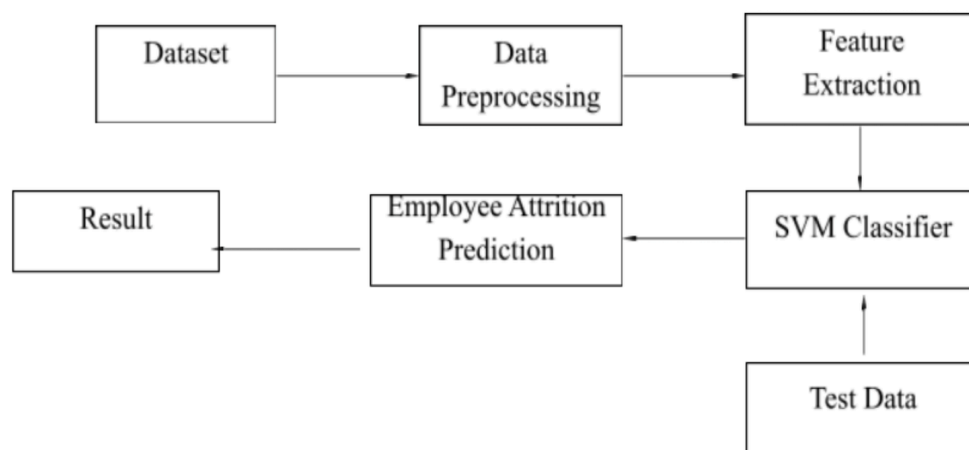# EMPLOYEE ATTRITION USING MACHINE LEARNING

- The main motive is to predict the employee attrition rate using various machine learning techniques.
- Machine Learning algorithms like SVM and Naive Bayes algorithms are employed in order to predict the attrition rate.
- There are various factors that affect the number of employees working in a company. One essential aspect we need to consider is that we need to retain potential employees in an organization. The various reasons behind why an employee leaves an organization is being analyzed.
- There are various factors that affect the number of employees in an organization. Parameters like salary, work culture, and work environment affects the employees working in an organization. So, first, we need to collect the datasets from the data source. After collecting the datasets, we need to apply various pre-processing techniques in order to remove null values and unwanted values.

- Then, the datasets are taken from various sources, various preprocessing techniques are employed in order to remove the null values and then the essential features are extracted in the Feature Extraction Phase. Then, using those features the machine learning model is trained in order to predict the employee attrition rate.
- Machine learning algorithms like Support Vector and Naive Bayes Classifiers are employed in order to predict the employee attrition rate. Finally, the performance of the model is predicted by calculating the accuracy score and showing it in the form of a confusion matrix.
- Only when we provide good quality data to the machine learning model, then the model will be trained properly and the model will predict properly.
- After cleaning the data, essential features are extracted in order to train the machine learning model. Then, in the classification module, the SVM algorithm is employed in order to predict the employee attrition rate.