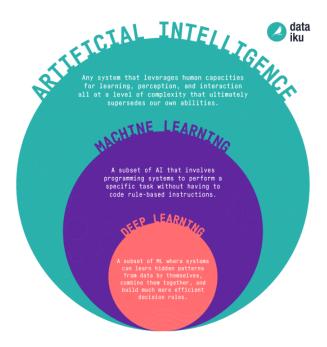
## **GENERAL TERMS:**

- **1.** <u>Machine Learning</u> Machine learning is the science of getting computers to act, based on the given data, without being explicitly programmed.
- **2.** Supervised Machine Learning: It is the section of machine learning in which one knows the list of the possible outcomes and each input belongs to one of the possible outcomes. For example, identify if the given image is a cat or a dog.
- **3.** <u>Unsupervised Learning:</u> In unsupervised learning the outcome is unknows the model is given the input data and then it is the task of the model to identify the input and label it. For example, the task to identify which animal the given image is (here we do not know what can be the possible output and are not limited to certain values).
- 4. AI vs ML vs Deep Learning -



**Libraries:** Coding a ML model is simplified by using a set of methods or functions which are declared under a set of libraries. For a basic definition on the most frequently used libraries in Python for ML visit the link. <a href="https://github.com/Prateek-ps/ML-">https://github.com/Prateek-ps/ML-</a>

 $\underline{Algorithms/blob/master/LIBRARIES\%20IN\%20PYTHON\%20FOR\%20MACHINE\%20LEARNING.p} \ df$ 

**6.** <u>Classification:</u> Classification refers to the process of distributing the input data into different categories. It can be binary where all the data is divided in either of the 2 categories or it can be multiclass classification where the input is divided under multiple classes.

**Example:** Spam or not spam, classifying a flower's species based on it measurements.

**7.** Regression: A classification problem caters to predicting a discrete value or class for the input whereas Regression aims at predicting a continuous number for a given problem.

**Example:** Predicting the prices of fuel after one week, predicting the temperature for next 5 days.

- **8.** Generalization: It is the process of training a model such that it can perform well not only on the seen data but also on the unseen data. In other words, we can say that it is the process of training the model so that it GENERALLY performs good in all cases.
- **9.** Overfitting: In certain cases, we try to make rules for every single point rather than making general rules that might fit on almost all points. In such cases where we make numerous rules for all the points, we end up making a very complex model and it in turn decreases its performance. Such a model is said to be overfitting on a data.
- **10.** <u>Underfitting:</u> This is the opposite of overfitting. In underfitting we make rules that are way too generalized and abrupt and due to this the model is unable to perform well and hence is called and underfitted model.

...Many more to be added...