Abstract

The nature and complexity of software have changed significantly in the last few decades. With the easy availability of computing power, deeper and broader applications are made. It has been extremely necessary to produce good quality software with high precession of reliability right in the first place. Olden day’s software errors and bugs were fixed at a later stage in the
software development. Today to produce high quality reliable software and to keep a specific time schedule is a big challenge. To cope up the challenge many concepts, methodology and practices of software engineering have been evolved for developing reliable software. Better methods of controlling the process of software production are underway. One of such methods to assess the software reliability is using control charts. In this paper we proposed an NHPP based control mechanism by using order statistics with cumulative quantity between observations of failure data using mean value function of exponential distribution.

Reference

- Hong Pharm; System Reliability; Springer;2005;Page No.281

Index Terms

Computer Science
Software Engineering

Key words

Ordered Statistics
Statistical Process Control (SPC)
Control Limits
software reliability

software quality