Abstract

This paper deals with a stochastic model for a two-unit hot standby combined hardware-software system in which one unit is operative and the other is hot standby. The operative unit may have hardware or software failures and goes to repair. This leads to degradation of the system and then a hot standby unit is under operation. Further, on hardware or software failures of the hot standby unit the system goes to complete failures. Various measures of performance of the system are obtained using semi-Markov process and regenerative point techniques. Numerical results and graphs pertaining to a particular case are also included.

References

Analysis of Stochastic Model on a Two-Unit Hot Standby Combined Hardware-Software System

290-293


Index Terms

Computer Science  Software Engineering

Keywords
Two-Unit Hot Standby System  Combined hardware-software system  reliability
mean up time

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semi-Markov and Regenerative point techniques.