Description

Johnson transforms to normality using the Z family of distributions. It performs the Johnson Transformation based on the method of the percentiles. It includes the Anderson-Darling Test.

Details

The values of the Johnson Transformation Function can be obtained
Author(s)

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References


See Also

<pkg>

Examples

# transforming to normality a random sample with beta distribution
x <- rbeta(30,2,3)
y <- RE.Johnson(x); print(y)

# working with the transformed variable
x <- runif(100)
y <- RE.Johnson(x) $ transformed; print(y)

# working with the p-values
x <- rgamma(100,2,1)
y <- RE.Johnson(x)$p; print(y)
Description

RE.ADT performs the Anderson-Darling test according to Trujillo-Ortiz(2007)

Usage

RE.ADT(x)

Arguments

x  x vector of observations

Details

For only work with p-values see the second example

Value

The object returned consists of the following items: p-value the resulting p-value of the transformation

Note

The function RE.ADT use the traditional algorithm while ADGofTest package is based on the Marsaglia approach.

Author(s)

Edgar Santos Fernandez

References

Examples

# performing the AD test for a random sample
x <- rnorm(100, 10, 2)
y <- RE.ADT(x); print(y)

# working with the p-value
x <- runif(100)
y <- RE.ADT(x) $p; print(y)

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RE.Johnson  

Johnson transformation

Description

Johnson transform to normality using the Z family of distributions. Performs the Johnson Transformation based on the method of the percentiles. Returns the transformed variable, the function used and the p-value of the transformation.

Usage

RE.Johnson(x)

Arguments

x  
x vector of observations

Details

The values of the Johnson Transformation Function can be obtained

Value

The objects returned consists of the following items: function type of function used in transformation (SB, SL or SU) p-value the resulting p-value of the transformation transformed the data vector of transformed variable f.gamma, f.lambda, f.epsilon and f.eta the values of the variables in the transformation function.

Note

Note that the transformed variable often present a good fit to the normal distribution.

Author(s)

Edgar Santos Fernandez


References


See Also

<pkg>

Examples

# transforming to normality a random sample with beta distribution
x <- rbeta(30,2,3)
y <- RE.Johnson(x); print(y)

# working with the transformed variable
x <- runif(100)
y <- RE.Johnson(x)$transformed ; print(y)

# working with the p-values
x <- rgamma(100,2,1)
y <- RE.Johnson(x)$p ; print(y)
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