

the vehicle routing problem pdf

The Vehicle Routing Problem (VRP) dates back to the end of the fifties of the last century when Dantzig and Ramser set the mathematical programming formulation and algorithmic approach to solve the problem of delivering gasoline to service stations.

Vehicle Routing Problem - Ruđer Bošković Institute

Computational results with a branch and cut code for the capacitated vehicle routing problem. Technical Report RR 949-M, Université Joseph Fourier, Grenoble, 1995. [2] R. Baldacci, E. Hadjiconstantinou and A. Mingozzi. An exact algorithm for the capacitated vehicle routing problem based on a two-commodity network flow formulation.

The Vehicle Routing Problem - PDF Free Download

The Vehicle Routing Problem covers both exact and heuristic methods developed for the VRP and some of its main variants, emphasizing the practical issues common to VRP. The book is composed of ...

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vehicle routing problem, each client has a time window during which its demand should be fulfilled, the objective here is to minimize the number of vehicles and the total distance while respecting the time-window constraint [4].

Vehicle Routing Problem with Distance Constraints and

vehicle routing problem (CVRP) and also their variants. The VRP is classified as an NP-hard problem. Hence, the use of exact optimization methods may be difficult to solve these problems in acceptable CPU times, when the problem involves real-world data sets that are very large. The vehicle routing problem comes under combinatorial problem.

A Survey on the Vehicle Routing Problem and Its Variants

Vehicle routing problems, among the most studied in combinatorial optimization, arise in many practical contexts (freight distribution and collection, transportation, garbage collection, newspaper delivery, etc.).

Vehicle Routing: Problems, Methods, and Applications, 2nd

Rich vehicle routing problems are the family of the extended vehicle routing problems that includes several or all aspect of real-life vehicle routing (Hartl et al., 2006).

GENETIC ALGORITHM FOR VEHICLE ROUTING PROBLEM

ing problems which combine routing and customer replenishment decisions. Finally, Section 5 covers the field of stochastic vehicle routing in which some of the problem data are random variables.

Vehicle Routing - Universidad Nacional De Colombia

1.3 Multiple vehicle routing problem A generalization of the well-known vehicle routing Problem is the multiple vehicle routing problem, which consists of determining a set of routes for m vehicles. The m VRP can in general be defined as follows: Given a set of nodes, let there be m vehicle located at a single depot node.

OPTIMIZATION OF MULTIPLE VEHICLE ROUTING PROBLEMS USING

The vehicle routing problem (VRP) is a combinatorial optimization and integer programming problem which

asks "What is the optimal set of routes for a fleet of vehicles to traverse in order to deliver to a given set of customers?".

Vehicle routing problem - Wikipedia

routing and scheduling problems, and presents various solution methodologies. Although every effort has been made to present the topic of vehicle routing and scheduling as simply and as straightforward as possible, it should be noted that this is a technical subject and one of the more mathematical topics in this text.

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