Simheuristics for Stochastic Vehicle Routing Problems: a review and open challenges

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Abstract

Many realistic vehicle routing problems need to consider uncertainty conditions, which typically also require from a reliability or risk analysis. Simheuristics extend metaheuristics by adding a simulation layer that allows the optimization component to deal efficiently with scenarios under uncertainty. This work reviews recent applications of simheuristics, mainly in the area of vehicle routing. It also discusses current trends and open research lines in this field.

Keywords: Stochastic VRPs, metaheuristics, simulation

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