LITERATURE SURVEY

TEAM ID: PNT2022TMID46626

Corporate Employee Attrition Analytics

S.NO	PAPER	AUTHOR	YEAR	METHOD & ALGORITHM	ACCURACY/ PRECISION
1	Predicting Employee Attrition Using Machine Learning Techniques	Francesca Fallucchi , Marco Coladangelo , Romeo Giuliano , and Ernesto William De Luca	3 November 2020	The methodology adopted in this work relates to the TDSP framework, Team Data Science Process: the scientific data analysis process is an agile and iterative data science methodology designed to offer predictive analysis solutions and efficient, intelligent applications.	The highest true positive rate of approximately 72%, correctly predicting 51 out of 71 workers who left the company.
2	Analyzing employee attrition using Decision tree algorithms	Alao D. & Adeyemo A. B.	1 March 2013	The basic algorithm for decision tree induction is a greedy algorithm that constructs decision trees in a top-down recursive divide-andconquer manner. A greedy strategies is usually used because they are efficient and easy to implement, but they usually lead to sub-optimal models. A bottom-up approach could also be used.	The algorithm TP Rate will be 129/(129+1+6+1+1+2)= 0.921.

3	Prediction of Employee Attrition Using Machine Learning and Ensemble Methods	Aseel Qutub, Asmaa AlMehmadi	March 2021	Six different machine learning models have been trained and evaluated in this work; decision tree model, random forest model, gradient boosting model, adaboost, and logistic regression model	Ensemble's Accuracy is 86.39%
4	Prediction of Employee Attrition Using Machine Learning Approach	M. B. Shete, A. G. Patil	August 2021	The proposed framework comprises of various AI procedures. To assemble prototypical, we take representative dataset which includes all over a significant time span records of the workers, then, at that point we perform information Pre-processing.	Random forest accuracy is 95.19450%
5	Employee Attrition Prediction Using Deep Neural Networks	Salah Al-Darraji, Dhafer G. Honi , Francesca Fallucchi , Ayad I. Abdulsada , Romeo Giuliano and Husam A. Abdulmalik	3 November 2021	Decision-making plays an essential role in the management and may represent the most important component in the planning process. Interestingly, artificial intelligence is utilized extensively as an efficient tool for predicting such a problem. The proposed work utilizes the deep learning technique along with some preprocessing steps to improve the prediction of employee attrition.	The prediction accuracy using the original dataset is about 91%, whereas it is about 94% using a synthetic dataset.