GRADUATE SEMINAR IN OPTIMIZATON

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Title:

Multi-trip vehicle routing problem with a variable number of wagons and time windows

Abstract:

Motivated by the transportation needs of modern-day retailers, we consider a variant of the vehicle routing problem with time windows in which each truck has a variable capacity. In our model, each vehicle can bring one or more wagons. The clients are visited within specified time windows, and the vehicles can also make multiple trips. We give a mathematical programming formulation for the problem and column generation algorithm to solve it. We extend Solomon's instances to evaluate our approach. We report on the computational results using concert technology in CPLEX. Ours is a first such study to the best of our knowledge.

WHEN WED, OCT 30 11:00 AM

WHERE W866

WHO ANYONE WHO'S INTERESTED

http://www.uleth.ca/artsci/math-computer-science/optimization-research-group