

## Abstract Details

**Title:** Minimization of Cost and Execution Time using HRSA Ant Colony Algorithm

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**Abstract:** Ant colony algorithm is an optimization technique which can be used in many NP hard problems like Resource Scheduling problem, TSP, knapsack problem etc. In this paper researcher has optimize the resource scheduling problem by Ant Colony algorithm. In order to implement this scheduling problem, researcher proposed an algorithm, an application have been developed which uses the simulated Grid environment i.e. GridSim. Researcher has implemented the application using JAVA programming language over the GridSim. The performance of the Heuristic Resource Scheduling Algorithm (HRSA) is compared with the Random Resource Scheduling Algorithm (RRSA) which randomly selects resources from the list of available resources.

**Keywords:** Ant Colony Optimization, Pheromones, Optimization, Resource Scheduling Problem.