Group 2 Project Proposal

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Abstract: Group 2 proposes to study the convergence properties of simulated annealing, genetic algorithms, and ant-colony approaches towards finding optimal solutions for various travelling salesman problems. Code will be tested to find convergence rate, wall-clock time, and for solution space exploration. For future studies, we will consider looking at parallel and/or GPU solutions to accelerate algorithms.

0.1 Introduction

0.2 Simulated Annealing

0.3 Genetic Algorithms

0.4 Ant-Colony Approaches

0.5 Go with the Winner Approaches

"Go with the Winner" [1].

0.6 Analysis

References

[1] D. Aldous and Vazirani U. Go with the winners algorithms. *Proceedings of the 35th IEEE Symposium on Foundations of Computer Science*, pages 492–501, 1994.