

عنوان مقاله:

DISCRETE-TIME GI/D-MSP/\/K QUEUE WITH N THRESHOLD POLICY

محل انتشار:

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خلاصه مقاله:

This paper presents a discrete-time single-server finite buffer N threshold policy queue with renewal input and discreteMarkovian service process. The server terminates service whenever the system becomes empty, and recommencesservice as soon as the number of waiting customers in the queue is N. We obtain the system-length distributionsat pre-arrival and arbitrary epochs using the supplementary variable and the imbedded Markov chain techniques. Various performance measures such as the loss probability, mean queue length and mean waiting time in the queue along with some numerical results have been presented. The proposed model has potential applications in the areas of computer and telecommunication systems

کلمات کلیدی:

Discrete Markovian service process, N threshold policy, Finite buffer, Queue, Supplementary variable

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