Poisson binomial distribution

Def

Parameter

belongs to

probability of success for each of n trials

trials

Support

belongs to

PDF

=

where

=

Recursive formula:

= , if

= if

where

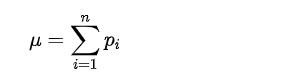
=

CDF

=

Expected Value

=



Variance

=



Skewness

=

Ex. Kurtosis

=

MGF

=

CF

=

PGF

=

Chernoff bound

Ref

[Poisson binomial distribution - Wikipedia](https://en.wikipedia.org/wiki/Poisson_binomial_distribution)