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# A contribution to the VeRoLog Solver Challenge 2019

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## Abstract

The talk describes our ideas for the VeRoLog Solver Challenge 2019. We propose a heuristic search algorithm that only uses a single, somewhat generalized neighborhood operator for Vehicle Routing Problems. While the algorithm as such is kept rather universal (it is non-adaptive and uses a single parameter only), a tailored, problem-specific implementation has been put forward for the current competition. This includes the proposition of a series of checks, speedups, and preprocessing techniques. In essence, we work on the core of what is, to us, of scientific interest: the very fast manipulation of data in memory, with the aim of finding an optimal/ satisfactory solution. Experiments have been conducted on the test instances published by the challenge organizers, i.e. the EURO VeRoLog Working Group and ORTEC. As far as we can tell, our approach exhibits a reasonable performance, both in short and in longer runs.

**Keywords:** VeRoLog Solver Challenge, multi period vehicle routing, implementation techniques

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