

ABSTRACT

Genetic Algorithm's was introduced by John Holland, which it's inspired from Darwin evolution theory. Genetic Algorithm's usually to solve optimization problem. Unfortunately, Genetic algorithm's encounter premature convergence sometimes, a condition that all of operator in genetic algorithm doesn't operate well in generate offspring from their parent.

Tabu search is one of method to solve combinatorial optimization problem which included in local search methods. The purpose of this method is to search best solution effectively from large scale of combinatorial optimization problem.

So, genetic algorithm will be combined by tabu search to prevent premature convergence and will be used in flow shop problem, types of production scheduling which has same specific sequence. Flow shop problem will be used in this area is finding minimum makespan.

Kata Kunci : Genetic Algorithm, Tabu search, Flow Shop.