Multinomial Distribution

‹ Previous Next ›

Multinomial Distribution

Multinomial distribution is a generalization of binomial distribution.

It describes outcomes of multi-nomial scenarios unlike binomial where scenarios must be only one of two. e.g. Blood type of a population, dice roll outcome.

It has three parameters:

`n` - number of possible outcomes (e.g. 6 for dice roll).

`pvals` - list of probabilties of outcomes (e.g. [1/6, 1/6, 1/6, 1/6, 1/6, 1/6] for dice roll).

`size` - The shape of the returned array.

Example

Draw out a sample for dice roll:

```
from numpy import random

x = random.multinomial(n=6, pvals=[1/6, 1/6, 1/6, 1/6, 1/6, 1/6])

print(x)
```

Try it Yourself »

Note: Multinomial samples will NOT produce a single value! They will produce one value for each `pval`.

Note: As they are generalization of binomial distribution their visual representation and similarity of normal distribution is same as that of multiple binomial distributions.

‹ Previous

Next ›

Top References

HTML Reference
CSS Reference
JavaScript Reference
SQL Reference
Python Reference
W3.CSS Reference
Bootstrap Reference
PHP Reference
HTML Colors
jQuery Reference
Java Reference
Angular Reference

Top Examples

HTML Examples
CSS Examples
JavaScript Examples
How To Examples
SQL Examples
Python Examples
W3.CSS Examples
Bootstrap Examples
PHP Examples
jQuery Examples
Java Examples
XML Examples

Web Certificates

HTML Certificate
CSS Certificate
JavaScript Certificate
SQL Certificate
Python Certificate
jQuery Certificate
PHP Certificate
Bootstrap Certificate
XML Certificate

Get Certified »