

Comparative study on job scheduling using priority rule and machine learning

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ABSTRACT

Cloud computing is a potential technique for running resource-intensive applications on a wide scale. Implementation of a suitable scheduling algorithm is critical in order to properly use cloud resources. Shortest Job First (SJF) and Longest Job First (LJF) are two well-known corporate schedulers that are now used to manage Cloud tasks. Although such algorithms are basic and straightforward to develop, they are limited in their ability to deal with the dynamic nature of the Cloud. In our research, we have demonstrated a comparison in our investigations between the priority algorithm performance matrices and the machine learning algorithm. In cloudsim and Google Colab, we finished our experiment. CPU time, turnaround time, wall clock time, waiting time, and execution start time are all included in this research. For time and space sharing mode, the cloudlet is assigned to the CPU. VM is allocated in space-sharing mode all the time. We've achieved better for SJF and a decent machine learning algorithm outcome as well.

KEYWORDS

Cloud computing; Priority rule; Time share; Space share; Adaboost Classifier

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