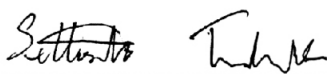


Sittisak Teachamatekul 2006: Application of Parallel Computer for Tabu Search.
Master of Engineering (Industrial Engineering), Major Field: Industrial Engineering,
Department of Industrial Engineering. Thesis Advisor: Mr. Pornthep Anssornnitisarn,
Ph.D. 104 pages.
ISBN 974-16-2254-6

Tabu Search is one of the powerful meta - heuristics in solving a production scheduling problem. Similar to other meta - heuristics approaches, it demands computational time while searching through the feasible solution space. This research modifies an original tabu search algorithm on parallel computer system in order to achieve better results in both time and quality of the solution. In this research, a parallel tabu search algorithm is developed and tested with standard flow shop scheduling problems. The performance of the parallel tabu search on the test problem is compared with the other meta – heuristics approaches. The experimental results indicated that the proposed parallel tabu search algorithm solved the flow shop problem with high accuracy in a very short time.



Student's signature



Thesis Advisor's signature

24 / 5 / 49