1. **Deep Learning**

Deep Learning is a field of machine learning which works on principle of neural network,such that it works of complex data trained repeatedly on various layer. It is inspired by the functioning of human brain. It has various structure called input layerm hidden layer and output layer.

**2.Neural Networks**

Neural networks works based on human brain, it is designed to find the pattern in the series of data forming many layer called conventional layer which consists of nodes called neurons and has weights in it.

Types of Neural Networks

1. Convuntional Neural Network: It uses a conventional filter which extract the spatial features from the images. Image classification,Image identification and Object detection comes It under this.
2. ` Recursional Neural NetworkL It works on data recursively. The output of the layer is fed as an input to the layer.
3. Feedforward Neural Network: It is a simple way of neural network such that data flows in single direction and used for simple regression.
4. Generative Adversatial Network: It is used for generating a new data or image.
5. Transformer: It is used for natural language processing in the chatbots

**3.Convolutional Neural Network**

A Convolutional Neural Network is a special type of neural network designed to work with images. It automatically detects patterns like edges, shapes, and textures in images to help identify what's in them.

It takes image as a input and identify the edges and the shapes in it and identify it as a object.

It is used in

* 1. Image classification
  2. Image identification
  3. Object detection

**4.Pipeline**

Pipeline is the series of steps which starts from collecting raw data to training the model and deploying it.

The steps in pipelines are

* 1. Problem definition
  2. Dataset collection
  3. Data preprocessing
  4. Training dataset
  5. Dataset evaluation
  6. Model Deployment