Glossary

1. Binomial Distribution

A distribution which gives the probability of observing X successes in a fixed number (n) of independent Bernoulli trials. p represents the probability of a success on a single trial.

2. Coefficient

A coefficient is a number in front of a variable. It is a constant by which a variable is multiplied.

3. Discrete

A type of random variable which may take on only a limited set of values, such as 1,2,3,...,10. The list may be finite, or there may be an infinite number of values. A discrete random variable is to be contrasted with a continuous random variable.

4. Distribution

A probability function which describes the relative frequency of occurrence of data values when sampled from a population. Distributions are either continuous, typically used for variables which can be measured, or discrete, typically used for data that are the result of counts.

5. Lambda

In probability theory, lambda represents the density of occurrences within a time interval, as modelled by the Poisson distribution. Lambda uppercase symbol is Λ and lowercase symbol is λ .

6. Leptokurtic Distribution

Distributions with negative or positive excess kurtosis are called leptokurtic distributions respectively.

7. Negative Binomial Distribution

A discrete probability distribution useful for characterizing the time between Bernoulli trials is known as Negative Binomial distribution.

8. Parameters

Parameter is a numeric value which characterizes a probability distribution. The mean and variance are the typical examples. Statistics are used to estimate parameters.

9. Pascal Distribution

Pascal distribution is another name for the Negative Binomial distribution.

10. Poisson Distribution

A distribution often used to express probabilities concerning the number of events per unit is known as Poisson distribution.

11. Probability Mass Function

Variability between observations made at the same values of the independent variable or variables is probability mass function.

12. Random Variable

A function which assigns a numerical value to all possible outcomes of an experiment is a random variable. The values of random variables differ from one observation to the next in a manner described by their probability distribution.

13. Skewed

A characteristic applicable to probability distributions or samples which refers to a lack of symmetry is referred to as skewed.

14. Summation

Summation is the operation of adding a sequence of numbers; the result is their sum or total and is denoted as Σ .

15. Variance

The variance is a measure of how far a set of numbers is spread out. The value calculated will always be greater than or equal to zero, with larger values corresponding to data which is more spread out. If all data values are identical, the variance is equal to zero.