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 proposed a control mechanism
based on order statistics of the cumulative quantity between observations of time domain failure data using mean value function of Exponential imperfect debugging, which is based on Non Homogenous Poisson Process (NHPP). The Maximum Likelihood Estimation (MLE) method is used to derive the point estimators of the distribution.

References


Index Terms

Computer Science

Software Engineering

Keywords

Statistical Process Control

Exponential imperfect debugging

Mean Value function

Probability limits

Control Charts
WiMAX