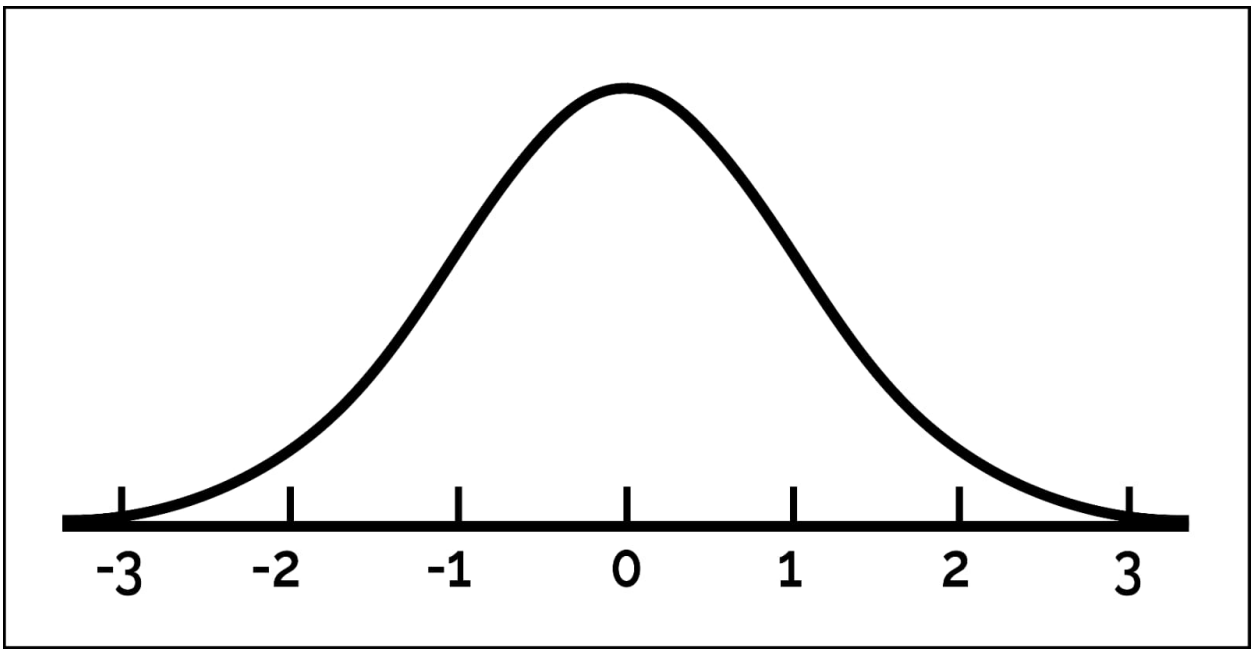
Type of data distribution:

1.normal distribution:

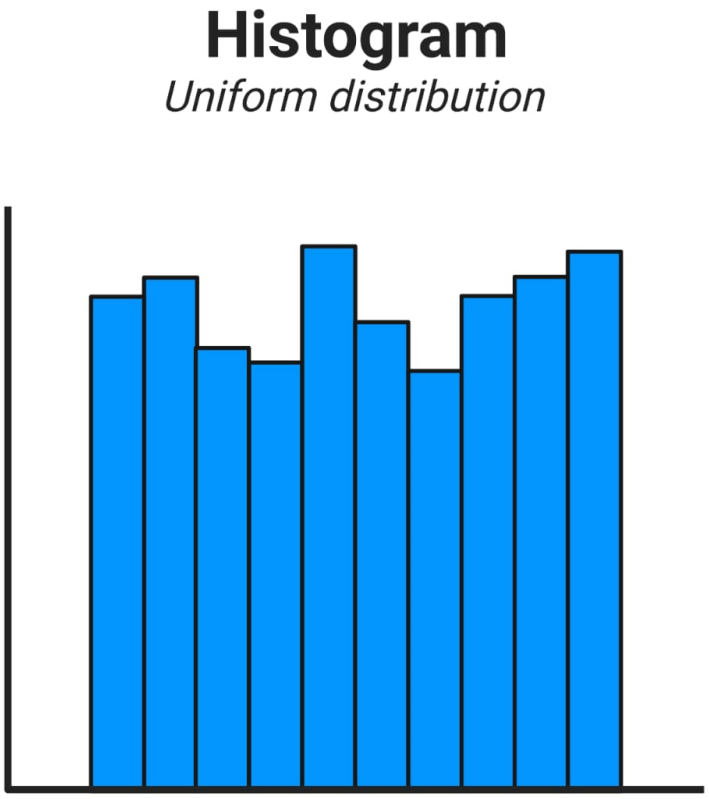
The way data is distributed in general, I can not control **it 100% but can understand it.**

As: degrees , natural phenomena



2.uniform distribution:

A probability distribution in which all values within a given range have the same probability.

