

On Simulation Some Life Data Distributions

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Abstract:

First, the paper presents in short algorithms for simulating some distributions which are used in the paper. Then, some probability distributions are introduced, which are mixtures between distributions of a minim and a maxim of sequences of life data having Lomax (Pareto) or Weibull distributions (called *target* distributions), mixed up with truncated geometric or Poisson distributions. These distributions could be used to calculate the reliability of multicomponent serial or parralel systems and particularly for simulating such systems. Apart from composition methods for simulating these distributions, some other simulation algorithms, based on inverse or rejection methods, are presented.