Session on Descriptive statistics

Date : 3 July 2021

Platform: Google meet

Speakers: Vishal Agarwal, Subhodip Choudhary

Number of attendees: 10+

Timeline of the session:-

1 min- The session on descriptive statistics starts. Vishal Agarwal introduces the students to raw data and how if not processed properly can obscure the overall patterns leaving it useless for statistical use

2 min- Vishal Agarwal discusses frequency distribution its example histograms and how they are the most widely used reduction technique in descriptive statistics

3 min- Vishal Agarwal speaks about the measurement of central tendency its uses to summarise meaningful conclusions and its various forms of calculation like arithmetic mean, median, mode, and more parameters. Arithmetic mean is discussed and how it has a flaw of being affected extreme values or fluctuations in sampling.

4 min- The measurement of the median is discussed and how it is not affected by the flaw of meaning therefore can be a better measurement tool for ranked data in the context of consumer preference and rating

5 min- Boxplot is discussed as a form for plotting the median and the various data about it

6 min- The measurement of mode is explained and how it helps in important parameters like summarising the most popular products during festival season etc.
Cases of bimodal and multimodal are discussed where the mode cannot be uniquely identified

7 min- Vishal Agarwal talks about the measures of dispersion and how it is used to measure how much the values are scattered in a data set

8 min- The first parameter for measurement of dispersion Range and its inability to be used when the max or min value becomes an extreme is discussed. IQR(Interquartile Range) is also introduced

9 min- Vishal Agarwal discusses standard deviation and Subhodip Choudhary talks about how it is used to determine how spread out the data is from the mean and the lesser it is the more closer the values are to the mean. Various examples are discussed where finding standard deviation and give critical insight about the data.

23 min- Subhodip Choudhary introduces coefficient of variance and its use in various comparisons of two different data sets like in share market where it can be used to calculate the risk of buying a particular stock by comparing its coefficient of variance

34 min- Vishal Agarwal talks about skewness as a parameter for determining the symmetricity of a particular data set. It shows how the data is spread across the whole axis.

36 min- Kurtosis and its various types are discussed. Its uses in the stock market are talked about how a leptokurtic curve carries more risk with it

37 min- Speakers answer the questions of the students.

38 min- The session is concluded