

Machine learning (ML) is defined as the study of computer programs that leverage algorithms and statistical models to learn through inference and patterns without being explicitly programmed [1]. To classify data and to illustrate the relationship between one dependent binary variable and one or more independent nominal, ordinal, interval, or ratio-level variables, logistic regression is used [9]. The feature extraction and the known answers of a dataset determine the formula that relies upon the input and output functions and applies it to new data to predict the response [5]. Hence, the model's algorithm uses a collection of data for training and builds a way to predict the output and saves that procedure for future purposes. Support vector machine is a fast and dependable classification algorithm that performs very well with a limited amount of data to analyze [6]. It finds techniques, trains models, and uses the learned approach to determine the output automatically [2]. A support vector machine (SVM) is a supervised machine learning model that uses classification algorithms for two-group classification problems. The decision tree is a supervised classification method that carries out a split test in its internal node and forecasts an example target class in its leaf node [11]. SVMs are a group of similar supervised learning techniques that are used for classification and regression problems [7]. ML algorithms learn over experience and improve automatically. The logistic regression model is the appropriate regression analysis. Logistic regression is predictive regression analysis [8]. That means it processes the data and finds out the hidden structures in a dataset [4]. In a machine learning system, a decision tree algorithm partitions the data into subsets. A model is a machine learning system that has been trained to identify specific types of patterns using an algorithm in a machine learning system [3]. A decision tree's purpose is to sum up the training data in the smallest tree possible [10]. Machine learning systems can also adjust themselves to a changing environment.