**About Dataset**

The Synthetic Employee Attrition Dataset is a simulated dataset designed for the analysis and prediction of employee attrition. It contains detailed information about various aspects of an employee's profile, including demographics, job-related features, and personal circumstances.

The dataset comprises 74,498 samples, split into training and testing sets to facilitate model development and evaluation. Each record includes a unique Employee ID and features that influence employee attrition. The goal is to understand the factors contributing to attrition and develop predictive models to identify at-risk employees.

This dataset is ideal for HR analytics, machine learning model development, and demonstrating advanced data analysis techniques. It provides a comprehensive and realistic view of the factors affecting employee retention, making it a valuable resource for researchers and practitioners in the field of human resources and organizational development.

**FEATURES:**

**Employee ID**: A unique identifier assigned to each employee.  
**Age:** The age of the employee, ranging from 18 to 60 years.  
**Gender:** The gender of the employee  
**Years at Company:** The number of years the employee has been working at the company.  
**Monthly Income:** The monthly salary of the employee, in dollars.  
**Job Role:** The department or role the employee works in, encoded into categories such as Finance, Healthcare, Technology, Education, and Media.  
**Work-Life Balance:** The employee's perceived balance between work and personal life, (Poor, Below Average, Good, Excellent)  
**Job Satisfaction:** The employee's satisfaction with their job: (Very Low, Low, Medium, High)  
**Performance Rating:** The employee's performance rating: (Low, Below Average, Average, High)  
**Number of Promotions:** The total number of promotions the employee has received.  
**Distance from Home:** The distance between the employee's home and workplace, in miles.  
**Education Level:** The highest education level attained by the employee: (High School, Associate Degree, Bachelor’s Degree, Master’s Degree, PhD)  
**Marital Status:** The marital status of the employee: (Divorced, Married, Single)  
**Job Level:** The job level of the employee: (Entry, Mid, Senior)  
**Company Size:** The size of the company the employee works for: (Small,Medium,Large)  
**Company Tenure:** The total number of years the employee has been working in the industry.  
**Remote Work:** Whether the employee works remotely: (Yes or No)  
**Leadership Opportunities:** Whether the employee has leadership opportunities: (Yes or No)  
**Innovation Opportunities:** Whether the employee has opportunities for innovation: (Yes or No)  
**Company Reputation:** The employee's perception of the company's reputation: (Very Poor, Poor,Good, Excellent)  
**Employee Recognition:** The level of recognition the employee receives:(Very Low, Low, Medium, High)

**Attrition:** Whether the employee has left the company, encoded as 0 (stayed) and 1 (Left).