Abstract

Job-shop scheduling problem is of how to determine settlement priority of each job that involves machines and operations with a variable time. In this final task, the algorithm that used is a combintation of Particle Swarm Optimization (PSO) and Simulated Annealing (SA). PSO was chosen because it is a suitable and practical algorithms that fit used to considerable scope, in addition to the PSO is also heuristic algorithm that has a high degree of efficiency because it uses a local search and global search in the search for a solution. However, PSO has the potential solutions generated trapped in local optimum, then the SA algorithm is used wich has a cooling scheduling to avoid the problem. That way we will get a more optimal solution.

Key words : Job-hop scheduling, Particle Swarm Optimization, Simulated Annealing, Cooling Scheduling