# Scheduling in Cloud Networks Using Chakoos Algorithm

**Authors :** Masoumeh Ali Pouri, Hamid Haj Seyyed Javadi

**Abstract :** Nowadays, cloud processing is one of the important issues in information technology. Since scheduling of tasks graph is an NP-hard problem, considering approaches based on undeterminisitic methods such as evolutionary processing, mostly genetic and cuckoo algorithms, will be effective. Therefore, an efficient algorithm has been proposed for scheduling of tasks graph to obtain an appropriate scheduling with minimum time. In this algorithm, the new approach is based on making the length of the critical path shorter and reducing the cost of communication. Finally, the results obtained from the implementation of the presented method show that this algorithm acts the same as other algorithms when it faces graphs without communication cost. It performs quicker and better than some algorithms like DSC and MCP algorithms when it faces the graphs involving communication cost.

**Keywords :** cloud computing, scheduling, tasks graph, chakoos algorithm
**Conference Title :** ICSES 2024 : International Conference on Software Engineering and Systems
**Conference Location :** Toronto, Canada
**Conference Dates :** July 18-19, 2024