

## Analytical Study of CPU Scheduling Algorithms

**Authors :** Keshav Rathi, Aakriti Sharma, Vinayak R. Dinesh, Irfan Ramzan Parray

**Abstract :** Scheduling is a basic operating system function since practically all computer resources are scheduled before use. The CPU is one of the most important computer resources. Central Processing Unit (CPU) scheduling is vital because it allows the CPU to transition between processes. A processor is the most significant resource in a computer; the operating system can increase the computer's productivity. The objective of the operating system is to allow as many processes as possible to operate at the same time in order to maximize CPU utilization. The highly efficient CPU scheduler is based on the invention of high-quality scheduling algorithms that meet the scheduling objectives. In this paper, we reviewed various fundamental CPU scheduling algorithms for a single CPU and showed which algorithm is best for the particular situation.

**Keywords :** computer science, Operating system, CPU scheduling, cpu algorithms

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