

CSP에 기초한 개선된 Randomizing 알고리즘을 이용한 Job Shop 일정계획에 관한 연구

A Study on the Job Shop Scheduling Using Improved Randomizing algorithm based on CSP

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Abstract

The objective of this paper creates a heuristic method of JSSP(Job Shop Scheduling Problem) to be solved effectively. In order to create this heuristic method, the paper propose the new one that combines CSP(Constraint Satisfaction Problem) with a improved Randomizing algorithm and uses ILOG programming library to solve.

The paper consists of initial solution a search algorithm, a improved solution search algorithm, a improved randomizing search algorithm. It creates a new and powerful method that after finding a enough good solution, can reduce the number of iteration when finding a improved solution and finish searching solution if this method don't find a solution in limited time or fail numbers when trying to find the best approximative solution.

We compare the total process time and computational time in the results of this paper with other two methods to verify how well solution search.

Keyword : Job Shop Scheduling, Constrained Satisfaction Problem

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