

Propositions

attached to the thesis

Vehicle Routing with Varying Levels of Demand Information

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I

Using *ng*-memory to enhance the capacity constraints for a capacitated vehicle routing problem in a branch-price-and-cut algorithm leads to a faster algorithm if the capacity is constraining.

(Chapter 2)

II

The integer *L*-shaped method and branch-price-and-cut algorithms are most effective in different types of instances of the vehicle routing problem with stochastic demands. Branch-price-and-cut algorithms work best when the vehicle's capacity is low, and integer *L*-shaped methods work best in any other case.

(Chapter 3)

III

Dividing the expected costs of recourse of a vehicle routing problem with stochastic demands over the different routes results in a formulation that easily facilitates valid inequalities exploiting the route-divisibility of the expected costs of recourse.

(Chapter 3)

IV

In a vehicle routing problem with stochastic demands, both the expected capacity and fixed route constraints improve the performance of the integer *L*-shaped method tremendously. However, performance stagnates or worsens when they are used together.

(Chapter 4)

V

Placing sensors at waste bins showing a high variance is a good tactic to reduce expected routing costs, independent of the inaccuracies of the sensor in question.

(Chapter 5)

VI

The increasing amount of different skills needed for academics to possess makes it increasingly impossible to create a sufficient thesis in a reasonable amount of time on your own.

VII

Wanting to not work yourself to death is too often mistaken for a lack of ambition.

VIII

The PhD thesis itself is an archaic remnant of a time where PhD students did not have to submit papers in order to build a passable CV.

IX

The average person is incompetent in almost everything.

X

Structure leads to exploitation. In any area.

XI

NP-hardness is not an issue if you are patient enough.