Salary Distribution

The dataset includes information on yearly salaries expressed in euros. An individual's yearly pay is represented by each element in the dataset.

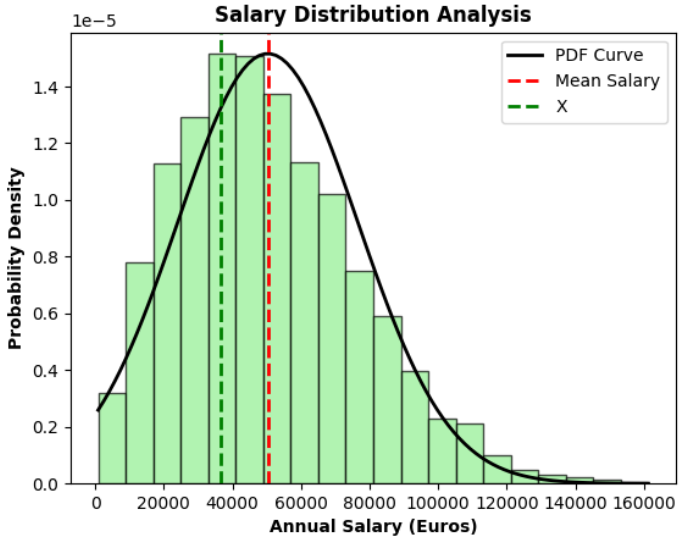
Distribution :
The PDF curve, fitted using the normal distribution , offers insights into the overall pattern of the salary distribution. From the graph we can observe that there is a higher curve on the left side of the mean value and a declining curve on the right side, it indicates that the salary distribution is skewed to the left. This type of distribution is called a left skewed distribution.

$$f(x;\mu,\sigma) = \frac{1}{\sigma\sqrt{2\pi}} e^{-1/2\left(\frac{x-\mu}{\sigma}\right)^2}$$

Mean value :
The average of a collection of numerical values is called the mean , which is a measure of central tendency. To compute it, add up all the values in the dataset, then divide the total number of values by the sum of the values. The mean value of the data is 50320.26 Euros.

$$\underline{mean = \sum_{i=1}^{n} arr[i]}$$
$$n$$

X value (33%):
X is determined such that 33% of people have a salary above 36562.68 Euros , using the numpy.percentile function.



Student Name : Alahari Sindhu kavya
Student Id : 22070331