

Survival and Hazard Maximum Likelihood Estimator with Covariate Based on Right Censored Data of Weibull Distribution

Authors : Al Omari Mohammed Ahmed

Abstract : This paper focuses on Maximum Likelihood Estimator with Covariate. Covariates are incorporated into the Weibull model. Under this regression model with regards to maximum likelihood estimator, the parameters of the covariate, shape parameter, survival function and hazard rate of the Weibull regression distribution with right censored data are estimated. The mean square error (MSE) and absolute bias are used to compare the performance of Weibull regression distribution. For the simulation comparison, the study used various sample sizes and several specific values of the Weibull shape parameter.

Keywords : weibull regression distribution, maximum likelihood estimator, survival function, hazard rate, right censoring

Conference Title : ICMCS 2016 : International Conference on Mathematics and Computational Science

Conference Location : Paris, France

Conference Dates : February 22-23, 2016