

## عنوان مقاله:

Bayesian Estimation of Reliability of the Electronic Components Using Censored Data from Weibull Distribution:  
Different Prior Distributions

## محل انتشار:

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## خلاصه مقاله:

The Weibull distribution has been widely used in survival and engineering reliability analysis. In life testing experiments is fairly common practice to terminate the experiment before all the items have failed, that means the data are censored. Thus, the main objective of this paper is to estimate the reliability function of the Weibull distribution with uncensored and censored data by using Bayesian estimation. Usually it is assigned prior distributions for the parameters (shape and scale) of the Weibull distribution. Instead, we assign prior distributions for the reliability function for a fixed time, that is, for the parameter of interest. For this, we propose different non-informative prior distributions for the reliability function and select the one that provides more accurate estimates. Some examples are introduced to illustrate the methodology and mainly to investigate the performance of the prior distributions proposed in the paper. The Bayesian analysis is conducted based on Markov Chain Monte Carlo (MCMC) methods to generate samples from the posterior distributions.

## کلمات کلیدی:

Bayesian, maximum-likelihood, Weibull, prior distribution, copula, reliability function, Jeffreys, reference, MCMC

## لینک ثابت مقاله در پایگاه سیویلیکا:

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