

The Exponentiated Hypoexponential Distribution

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Abstract : In this paper we study the Exponentiated Hypoexponential Distribution with different parameters. The distribution added a parameter to the n parameters of the Hypoexponential distribution. We first derive a closed expression of the probability density function and the cumulative distribution function of Maximum Exponentiated Exponential distribution. These functions are used to determine an exact expression of the probability density function, the cumulative function, reliability function, and hazard function of our Exponentiated Hypoexponential Distribution. We discuss estimation of the parameters by maximum likelihood estimators. The distribution has been fitted to a real life data set and the fit has been found to be a serious competitor to the others.

Keywords : exponentiated exponential distribution, exponentiated hypoexponential distribution, maximum likelihood estimation

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