Evolutionary Approach for the Containers Bin-Packing Problem

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Abstract: This paper deals with the resolution of combinatorial optimization problems, particularly those concerning the maritime transport scheduling. We are interested in the management platforms in a river port and more specifically in container organisation operations with a view to minimizing the number of container rehandlings. Subsequently, we meet customers' delivery deadlines and we reduce ship stoppage time. In this paper, we propose a genetic algorithm to solve this problem and we present some experiments and results.

Keywords: Bin-paking, Genetic algorithm, transport scheduling, heuristic, optimization, container.