Abstract

The ready queue estimation problem appears when many processes remain in the ready queue after the sudden failure. The system manager has to decide immediately how much further time is required to process all the remaining jobs in the ready queue. In lottery scheduling, this prediction is possible with the help of sampling techniques. To strengthen the prediction methodology, the auxiliary source of data is often utilized. This paper considers the three additional data sources as (i) process size (ii) process priority and (iii) process expected time. The Ratio method, existing in sampling literature, is used to predict the time required for remaining jobs after failure. A comparative study between different auxiliary sources has been made. It is found that highly correlated source of auxiliary information provides better processing time prediction.

References


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**Index Terms**

Computer Science Information Sciences

**Keywords**

Scheduling  Ratio Estimator  Bias  Variance  Confidence Interval  Ready Queue  Expected Time (et)  Size(s)  Priority (p)