

# The RENAULT Car Sequencing Problem: a Constraint Programming benchmark revisited and a new playground for metaheuristics and local search algorithms

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Abstract: The Car Sequencing Problem is a well known benchmark in the Constraint Programming community. However, when RENAULT submitted its real-life version of the Car Sequencing problem to the last ROADEF challenge, there was no CP algorithm among all the methods implemented by the 25 candidate teams (mainly metaheuristics and local search algorithms). A few explanations are needed ! We will present the differences between RENAULT Car Sequencing Problem and the traditional one, a review of the methods presented to the ROADEF challenge and focus on a simulated annealing approach..

Keywords: Metaheuristics - Local Search