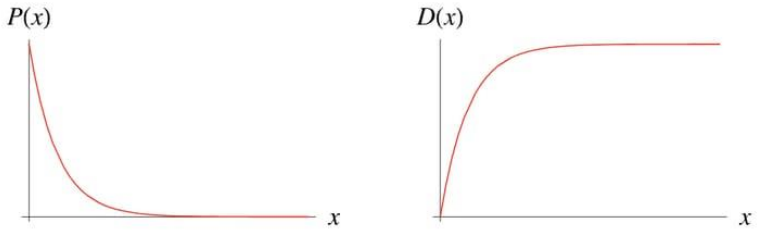


3.exponential distribution:

Continuous distribution, the change is very rapid at the beginning and then gradually decreases, its curve starts with a high value and then decreases quickly, the probability is highest at a value close to zero

Wolfram MathWorld FROM THE MAKERS OF MATHEMATICA AND WOLFRAM|ALPHA

Exponential Distribution



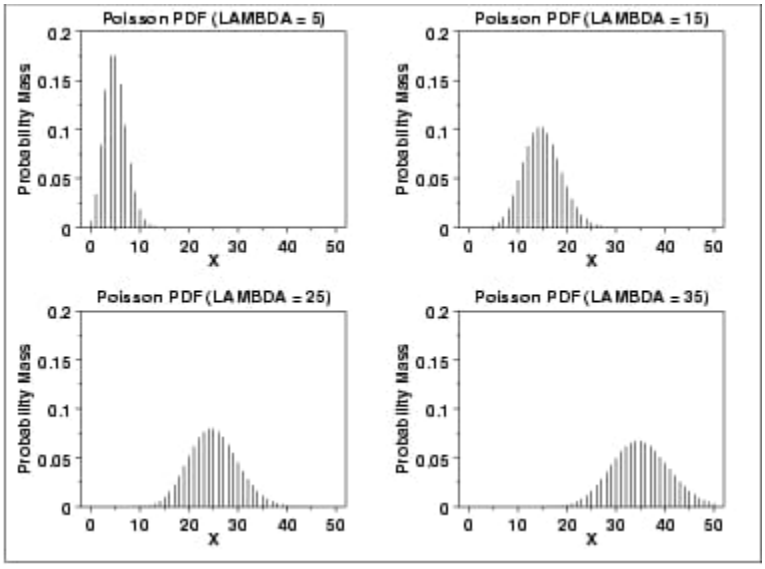
Given a Poisson distribution with rate of change λ, the distribution of waiting times between successive changes (with $k = 0$) is

$$D(x) \equiv P(X \le x) \quad (1)$$
$$= 1 - P(X > x) \quad (2)$$
$$= 1 - e^{-\lambda x}, \quad (3)$$

