

Abstract: The thesis deals with the Vehicle Routing problem with vehicles having limited capacity. We mainly focus on the variant with heterogeneous fleet of vehicles each having its variable and fixed costs. Algorithm designed to solve the problem first finds an feasible initial solution by probabilistically modified Clarke-Wright savings method and then improves it by techniques based on local search. Obtained results are compared with state-of-the-art algorithms on well-known benchmarks. The implementation of the algorithm in Java is part of the work.