Comparing the Effectiveness of Utilizing a Genetic Algorithm (GA) and Ant Colony Optimization (ACO) in Solving the Knapsack Problem

The Knapsack problem is a… the goal is to…

Use the A1 loader and summarizer and tweak

1. Develop a GA to solve the Knapsack problem
2. Develop ACO to solve the Knapsack problem
3. Measure Number of Optima
4. Measure Time
5. Present Results
6. Statistics
7. Conclusion

(Julstrom, 2005)

Julstrom, B.A. (2005) “Greedy, genetic, and greedy genetic algorithms for the quadratic knapsack problem,” Proceedings of the 7th annual conference on Genetic and evolutionary computation, pp. 607–614. Available at: https://doi.org/10.1145/1068009.1068111.