and the probability distribution function is

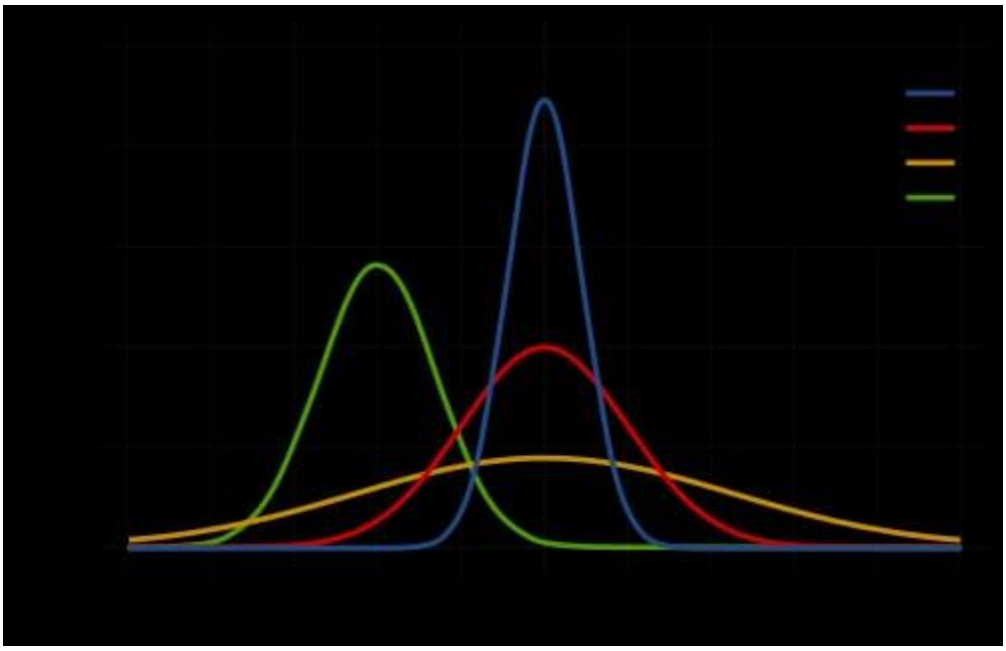
4. poisson distribution :

It measures the number of events that occur in a specific period of time. It is dedicated to rare and sudden events. It has a discrete probability distribution and depends on a constant rate. The events are independent of each other.



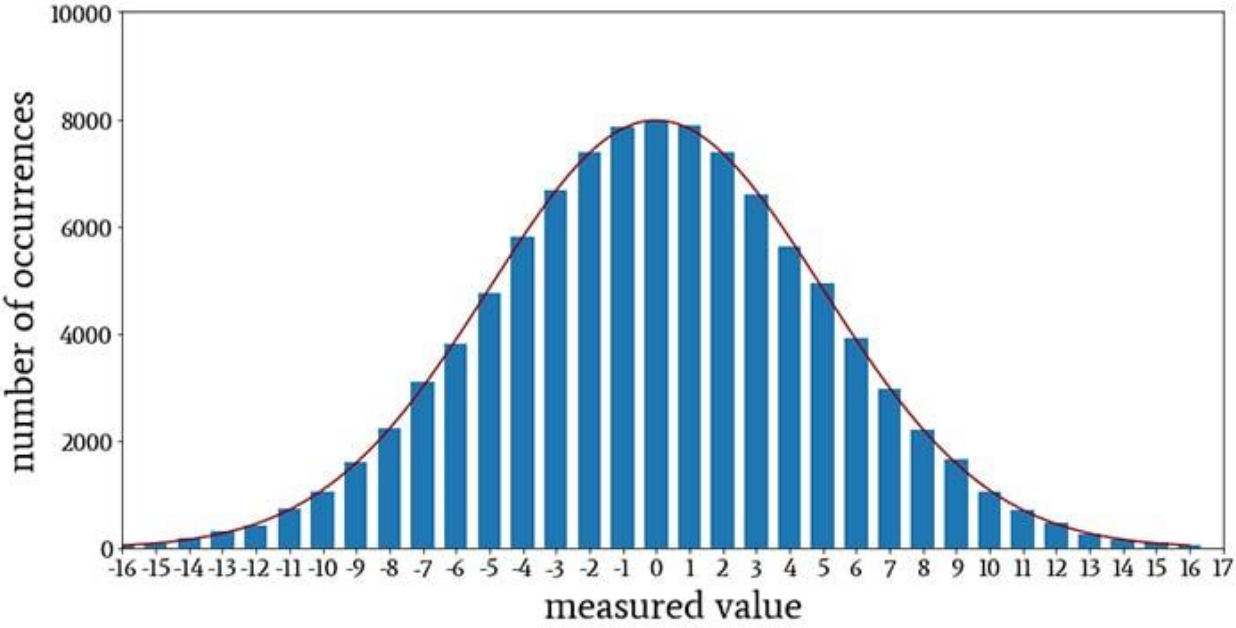
5.gamma distribution:

It is used when we measure the time until several successive events occur. It is more general and comprehensive than exponential. There is greater control over the shape of the distribution through beta alpha. It is a continuous distribution. It shows a rapid change in the beginning if alpha is small and then stabilizes. The distribution includes the expontial as a special case, alpha = 1.



6.binonial distribution:

It is used in experiments that result in success and failure.


10000
8000
6000
4000
2000
0
number of occurrences
-16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
measured value