



Cooperation between Branch and Bound and Evolutionary Approaches to Solve a Bi-objective Flow Shop Problem

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Résumé en anglais

Over the years, many techniques have been established to solve NP-Hard Optimization Problems and in particular multiobjective problems. Each of them are efficient on several types of problems or instances. We can distinguish exact methods dedicated to solve small instances, from heuristics - and particularly metaheuristics - that approximate best solutions on large instances. In this article, we firstly present an efficient exact method, called the two-phases method. We apply it to a biobjective Flow Shop Problem to find the optimal set of solutions. Exact methods are limited by the size of the instances, so we propose an original cooperation between this exact method and a Genetic Algorithm to obtain good results on large instances. Results obtained are promising and show that cooperation between antagonist optimization methods could be very efficient.

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Liens

- [1] <http://okina.univ-angers.fr/matthieu.basseur/publications>
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=13255](http://okina.univ-angers.fr/publications?f[author]=13255)
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