Università
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di Padova

Dipartimento
di Ingegneria
dell'Informazione

A Branch-and-Cut based Pricer for the Capacitated Vehicle Routing Problem

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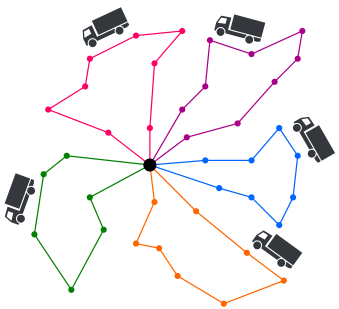
Master's Degree in Computer Engineering

July 14th, 2022
Academic Year: 2021–2022

The Capacitated Vehicle Routing Problem (**CVRP**) is an NP-hard discrete optimization routing problem with applications in logistics optimization (goods/services delivery).



We are given:

- Customer locations within a road network.
- The demand of each customer.
- The vehicle capacity.
- Number of available trucks.

Objective:

- Serve **all** customers while minimizing the overall routing cost.

Branch-price-and-cut

Conclusions

Thank, you.
Jepsen et al., 2014

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