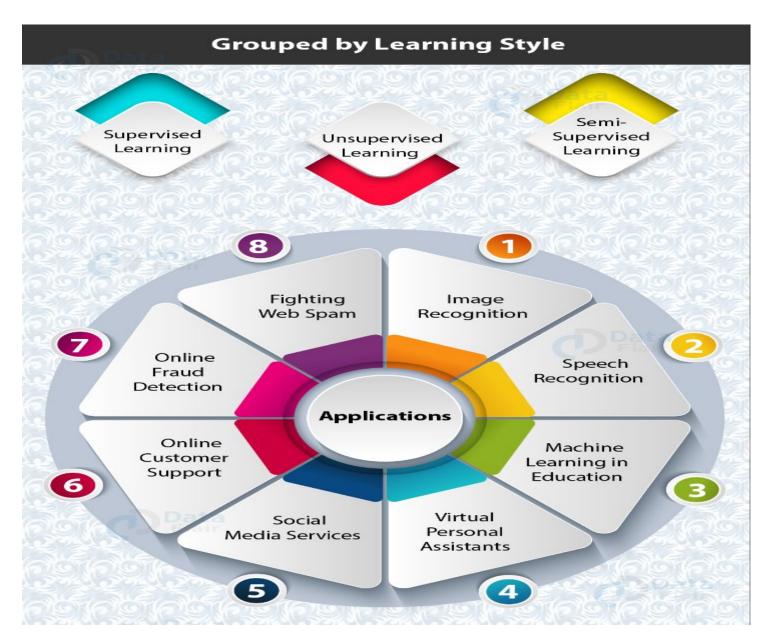
Types of Machine Learning





Applications of Machine Learning





Advantages and Disadvantages



Advantages Disadvantages Easily identifies trends **Data Acquisition** and patterns No human intervention **Time and Resources** needed Interpretation of Results **Continuous Improvement** Handling multi-dimensional High error-susceptibility and multi-variety data Wide Applications

Companies Using Python Machine Learning











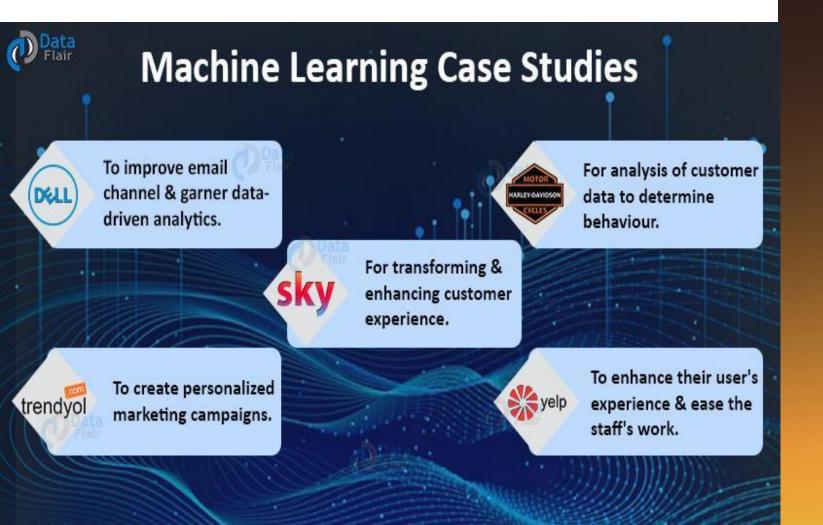


Qubit.

Machine Learning case studies



Here are a few real-world case studies on machine learning applications to solve real problems.



Python Project ideas

INTERNSHIPSTUDIO

- 1. Hangman Project in Python
- 2. Rock Paper Scissor Python Game
- 3. Dice Rolling Simulator in Python
- 4. Email Slicer
- 5. Magic 8 Ball Game
- 6. Target Practice Game
- 7. Alarm Clock with GUI
- 8. Binary Search Algorithm
- 9. Desktop Notifier App in Python
- 10. Clickomania Game







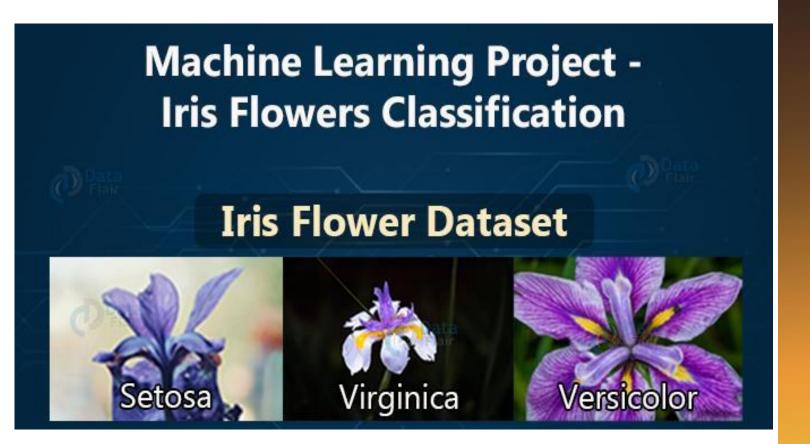


Machine Learning Projects ideas



Learning through projects is the best investment that you are going to make. These project ideas enable you to grow and enhance your machine learning skills rapidly.

1. Iris Flowers Classification Project



Machine Learning Project ideas



2. Emojify – Create your own emoji with Python



3. Loan Prediction using Machine Learning

Project idea – The idea behind this ML project is to build a model that will classify how much loan the user can take. It is based on the user's marital status, education, number of dependents, and employments. We can build a linear model for this project.

Machine Learning Project ideas



3. Housing Prices Prediction Project



4. MNIST Digit Classification Machine Learning Project

Project idea – The MNIST digit classification python project enables machines to recognize handwritten digits. This project could be very useful for computer vision. Here we will use MNIST datasets to train the model using Convolutional Neural Networks.

Machine Learning Project ideas

NTERNSHIPSTUDIO

- 5. Stock Price Prediction using Machine Learning
- 6. Titanic Survival Project
- 7. Wine Quality Test Project
- 8. Fake News Detection Project
- 9. Music Genre Classification Machine Learning Project
- 10. Bitcoin Price Predictor Project





- Summarise different ML algorithms groups?
- Name key applications of ML?
- Advantages & Disadvantages of ML?
- Implement at least 3 project ideas in Python.
- Implement 3 Machine Learning Projects ideas.