

## PROBLEM SOLVING IN ARTIFICIAL INTELLIGENCE

A company works with number of employees; all the works are dependents on the employees. Even if one of the employees resign the job immediately then assigned work will be not finished at the time, so delivery of the project to the clients will be delayed. Company planned to make solution for this, they want to know which employee may resign next. If they know previously, they can arrange alternative to avoid such problem. As an AI Engineer you must give Solution to this.

- A) How will you achieve this in AI?
- B) Find out the 3 -Stage of Problem Identification
- C) Name the project
- D) Create the dummy Dataset.

### **A) How will you achieve this in AI?**

In the above problem, the xyz company is at the risk of losing an employee so that their work may not be finished and projects may be delayed. So if they found the employee who might resign next, they can arrange an alternate solution.

Using AI We can solve this. At first we have to collect some input datasets from the xyz company such as employee id, age, Monthly Income, Last promotion, monthly working hours, Performance rating, Employee satisfaction, Total working years. By analysing these datasets using AI, we can find whether the employee might resign or not.

### **B) 3-Stage of Problem Identification**

#### **STAGE1: Domain Selection – Machine Learning**

As the input datasets are in the form of excel sheet produced by the company, we go for machine learning in domain selection

#### **STAGE2: Learning Selection – Supervised learning**

In this problem as the requirement of the company is clear(i.e.) Employee resignation will be 'yes' or 'no'. Therefore, input and output datasets are very clear.so we go for supervised learning.

### STAGE3: Supervised Learning – Classification

Here classification of the datasets are done based on its Category, so we move on to classification technique under supervised learning.

#### C) Name of the project:

EMPLOYEE ATTRITION PREDICTION

#### D) Create the dummy dataset

Employee id	Age	Monthly income	Last Promotion In years back	Monthly Working hours	Performance rating	Total Working years	Employee attrition
134561	28	40000	-	130	Low	3	Yes
134562	45	155000	2	170	Medium	5	No
134563	34	45000	4	125	Low	7	Yes
134564	29	80000	3	240	High	2	Yes
134565	47	215000	1	190	High	6	No