Upper and lower bounds for ordered random variables

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Abstract

Our aim was to examine upper and lower bounds for some reliability functions for independent but not identically distributed random variables. This problem was studied by different authors when the random variables are independent and identically distributed (see [2, 3, 4], among others).

In the article and in the presentation a short overview on the wide field of stochastic orderings is given, showing some results given by Torrado and Lillo [5] and also some of the current research the author is doing at the moment. Some applications to multiple-outlier models will be briefly discussed. Multiple-outlier models are interesting due to applications in the study of the robustness of different estimators of parameters of a wide range of distributions, see e.g. Balakrishnan [1].

Bibliography

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