Abstract

Control charts are widely used for process monitoring. Software reliability process can be monitored efficiently by using Statistical Process Control (SPC). It assists the software development team to identify failures and actions to be taken during software failure process and hence, assures better software reliability. In this paper we propose a control mechanism...
based on the cumulative quantity between observations of time domain failure data using mean value function of Weibull distribution, which is based on Non Homogenous Poisson Process (NHPP). The Maximum Likelihood Estimation (MLE) method is used to derive the point estimators of a two-parameter Weibull distribution.

Reference


Index Terms

Computer Science
Software Engineering

Key words

Statistical Process Control
Software reliability
Weibull Distribution
Mean Value function
Probability limits
Control Charts