Bidirectional Labeling in Column-Generation Algorithms for Pickup-and-Delivery Problems

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Highlights

- Bidirectional labeling for vehicle routing with pickup-and-delivery structure
- Different cost matrices in forward and backward labeling
- Strong dominance rules in both directions is key innovation
- Computational analysis on pickup-and-delivery problem with time windows
- New branch-price-and-cut algorithm reduces computation time by 40% on average