HR Analytics: Employee Prediction Churn

Overview

HR analytics:

Human Resource Analytics (HR Analytics) is defined as the area in the field of analytics that deals with people analysis and applying the analytical processes to the human capital within the organization to improve employee performance and improving employee retention.

It allows for data-driven decision-making in all dimensions related to Employee Management.

Employee Turnover

- It's a process related to employees leaving the company
- Also known as employee Attrition or Employee Churn
- If not dealt with properly, Results in High Loss to the organization.
- Having predicted this, we can create a strategy related to the company's hiring and retention policies

Problem Statement:

You have to build a model for Employee Turnover prediction which can be used
Hiring/Assessing and Retention
Advantages of prediction Turnover beforehand:

- We can identify good workers and change the strategy in order to Retain them
- We can also start the hiring process of new employees on time

Data Description:

We have a dataset replicating the Data of Employees of an Indian Firm. The Feature Description of each feature is given below:

- **EmpID**: EmployeeID of the employee in his organization.
- **Satisfaction**: Job Satisfaction score calculated by averaging the ratings given by the employee in Organisation's last year's annual survey.
- **Evaluation**: An evaluated score calculated by averaging the ratings given by Manager to Employee in last year's Annual Appraisal Meetings.

- **Number_of_Project**: Total number of Projects employee has worked on, in the current organization since joining.
- **Average_Monthly_Hours**: Average hours per month employee has spent in Office in last fiscal year.
- **Time_spent_company**: Number of years the employee has been part of the Organisation.
- **Work_accident**: Count of work-related accidents employee has been part of.
- **Promotion**: Number of times employee has been promoted since joining the Organisation
- **Department**: Department of Employee.
- **Salary_INR**: Salary of the Employee.
- **Churn**: Whether the employee left the Company or Not. value 1 indicating he left the company

Train File

- CSV containing the Churn column in the dataset. Churn = 1 means the Employee left the Organisation.

Test File

CSV containing everything except Churn is to be predicted.

Submission File Format

Variable	Description
EmpID	Employee ID
Churn	Predicted value (1 or 0)

Public and Private LeaderBoard

The test file is further divided into Public (25%) and Private (75%).

- Your initial responses will be checked and scored on the Public data.
- The final rankings would be based on your private score which will be published once the competition is over.

Evaluation Criteria

Your model performance will be evaluated on the basis of the **Accuracy Score**.

Rubric

Component	Weightage
Data Cleaning and Data Visualization	25%
Model Building and Evaluation	60%
Pipeline and Deployment (Dashboard/Webapp)	15%