

PROJECT NAME	University Admit Eligibility Predictor
TEAM ID	PNT2022TMID02578

PRIOR KNOWLEDGE

MACHINE LEARNING:

Machine learning is a branch of Artificial Intelligence and computer science which focuses on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy.

TYPES :

- 1) Supervised Learning
- 2) Unsupervised Learning

SUPERVISED LEARNING:

In Supervised Learning , the machine will be able to predict with the help of Labeled Data. Taking the images dataset as an example, the known data is fed to the machine, which analyzes and learns the association of the images based on the features such as shape, size, sharpness, etc. Now when a new image is fed to the machine without any label, the machine is able to predict accurately.

Supervised learning is of following types:

1)CLASSIFICATION:

Classification is used when the output variable is categorical i.e. with 2 or more classes. For example, yes or no, male or female, true or false, etc. In Classification, a program learns from the given dataset or observations and then classifies new observation into a number of classes or groups.

2) REGRESSION:

Regression is used when the output variable is a real or continuous value. In this case, there is a relationship between two or more variables i.e., a change in one variable is associated with a change in the other variable.

UNSUPERVISED LEARNING:

Unsupervised learning can be further grouped into types:

1. Clustering
2. Association

DECISION TREE REGRESSION:

Decision tree regression observes features of an object and trains a model in the structure of a tree to predict data in the future to produce meaningful continuous output. Continuous output means that the output/result is not discrete, i.e., it is not represented just by a discrete, known set of numbers or values.

DATA VISUALIZATION:

Data visualization is the graphical representation of information and data. By using visual elements like charts, graphs, and maps, data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in data.

FLASK:

Flask is a web framework, it's a Python module that lets you develop web applications easily. It's has a small and easy-to-extend core: it's a microframework that doesn't include an ORM (Object Relational Manager) or such features. It does have many cool features like url routing, template engine. It is a WSGI web app framework.

Flask is based on the Werkzeug WSGI toolkit and the Jinja2 template engine. A Web Application Framework or a simply a Web Framework represents a collection of libraries and modules that enable web application developers to write applications without worrying about low-level details such as protocol, thread management, and so on.