**1. Naive Bayes Classifier Algorithm:**

In case we’re wanting to consequently order website pages, gathering posts, blog scraps, and tweets without physically experiencing them, at that point the Naive Bayes Classifier Algorithm will make our life, less demanding.

This groups words dependent on the well known Bayes Theorem of likelihood and is utilized in applications identified with illness forecast, report order, spam channels, and conclusion investigation ventures. We can utilize the Naive Bayes Classifier Algorithm for positioning pages, ordering importance scores and grouping information completely.

**2. K-Means Clustering Algorithm:**

It is regularly utilized in applications, for example, gathering pictures into various classes, identifying diverse action types in movement sensors and for checking whether followed information focuses change between various gatherings after some time. There are business use instances of this calculation too, for example, dividing information by buy history, characterizing people dependent on various interests, gathering inventories by assembling and deals measurements, and so forth.

The K-Means Clustering Algorithm is an unsupervised Machine Learning Algorithm that is used in cluster analysis. It works by categorizing unstructured data into a number of different groups ‘k’ being the number of groups. Each data-set contains a collection of features and the algorithm classifies unstructured data and categorizes them based on specific features.

**3. Support Vector Machine (SVM) Learning Algorithm:**

Predicting the student who has passed or fail in the exam. Clinical trials of patients; example: Simply by knowing the pass mark a hyperplane can be drawn. Suppose 40 is the pass mark a hyperplane can be drawn any student above 40 is classified as pass and below 40 classified as a fail.

SVM Algorithm is a supervised learning algorithm, and the way it works is by classifying data sets into different classes through a hyperplane. It marginalizes the classes and maximizes the distances between them to provide unique distinctions. We can use this algorithm for classification tasks that require more accuracy and efficiency of data.

**4. Recommender System Algorithm:**

I have the problem of getting confused with too many options. Might be someone also faces the same. With this context, I will try to make aware of how to narrow down options. This post will be in “hinglish” as we are more accustomed to this pattern, thanks to WhatsApp. Toh what is a Recommendation Engine? Simply it can narrow down your options and make you likely to buy.

So how is this possible? There are multiple ways to make it possible, I will try to explain the most common:  
**Content-Based:** Aap kuch din se chicken ka item kha rahe hai, toh mostly likely aap chicken ka dish lena pasand karenge. Toh here chicken is the content, so based on your eating pattern you are recommended with chicken item.  
**Collaborative filtering:** Agar aapka or aap ka dost ko khane ka pasand bahoot hi similar ho, as like aap ko bhi biryani khana pasand hai or aap ki dost ko bhi, than apka dost ko raita pasand hai. Toh most likely aap ko bhi raita pasand ho sakti hai. Toh this depend on the similarity of the user profile, if someone has the same consuming or buying pattern, most likely your taste are same so the name collaborative filtering.

**5.1. Linear Regression:**

Linear Regression broadly utilized for applications, for example, deals estimating, chance evaluation examination in medical coverage organizations and requires negligible tuning.

**5.2. Logistic Regression:**

Logistic regression is used in applications such as-  
1. To Identifying risk factors for diseases and planning preventive measures.  
2. Classifying words as nouns, pronouns, and verbs.  
3. Weather forecasting applications for predicting rainfall and weather conditions.  
4. In voting applications to find out whether voters will vote for a particular candidate or not.

Logistic Regression is a statistical analysis technique which is used for predictive analysis. It uses binary classification to reach specific outcomes and models the probabilities of default classes.

**6. Decision Tree Machine Learning Algorithm:**

Applications of this Decision Tree Machine Learning Algorithm range from data exploration, pattern recognition, option pricing in finances and identifying disease and risk trends.  
Rather than processing multiple if and else condition decision tree gives the optimal prediction.

**7. Random Forest ML Algorithm:**

The random forest algorithm is used in industrial applications such as finding out whether a loan applicant is low-risk or high-risk, predicting the failure of mechanical parts in automobile engines and predicting social media share scores and performance scores. Ensemble a multiple decision tree and voting the right prediction is what random forest do.

**8. K-Nearest Neighbors Algorithm:**

KNN is mainly used in market basket analysis or for retail analytics. Finding a similar product which customer is likely to buy or put in the basket. Prediction is done on the basis of similarity.

**9. Principal Component Analysis (PCA) Algorithm:**

PCA algorithm is used when there are multiple independent variables or in combining the features having a correlation in them. It is mainly used to reduce the number of features. Network fault analysis is an important use case for properly visualizing the features affecting the failure of the network.

**10. Artificial Neural Networks:**

ANN or deep learning has its application in various use case from image recognition, image generation, speech recognition translation.

With the increase of computation power deep learning has grown significantly. There are several sub-fields of deep learning. CNN (Convolution Neural Network ) mainly used in computer vision for recognition, segmentation, and tagging. Facebook automate picture tagging is based on CNN.  
RNN(Recurrent Neural Network ) has its application in mainly text processing, translation of text and also is applied in music generation, try using Google Magenta, GAN is gaining a lot of popularity in the generation of images, text and a lot more, check out deep fakes on google.